# U.S. EPA REGION IV

# SDMS

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V. 2-040506

CUMMINGS RITER CONSULTANTS, INC.

VOLUME II OF III

Site: Koppers
Break: 7.8
Other: Vol 2

# REMEDIAL ACTION REPORT
# SURFACE WATER, SOIL, AND GROUNDWATER REMEDIATION
# KOPPERS COMPANY, INC. SUPERFUND SITE
# MORRISVILLE, NORTH CAROLINA

**PREPARED FOR:**
BEAZER EAST, INC.
436 SEVENTH AVENUE
PITTSBURGH, PA 15219

**PREPARED BY:**
CUMMINGS/RITER CONSULTANTS, INC.
339 HAYMAKER ROAD
PARKWAY BUILDING, SUITE 201
MONROEVILLE, PA 15146

10569332

**PROJECT NO. 93145.30/55**
**FEBRUARY 27, 1997**

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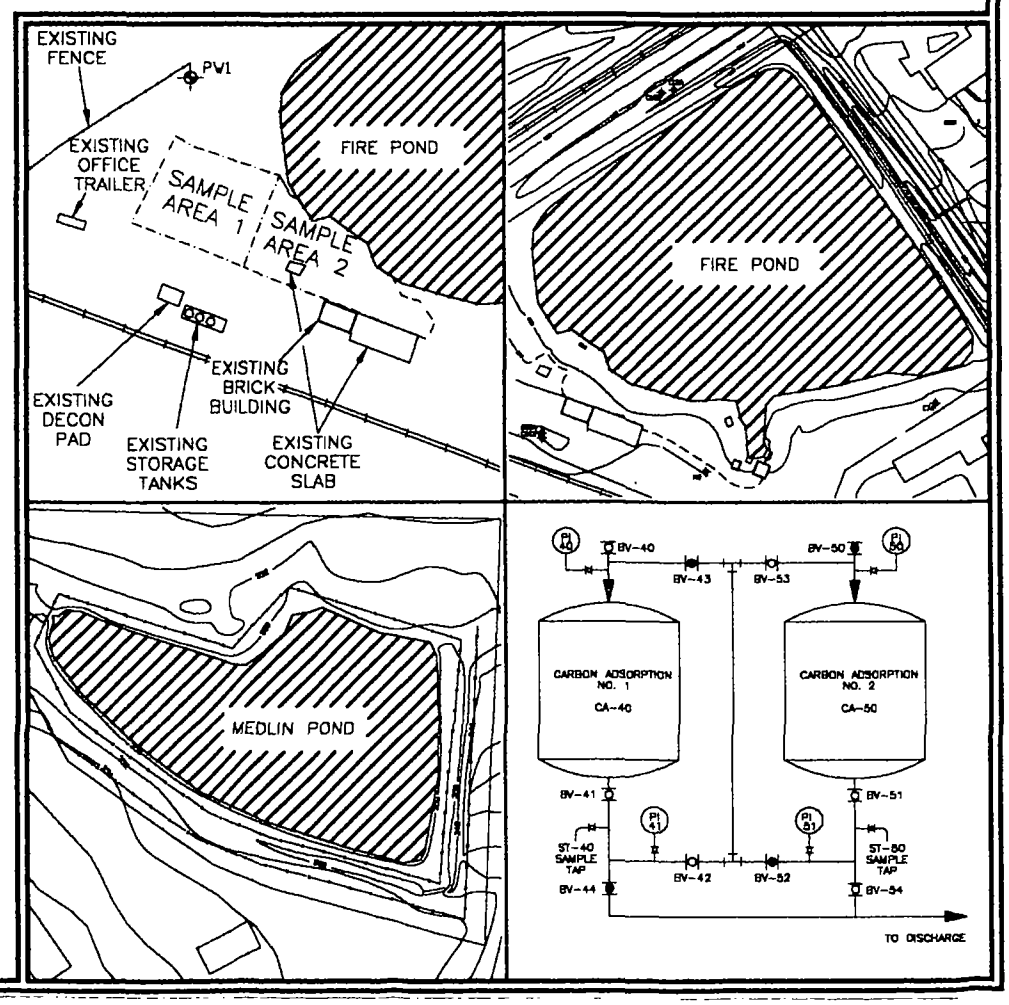
CUMMINGS RITER CONSULTANTS, INC.

PROJECT NO. 93-145
FEBRUARY 1997

# REMEDIAL ACTION REPORT
# VOLUME II OF III

# SOIL, GROUNDWATER, & SURFACE WATER REMEDIATION
# KOPPERS COMPANY, INC. SUPERFUND SITE
# MORRISVILLE, NORTH CAROLINA




## BEAZER EAST, INC.
## PITTSBURGH, PENNSYLVANIA

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# APPENDIX D

## DAILY CONSTRUCTION QUALITY ASSURANCE REPORTS

CUMMINGS RITER CONSULTANTS, INC.

Date 10/24/95
Day of Week Tues
No. 2
Sheet 1 of 3

# FIELD ACTIVITY REPORT

**Project Name:** Beazer East - Koppers Superfund Site **Project No.** 93-145.30.55

**Field Activity:** Temp. Surface Water Trtmt. Installation

**Personnel On Site:** BG, end **Subcontractor:** WATEC

**Description on Daily Activities and Events:**

0830 BG arrives on Morrisville site. Breakfast with Jim Cole (Beazer East). Discussed proportion of RFP for excavation of impacted soils & stockpiling. Results of public meeting to discuss off-site incineration: consensus to incinerate off site, however new issue of fish in ponds - "if destroyed due to bioconcentration, why not incinerate fish?" Beazer will need to respond to community group quickly before fish are exposed. WATEC crew and subs (Triangle Grading & Enviotech) arrived at 0730. Working to prepare pump & temp. surface water treatment (carbon tanks + sed. bag filters). Triangle is clearing trees for access to Medlin Pond.

0930 Elect. subcontractor has tested fuse box to trailers. Power is working, but cannot use power until Morrisville building inspector has approved installation.

0930 Elec. sub. leaves site. Bldg inspector should visit pm, if not WATEC has inspector's phone no.

1030 Steve Kalemenicky (WATEC) reports that piping for carbon nearly completed. Boom lift scheduled to arrive to unload barge of carbon into tanks at 1300.

1030 - 1300 BG observes installation of piping for carbon units, placement of discharge pipe for discharge, and clearing for Medlin Pond access. Trees from clearing operation to be sold to mill.

1310 Boom truck arrives for loading granular carbon into canisters. PVC (6") being placed through culvert crossing McCrimmon (formerly Koppers) Rd. Clearing trees continues on former Medlin property.

1400 Southern Bell arrives for phone installation. Need to run new line from near culvert to RR tracks, northwest along tracks to trailer area.

**Pay Quantities:**

WATEC: Steve Kalemanicky 1 backhoe
Terry Hall
John Cutlip
Fornot Hodges

Triangle Grading: 2 laborers, one tractor & operator
Enviotech: Peter Kanavy

**Project Changes/Unusual Observations:**

**Weather Conditions:** a.m. overcast, high 60's

**Health & Safety PPE:** steel-toed boots, hard hat, safety glasses.

**Air Monitoring Results:** —

**Field Representative:** Bruce Sem **Date:** 10/24/95

f40/corp

CUMMINGS RITER CONSULTANTS, INC.

Date 10/24/95
Day of Week Tues
No. 2
Sheet 2 of 3

# FIELD ACTIVITY REPORT

**Project Name:** Beazer East | **Project No.** 93-145

**Field Activity:** Temp Surface Water Treatment Installation

**Personnel On Site:** B. Gens | **Subcontractor:** WATEC

**Description on Daily Activities and Events:**

1500 Butch Hardy & Brian Colbert of Adams Products Co. visits WATEC & BG at outlet side of McCrimmon Rd. culvert. B.G. explains pipe will carry treated water to Medlin Pond.. Brian Colbert asks if WATEC/Beazer should first have an easement for discharge. BG explains that should not need easement for treated water since will not have sediment and will not discharge onto Adams Products property. Also explain that following regrading of earth berm, a sand/aggregate filter will be placed at culvert inlet to trap sediment before sediment can pass onto Adams property. Butch Hardy explains that Adams is willing to sign the indemnity agreement prepared by Beazer if upper management approves. BG to talk to Butch Hardy's secretary 10/25/95 to determine if additional issues need to be resolved before Adams Products signs indemnity agreement. BG explains that only encroachment should be possibly placement of riprap at culvert outlet as energy dissipator. (Realistically culvert apron should be in NC DOT right-of-way.)

1800 BG/WATEC leave site for the day. Southern Bell still on site - to lock up upon departure.

**Pay Quantities:**

**Project Changes/Unusual Observations:**

**Weather Conditions:**
*a.m.*
*p.m.*

**Health & Safety PPE:**

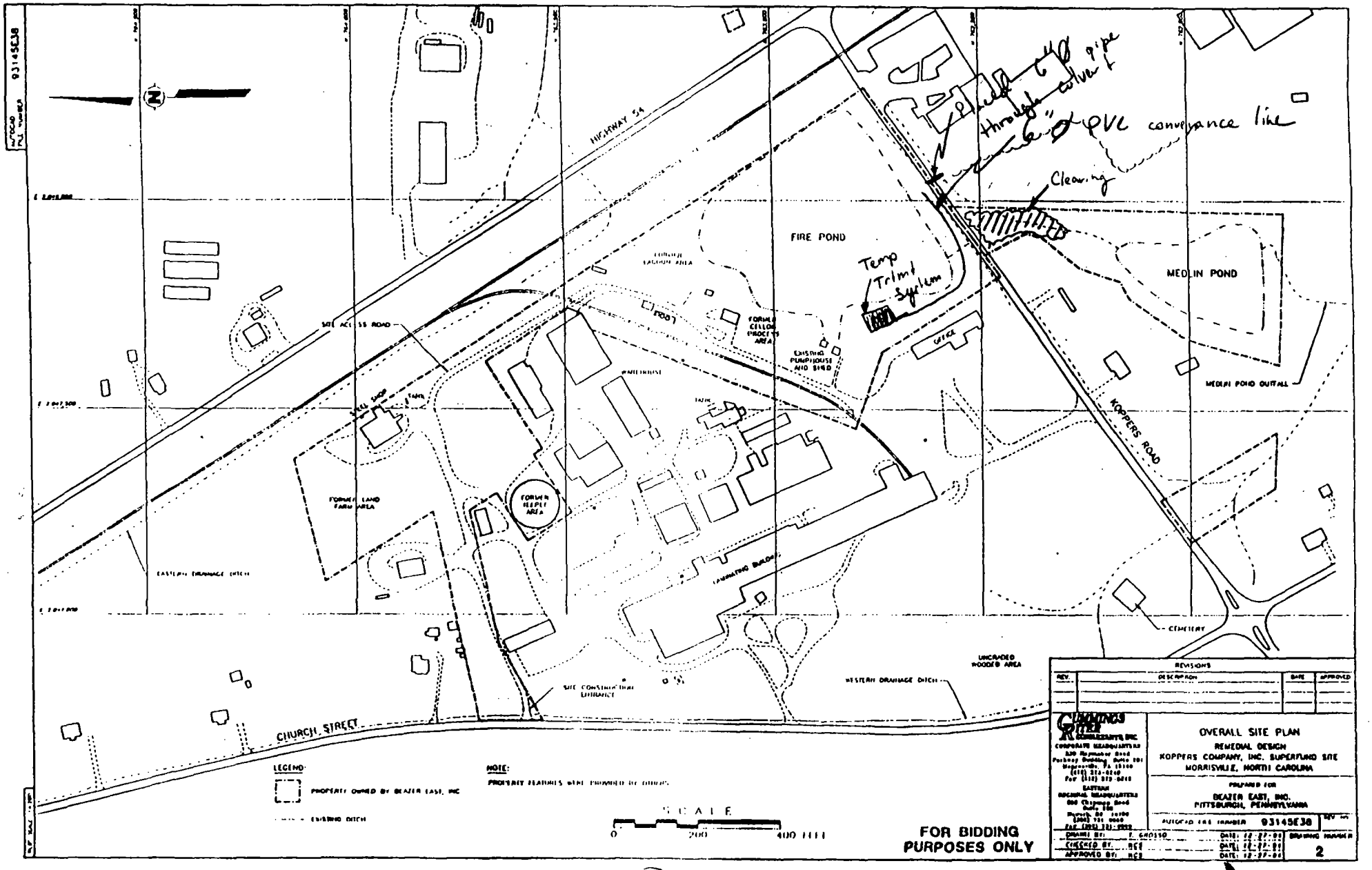
**Air Monitoring Results:**

**Field Representative:**

**Date:**

f40/corp

Pg 3 of 3



HIGHWAY 54
FIRE POND
MEDLIN POND
MEDLIN POND OUTFALL
KOPPERS ROAD
CHURCH STREET
SITE ACCESS ROAD
FORMER LAND FARM AREA
FORMER TEEPEE AREA
EASTERN DRAINAGE DITCH
WESTERN DRAINAGE DITCH
UNGRADED WOODED AREA
CEMETERY
OFFICE
EXISTING PUMPHOUSE AND SHED
FORMER CELLOR PROCESS AREA
LAMINATING BUILDING
SITE CONSTRUCTION ENTRANCE
Temp Trlmt System
Placed 6" ø pipe through culvert
6" ø PVC conveyance line
Clearing
LEGEND:
PROPERTY OWNED BY BEAZER EAST, INC
EXISTING DITCH
NOTE:
PROPERTY FEATURES WERE PROVIDED BY OTHERS
SCALE
0
200
400 FEET
FOR BIDDING PURPOSES ONLY
REVISIONS
REV.
DESCRIPTION
DATE
APPROVED
CUMMINGS CITER CONSULTANTS, INC.
CORPORATE HEADQUARTERS
EASTERN REGIONAL HEADQUARTERS
OVERALL SITE PLAN
REMEDIAL DESIGN
KOPPERS COMPANY, INC. SUPERFUND SITE
MORRISVILLE, NORTH CAROLINA
PREPARED FOR
BEAZER EAST, INC.
PITTSBURGH, PENNSYLVANIA
AUTOCAD FILE NUMBER 93145E38
DRAWING NUMBER
2

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 10/25/95 |
| Day of Week | Wed |
| No. | 3 |
| Sheet | 1 of 4 |

# FIELD ACTIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East - Koppers Superfund Site | **Project No.** 93-145.30 55 |
| **Field Activity:** Temp Surface Water Trtmt Installation | |
| **Personnel On Site:** B Geno | **Subcontractor:** WATEC |

**Description on Daily Activities and Events:**

0800 BG arrives on site WATEC workers are mulching diversion ditches Continue to assemble pipe for temp pond water trtmt system. Phone lines installed 10/24/95, However, CRC lines not operating Power is working. Triangle grading is bringing in sand for temp. access road to Medlin Pond. Placed single width of 3x1.10 Tensar geogrid and plan to overlay with 1½-2 ft. of sand and additional 1-1½ ft with aggregate. Clearing of trees is completed in Medlin side of McCrimmon Road is completes In vicinity of

0930 BG calls Wilmington office of CRC to check on Bill Smith's arrival. B. Smith to arrive before noon.

1050 B. Smith arrives from Wilmington. BG & B Smith walk site. Observe installation of temporary treatment system, demarcation of impacted soil areas protection/marking of existing groundwater [illegible] installation of diversion ditches, clearing of access to Medlin Pond and first stages of access road installation

1115 Pam & Brian of Adams Products Co. review draft copy of easement agreement for property access south of McCrimmon Road (near culvert outlet). Adams Products has prepared their own draft of easement agreement, but need reference to Remedial Action Work Plan and drawing of area of encroachment. B. Smith & B. Geno agree to provide information requested.

1200 B. Geno & B. Smith break for lunch.

| | |
|---|---|
| **Pay Quantities:** See pg 2 of 3 | **Project Changes/Unusual Observations:** |

| | | |
|---|---|---|
| **Weather Conditions:** *a.m.* *p.m.* | **Health & Safety PPE:** | **Air Monitoring Results:** |

| | |
|---|---|
| **Field Representative:** | **Date:** |

f40/corp

**CUMMINGS RITER CONSULTANTS, INC.**

| | |
|---|---|
| Date | 10/25/95 |
| Day of Week | Wed |
| No. | 3 |
| Sheet | 2 of 4 |

# FIELD ACTIVITY REPORT

**Project Name:** Beazer East | **Project No.** 93-145.30.55

**Field Activity:** Temp Surface Water Trtmt Installation

**Personnel On Site:** B. Geno | **Subcontractor:** WATEC

**Description on Daily Activities and Events:**

1300 B. Geno & B. Smith prepare references for Adams Products Co. indemnification. Hand mark drawing showing property boundaries, area south of McCrimmon Road to be cleared, riprap apron at culvert outlet, and alignment of temporary treated water conveyance line. Send to J. Cook (Beazer) for review.

1500 B.G delivers edits to Adams Products Co. indemnification agreement, including marked up drawing

1520 BG talks to Joe Gunn (WATEC - Atlanta regarding change order resulting from Erosion and Sedimentation Controls. Joe to submit change order for BG review 10/26/95, BG to review WATEC invoice for October by 10/27/95. B. Smith leaves site to travel back to Wilmington, DE.

1600 BG checks voice mail; Laura Faulconer of Wake Co. has approved E&S plan. Permit may be obtained from Wake Co. Office Bldg from 8:30 AM - 4:00 PM. Permit fee = $1500 (250/acre × 6 acres).

**Pay Quantities:**

WATEC: Steve Kel (foreman), 1 backhoe
Terry Hall
John Cultlip
Forrest Hodges, Todd Kasper
Encoded: Peter Kanrary
Triangle Grading Contractors: Wayne Thompson
2 laborers

**Project Changes/Unusual Observations:**

**Weather Conditions:**
a.m. sunny, high 60's
p.m. sunny, high 70's

**Health & Safety PPE:** steel-toed boots, safety glasses, hd hat

**Air Monitoring Results:** —

**Field Representative:** [signature] | **Date:** 10/25/95

f40/corp

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 10/25/95 |
| Day of Week | Wed |
| No. | 2 |
| Sheet | 2 of 4 |

# FIELD ACTIVITY REPORT

| | |
|---|---|
| **Project Name:** [illegible] East | **Project No.** |
| **Field Activity:** Temp Surface Water [illegible] Installation | |
| **Personnel On Site:** [illegible] | **Subcontractor:** WATEC |

**Description on Daily Activities and Events:**

1800 WATEC has completed piping for testing of pump

1845 BG & WATEC personnel leave site for the day.

| | |
|---|---|
| **Pay Quantities:** See pg 2 of 3 | **Project Changes/Unusual Observations:** |

| | | |
|---|---|---|
| **Weather Conditions:** *a.m.* *p.m.* | **Health & Safety PPE:** | **Air Monitoring Results:** |

| | |
|---|---|
| **Field Representative:** | **Date:** |

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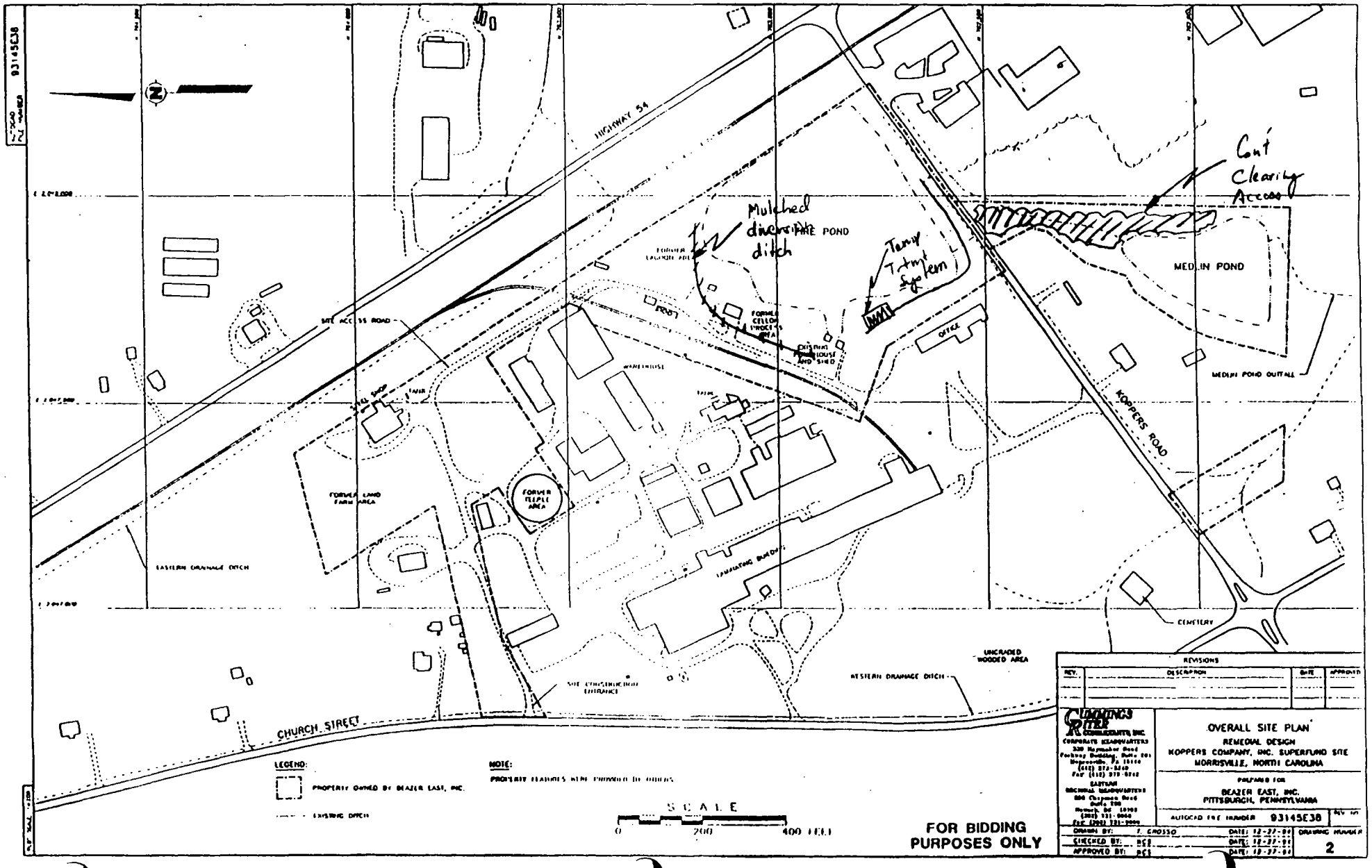
Sheet 4 of 4

pg 4 of 4



**CUMMINGS RITER CONSULTANTS, INC.**

| | |
|---|---|
| Date | 10/26/95 |
| Day of Week | Thurs |
| No. | 4 |
| Sheet | 1 of 4 |

# FIELD ACTIVITY REPORT

| | |
|---|---|
| **Project Name:** [illegible] Site | **Project No.** 93-145 20.55 |
| **Field Activity:** [illegible] Installation | |
| **Personnel On Site:** B Gen (BG) | **Subcontractor:** WATEC |

**Description on Daily Activities and Events:**

0730 BG arrives on site. Gate is unlocked, and WATEC is conducting safety meeting. WATEC to begin testing pump and filling carbon canisters with water from Fire Pond. Use garden hose from Unit Structures to prime 6" Ø PVC line from SW corner of Fire Pond to pump. (However, since no check valve in PVC line, priming probably not effective.)

0915 Phone company calls to verify problem with phone line.

0930 BG talks to B. Smith. BG describes WATEC's flow measurement instrument. B. Smith informs BG that WATEC's bid may contain info. BG has copied specifications for Flow Research TR400 flow transducer. B. Smith has also received Change Order No. 4 from Joe Gunn of WATEC for lost revenue from pump in pump-house (demolished pumphouse). Pump assumed by WATEC to belong to Beazer, but actually belongs to Unit Structures. BG was told by Joe Gunn that pump ownership issue had been resolved. BG did not receive notification that pump ownership issue would result in Change Order, only that ownership was resolved. BG to begin record of change orders. Recommendations to be provided to Jim Cook in letter form. Jim Cook not to receive change order requests directly from WATEC.

0945 Phone company reports phone line is fixed.

1015 Brian Colbert of Adams Products Co. delivers draft copy of indemnity agreement between Beazer and Adams Products Co. for riprap culvert apron and temp. PVC line for discharge of treated water to cross Adams property.

| | |
|---|---|
| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

| | | |
|---|---|---|
| **Weather Conditions:**<br>**a.m.** overcast, 60's<br>**p.m.** sunny, 70's | **Health & Safety PPE:** | **Air Monitoring Results:** |

**Field Representative:** Bruce Gen **Date:** 10/26/95

f40/corp

CUMMINGS RITER CONSULTANTS, INC.

Date 10/26/95
Day of Week Thurs
No. 4
Sheet 2 of 4

# FIELD ACTIVITY REPORT

**Project Name:** Beazer East **Project No.** 93-145.30.55

**Field Activity:** Temp Surface Water Treatment Installation

**Personnel On Site:** BG **Subcontractor:** WATEC

**Description on Daily Activities and Events:**

BG to fax to Beazer (Terri Faye) for comments. Adams Products Co. requests that pipe not be placed on Adams Products property until indemnity agreement has been notarized. BG provides marked up 8½" x 11" copy of a portion of an E-5.2A drawing showing Beazer property boundaries, current, temporary treated surface water discharge line crossing Adams Products property, area of former Medlin (now Beazer) property cleared for access, and north orientation.

1020 BG faxes to Joe Gunn regarding availability of sod in Nov/Dec. 1995. Sod may not be readily available. May be more expensive, this Change Order No. 5 for E&S Control measures will reflect higher cost than current prices due to more shipping. Change Order No. 4 for lost revenue due to pump submitted to Jim Cook (cc: B Smith) needs further substantiation by WATEC. Joe Gunn (WATEC) to provide documentation of market value for pump.

1045 BG telephones L. Faulconer (Wake Co.) to discuss attainment of earth disturbance permit. L. Faulconer has not yet received check from CRC for $1500 (sent regular mail 10/24/95). Laura Faulconer is out 10/27/95, and informs BG that Monday 10/30/95 should be soon enough to obtain earth disturbance permit (ie., no violations).

**Pay Quantities:**
WATEC: Steve Kalomenecky
Terry Hall
Forrest Hodges
John Cutlip
Todd Kasper
Encotech: Peter Kanravy

Δ Grading: Wayne Thompson
Larry Walker

**Project Changes/Unusual Observations:**

**Weather Conditions:** a.m.

**Health & Safety PPE:**

**Air Monitoring Results:**

**Field Representative:** **Date:**

f40/corp

**CUMMINGS RITER CONSULTANTS, INC.**

| | |
|---|---|
| Date | 10/26/95 |
| Day of Week | Thur |
| No. | 4 |
| Sheet | 3 of 4 |

# FIELD ACTIVITY REPORT

| | |
|---|---|
| **Project Name:** | **Project No.** |
| **Field Activity:** | |
| **Personnel On Site:** | **Subcontractor:** |

**Description on Daily Activities and Events:**

1130 Phone line cut by Morrisville road maintenance while mowing roadside south of Fire Pond.

1300 WATEC unable to sustain prime in pump. May need to move pump closer to road. Triangle Grading Contractors (WATEC's sub.) continues placing fill over geogrid for access road to Mellin Pond. Need additional length of culvert pipe due to height of road over culvert. Approximately 2H:1V side slopes along road.

1500 WATEC decides to move pump for surface water treatment closer to inlet at deepest portion of pond at south-central part of pond on embankment. By moving pump closer to inlet, should be able to keep prime on pump.

1800 Phone line repaired.

1845 WATEC starts pump and has established flow through treatment system. 30 psi at bag filters. Discharge back to Fire Pond. Need to install flow meter prior to discharge. Will not pump overnight

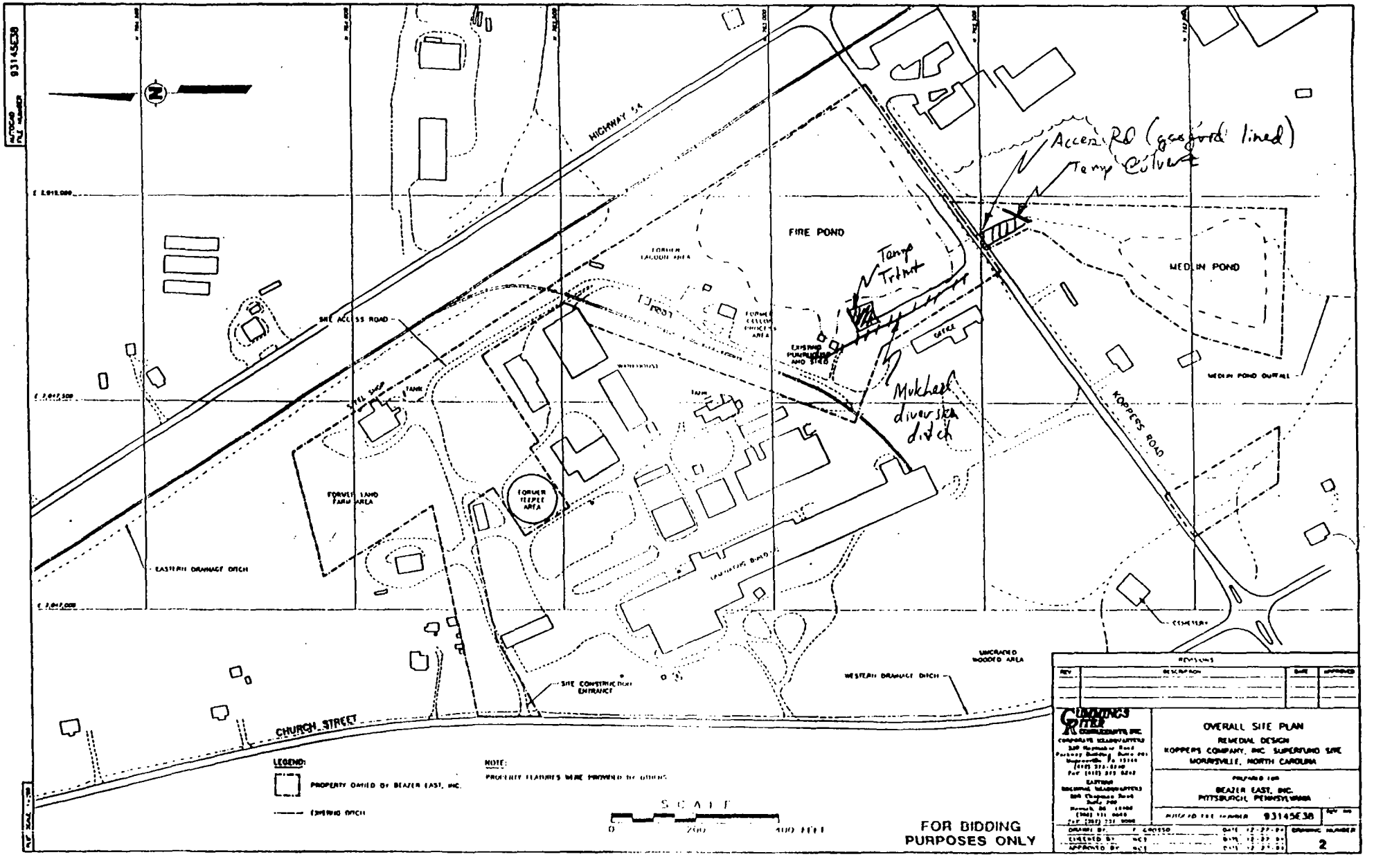
1900 WATEC & BG leave site for the day.

| | |
|---|---|
| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

| | | |
|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health & Safety PPE:** | **Air Monitoring Results:** |

| | |
|---|---|
| **Field Representative:** | **Date:** |

f40/corp



AUTOCAD FILE NUMBER 93145E38
HIGHWAY 54
FIRE POND
MEDLIN POND
Access Rd (geogrid lined)
Temp Culvert
Temp Trtmt
Mulched diversion ditch
SITE ACCESS ROAD
FORMER LAGOON AREA
FORMER CELLULOSE PROCESS AREA
EXISTING PUMPHOUSE AND SHED
WAREHOUSE
TANK
STEEL SHOP
FORMER LAND FARM AREA
FORMER TEEPEE AREA
EASTERN DRAINAGE DITCH
KOPPERS ROAD
MEDLIN POND OUTFALL
CEMETERY
UNCRADED WOODED AREA
WESTERN DRAINAGE DITCH
SITE CONSTRUCTION ENTRANCE
CHURCH STREET
LEGEND:
PROPERTY OWNED BY BEAZER EAST, INC.
EXISTING DITCH
NOTE:
PROPERTY FEATURES WERE PROVIDED BY OTHERS
SCALE
0
200
400 FEET
FOR BIDDING PURPOSES ONLY
REVISIONS
REV
DESCRIPTION
DATE
APPROVED
CUMMINGS RITER CONSULTANTS, INC.
OVERALL SITE PLAN
REMEDIAL DESIGN
KOPPERS COMPANY, INC. SUPERFUND SITE
MORRISVILLE, NORTH CAROLINA
PREPARED FOR
BEAZER EAST, INC.
PITTSBURGH, PENNSYLVANIA
AUTOCAD FILE NUMBER 93145E38
DRAWING NUMBER
2

**CUMMINGS RITER CONSULTANTS, INC.**

| | |
|---|---|
| Date | 10/27/95 |
| Day of Week | Fri. |
| No. | 5 |
| Sheet | 1 of 4 |

# FIELD ACTIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East - Koppers Superf. Site | **Project No.** 93-145 |
| **Field Activity:** Temp. Surface Water Treatment Installation | |
| **Personnel On Site:** B. Geno (BG) | **Subcontractor:** WATEC |

**Description on Daily Activities and Events:**

0800 BG arrives on site. WATEC is completing installation of 6" Ø PVC pipe for treated water discharge.

0900 Steve Kelemencky (WATEC) leaves site to obtain physical exam. Informs BG that Terry Hall (WATEC) will be supervising in Steve's absence. Steve has given Terry instructions to install flow meter for discharge of treated water.

1000 BG talks to Joe Gunn concerning invoice approval. Joe Gunn (WATEC) to forward copy of project completion estimate itemized by task for invoicing purposes to Beazer East, Inc. BG to sign copy of itemized estimate upon agreement and return to WATEC. WATEC will then invoice Beazer.

1015 BG receives copy of October project invoice projection from Joe Gunn for review. BG signs copy of invoice summary and faxes back to Joe Gunn.

1130 BG receives telephone call from Jim Cook (Beazer East). BG informs J. Cook that WATEC has forwarded copy of invoice summary to BG for approval and BG has signed the invoice summary and returned. J. Cook asks BG to verify that invoice does not include credit for trees fold on former Medlin Property. Also, J. Cook requests manual calibration of

| | |
|---|---|
| **Pay Quantities:**<br>WATEC: Steve Kelemencky<br>Forrest<br>John Cutlip<br>Todd Kasper<br>Terry Hall<br>Triangle: dozer & operator<br>dump & operator | **Project Changes/Unusual Observations:**<br>— |

| | | |
|---|---|---|
| **Weather Conditions:**<br>**a.m.** cloudy, 50's<br>**p.m.** sunny, windy, high 60's | **Health & Safety PPE:**<br>steel boots, hd hat, safety glasses | **Air Monitoring Results:**<br>— |

**Field Representative:** Bruce Geno **Date:** 10/27/95

f40/corp

CUMMINGS RITER CONSULTANTS, INC.

Date 10/27/95
Day of Week Fri.
No. 5
Sheet 2 of 4

# FIELD ACTIVITY REPORT

| | |
|---|---|
| **Project Name:** Berger East | **Project No.** 93.145 |
| **Field Activity:** Temp Surface Water Treatment Plant | |
| **Personnel On Site:** BGeno | **Subcontractor:** WATEC |

**Description on Daily Activities and Events:**

flow using stop watch and Polyethylene tank.

1140 BG talks to Joe Gunn. BG asks Joe Gunn (WATEC) for submittal info on erosion control fabric, non-woven geotextile, woven geotextile, geogrid, topsoil and fill material. Joe Gunn to provide 10/31/95. Ask Joe Gunn about credit for trees cut from Medlin Pond area. Joe says he does not know what trees are worth, but will speak with subcontractor to see if contract price will drop for clearing and grubbing. Change Order requests to be handled at the end of the job, given short deadline - approval, however, to be requested prior to implementation.

1230 BG talks to Steve K. (WATEC) regarding configuration of flow meter. Do not have manufacturer recommendations for diameters before and 5 diameters after flow transducer. Steve K. informs BG that he spoke with manufacturer's representative, and for vertical application, the requirements are 5 diameters before transducer and no requirements for length of pipe after transducer. BGeno to check with Brad McLean of Automatic Controls to verify. Triangle Grading Contractors is placing fill at northwest corner of pond for additional staging (soft area in vicinity of former pump house). Ask Steve K. (WATEC) to place silt fence around stockpiles before the end of the day. Steve agrees to place silt fence.

| **Pay Quantities:** | **Project Changes/Unusual Observations:** |
|---|---|
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| **Weather Conditions:** | **Health & Safety PPE:** | **Air Monitoring Results:** |
|---|---|---|
| p.m. | | |

**Field Representative:** **Date:**

f40/corp

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 10/27/95 |
| Day of Week | Fri |
| No. | 5 |
| Sheet | 3 of 4 |

# FIELD ACTIVITY REPORT

| | |
|---|---|
| **Project Name:** | **Project No.** |
| **Field Activity:** | |
| **Personnel On Site:** | **Subcontractor:** |

**Description on Daily Activities and Events:**

1330 BG asks Steve Kelemencky (WATEC) about manual calibration of flow meter. BG and Steve K. agree that calibration of flow will be difficult with 550 gallon PE tank, given anticipated flow of 400 gpm. However, Steve K. agrees to perform calibration. May want to delay for a couple of days.

1410 BG talks to Carl of Automatic Controls (770-447-5644). Carl explains that 10 Ø and 5 Ø rule applies in vertical configuration situation only, and if horizontal, may not get laminar flow due to gravity. Thus, WATEC will need to reinstall per manufacturer's recommendation.

1430 BG [illegible] to J. Cook [illegible] change order approval / rejection procedures, calibration of flow with 550 gal. PE tank, Adams Property [illegible] delay, and staking perimeter water surface to monitor drop in water level. J. Cook acknowledges manual flow calibration will be very approximate. BG offers to perform cal. twice a couple of days after pumping started (to expedite start-up). J. Cook approves. Change Orders to be invoiced at end of project is satisfactory, however, review must be documented within 15 days of change order receipt. Brian Colbert (Adams Products) informed that 6" Ø PVC discharge line will be placed in NCDOT McCrimmon Road right-of-way. J. Cook

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health & Safety PPE:** | **Air Monitoring Results:** |

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|---|---|
| **Field Representative:** | **Date:** |

f40/corp

GUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 10/27/95 |
| Day of Week | Fri |
| No. | 5 |
| Sheet | 4 of 4 |

# FIELD ACTIVITY REPORT

| | |
|---|---|
| **Project Name:** Beezer East | **Project No.** |
| **Field Activity:** | |
| **Personnel On Site:** | **Subcontractor:** |

**Description on Daily Activities and Events:**

requests that perimeter of Fire Pond water surface be staked to monitor drawdown over time. Requests have been communicated to Steve Kelemenchy (WATEC).

1540 Triangle Grading Con. has moved fill material to one stockpile at northeast corner of pond. WATEC to tie diversion ditches in to natural drainage. Joe Gunn (WATEC) has provided treated flow tracking sheet. Steve Kelemenchy to install flow meter.

[illegible] BG leaves site, WATEC to work [illegible] 10/28/95.

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|---|---|
| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

| | | |
|---|---|---|
| **Weather Conditions:** [illegible] | **Health & Safety PPE:** | **Air Monitoring Results:** |
| **Field Representative:** | | **Date:** |

f40/corp

**CUMMINGS RITER CONSULTANTS, INC.**

| | |
|---|---|
| Date | 10/30/95 |
| Day of Week | Mon. |
| No. | 6 |
| Sheet | 1 of 3 |

# FIELD ACTIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East - Kaiser Superfund Site | **Project No.** 93-145.30 |
| **Field Activity:** Surface Water Trtmt. | |
| **Personnel On Site:** B. Gem | **Subcontractor:** WATEC |

**Description on Daily Activities and Events:**

1130 BG arrives on site. Trave from PGH. Obtained Land Disturbance Permit from Wake County Community Services. WATEC is pumping groundwater. Steve Kelemencky reports that WATEC began pumping 10/28/95. Pumped approximately 210,000 gallons 10/28/95 through 10/29/95. Pumped additional 134,000 gallons 10/30/95 AM. Intend to pump approximately 300k gallons/day, operating 6:30 AM to 8:00 pm. (more than 11 hrs. at 450 gpm). Triangle Grading Contractors (WATEC sub) has finished constructing access road to Medlin Pond area. Access road entrance is taped off with construction tape. Water discharging through end of temp. culvert to upstream side of Medlin Pond. Riprap has been placed at the end of the temporary culvert to reduce velocity of flow. WATEC has collected first set of treated water samples for expedited (48-hr) turnaround time (treatment verification samples). Samples to be shipped for laboratory receipt 10/31/95. Triangle Grading is currently stockpiling fill material on site to the SE of the field offices. Steve Kelemencky (WATEC) expects to perform manual flow calibration 10/31/95.

1200 WATEC provides BG with Daily Quality Control Reports for 10/16/95 to 10/23/95.

1440 BG & Wayne Thompson (Triangle Grading Contractors) travel to local soil stockpile to determine whether borrow is appropriate for suitable fill. BG and Wayne T. collect soil samples for saive analysis. Collect 3-5gal. buckets and 3-1gal. buckets from same stockpile at the same location. Material appears to be ML.

| | |
|---|---|
| **Pay Quantities:**<br>WATEC: Steve Kelemencky<br>John Cutlip<br>Forrest Hodges<br>Terry Hall<br>Triangle: 1 tandem dump<br>1 trailer<br>1 dozer | **Project Changes/Unusual Observations:**<br>— |

| | | |
|---|---|---|
| **Weather Conditions:**<br>**a.m.** sunny, high - 50's<br>**p.m.** sunny, mid - 60's | **Health & Safety PPE:**<br>Steel-tied boots, hd hat, safety glasses | **Air Monitoring Results:**<br>— |

**Field Representative:** Brian Gem **Date:** 10/30/95

f40/corp

**CUMMINGS RITER CONSULTANTS, INC.**

| | |
|---|---|
| Date | 10/20/95 |
| Day of Week | Mon |
| No. | 6 |
| Sheet | 2 of 3 |

# FIELD ACTIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East | **Project No.** 93-145 |
| **Field Activity:** Surface Water Trtmt | |
| **Personnel On Site:** B. Gene | **Subcontractor:** WATEC |

**Description on Daily Activities and Events:**

WATEC & Triangle prefer to place fill and topsoil as one material, to avoid having to place two separate materials in two separate operations. BG agrees this is a reasonable approach, provided that the fill material will meet specification requirements of maximum particle size of 1 inch and NCDOT Spec. 732 gradation.

1530 BG talks to Steve Kelemencky (WATEC) concerning drainage along access road and upstream of Medlin Pond. The natural drainage course leading to Medlin Pond has been altered and will need to be engineered and lined similar to regraded [illegible] area channel. The temporary culvert [illegible] to [illegible] does not [illegible] inlet or outlet design. Also, the temp. [illegible] access road culvert has not been designed for 24-hr, 10-yr storm. Sides of access road (3H:1V to 2H:1V) need to be stabilized with grass (seed & mulch). Steve K. reports that seeding and mulching can be accomplished within next couple of days now that pumping has began. Also plan to perform manual calibration by hard piping (6"ø PVC) to 1,000 gal. PE tank from outlet with a 6" Tee. (Flex line from outlet may not be safe.) Schedule approx. 2 hrs. downtime to connect PVC pipe to perform test. Steve K. reports that 2hrs.

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|---|---|
| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:** p.m. | **Health & Safety PPE:** | **Air Monitoring Results:** |

| | |
|---|---|
| **Field Representative:** | **Date:** |

f40/corp

CUMMINGS RITER CONSULTANTS, INC.

Date 10/30/95
Day of Week Mon
No. 6
Sheet 3 of 3

# FIELD ACTIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer [illegible] | **Project No.** 93-145.30 |
| **Field Activity:** Surface Water Trtmt | |
| **Personnel On Site:** B. Gene | **Subcontractor:** WATEC |

**Description on Daily Activities and Events:**

downtime can be made up by pumping longer on the weekends. Also, materials for seeding temp. access road embankment should be minor and not result in Change Order. Schedule manual calibration for 10/31/95 AM.

1630 Talk to B. [illegible] (CEC - Wilmington). WATEC proposal to use one material for both topsoil and fill is ok provided specs met. Need to get copy of NCDOT specs (and details, if any) for [illegible]. [illegible] [illegible] 450 gpm. BG should talk with Leslie Skinner regarding immunoassay analysis of soil samples for screening purposes. Anticipated for Dec. 1995.

1700 BG walks site to observe pumping and discharge operations. Discharge from Medlin is at southeast corner of pond, then west along bottom of earth embankment, to drainage course leading due south from pond.

1730 BG leaves site. WATEC plans to continue pumping to about 20:00. Daily total about 300 ft Gal.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health & Safety PPE:** | **Air Monitoring Results:** |

**Field Representative:** **Date:**

f40/corp

**CUMMINGS RITER CONSULTANTS, INC.**

| | |
|---|---|
| Date | 10/31/95 |
| Day of Week | Tues |
| No. | 3 |
| Sheet | 1 of 2 |

# FIELD ACTIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East - Koppers Superfund Site | **Project No.** 93-145.3.0.55 |
| **Field Activity:** Surface Water Treatment | |
| **Personnel On Site:** B Gene | **Subcontractor:** WATEC |

**Description on Daily Activities and Events:**

0800 BG arrives on site. WATEC has pumped total of ~ 500$^{k}$ gal. from Fire Pond. Water line has receeded approx. 3½'. According to design calculations, 1.31 x10$^{6}$ gal. for first foot of drawdown. Thus, total volume of water pumped coincides approximately with anticipated drawdowns

1000 Robert Fisher (Beazer East) arrives on site to observe pumping operations. Jim Cook (Beazer East) [illegible] to discuss progress [illegible] Fire Pond [illegible], EPA [illegible] Fire Pond [illegible] treatment decision [illegible] of Southern Railroad tracks. Jim Cook [illegible] 10/31/95, [illegible] backfilling of Fire Pond is underway. BG informs J. Cook of WATEC's desire to use one soil type as both topsoil and fill, schedule to perform manual calibration 10/31/95 AM, but have not yet confirmed with Steve Kelemencky (WATEC) today. EPA sent draft of letter by Beazer to be signed by EPA notifying ETG of new soil treatment option of off-site incineration. Indemnification agreement with Adams Products should be resolved this week by Beazer.

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| **Pay Quantities:** WATEC: Steve Kelemencky (Site Manager)<br>Terry Hall (Foreman)<br>John Cutlip ] tech.s<br>Forrest Hodge ] | **Project Changes/Unusual Observations:** |

| | | |
|---|---|---|
| **Weather Conditions:** overcast, high 50's<br>p.m. overcast, | **Health & Safety PPE:** steel-toed boots, safety glasses | **Air Monitoring Results:** — |

**Field Representative:** Bruce Gene **Date:** 10/31/95

f40/corp

CUMMINGS RITER CONSULTANTS, INC.

Date 11/31/95
Day of Week Tues
No. 7
Sheet 2 of 2

# FIELD ACTIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East | **Project No.** 93-145 |
| **Field Activity:** Surface Water Trtmt | |
| **Personnel On Site:** B. Geig | **Subcontractor:** WATEC |

**Description on Daily Activities and Events:**

1030 Bob Fisher meets with Morrisville Fire Dept. Fire Marshall to inspect site trailer and remaining drums from RI & Predesign activities.

1400 Talk to B. Smith (CRC) to explain that NCDOT specifications do not have requirements for topsoil gradation. Maximum particle size of 1 inch should suffice.

1600 Steve Kolenovsky (WATEC) leaves site for the day. WATEC will begin placing 4 PVC pipe from Medlin Pond to temporary treatment location 11/1/95. Terry [illegible] John Cutlip (WATEC) [illegible] pump to ~20:00.

1830 BG leaves site for the day.

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|---|---|
| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

| | | |
|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health & Safety PPE:** | **Air Monitoring Results:** |

**Field Representative:** **Date:**

f40/corp

**CUMMINGS RITER CONSULTANTS, INC.**

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|---|---|
| Date | 11/1/95 |
| Day of Week | Wed |
| No. | 8 |
| Sheet | 1 of 3 |

# FIELD ACTIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer [illegible] Koppers Superfund Site | **Project No.** [illegible] |
| **Field Activity:** Surface Water Treatment | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description on Daily Activities and Events:**

0800 BG arrives on site. WATEC is beginning to place 4 in Ø PVC from Medlin Pond area to temp. treatment plant. Pumped to about 19:30 on 10/31/95 (about 840 K Gal.) Expect to make first bag filter change out today or tomorrow.

1000 BG checked downstream side of Medlin Pond to evaluate erosion. Water discharging from SE corner of Medlin Pond is slightly turbid - can see into water about 10 in. Does not appear to be erosion downstream of Medlin Pond. [illegible] approximate Medlin [illegible] on attached site drawing. Medlin Pond [illegible] has [illegible] since [illegible] Pond. On [illegible] perimeter [illegible] Fire Pond [illegible] bottom [illegible] exposed. Flow rate varies from [illegible] 480 GPM to approximately 520 GPM (approximately 8% fluctuation). Check of Steve Kolemencky's (WATEC) flow totalizer programming calc. indicates programming parameters were properly calculated. Do not know if calculated parameters were input into monitoring device.

1100 Measured drawdown at bulkhead at SW corner of Fire Pond = 5 1/4".

1230 Explain to Wayne Thompson (Triangle Grading Contractors) that NCDOT does not have topsoil specification. Topsoil requirements are thus: ≤ 1" particle size, agricultural testing to determine application rates for lime & fertilizer, and organic testing.

| | |
|---|---|
| **Pay Quantities:**<br>WATEC: 1 supervisor<br>1 foreman<br>2 laborers<br>Triangle Grading: 2 truck operators | **Project Changes/Unusual Observations:**<br>— |

| | | |
|---|---|---|
| **Weather Conditions:**<br>am overcast, high 50's<br>pm overcast, drizzle, low 60's | **Health & Safety PPE:**<br>steel-toed boots, safety glasses<br>hard hat | **Air Monitoring Results:**<br>— |

**Field Representative:** Bruce Geno **Date:** 11/1/95

f40/corp

**CUMMINGS RITER CONSULTANTS, INC.**

Date 11/1/95
Day of Week Wed
No. 8
Sheet 2 of 3

# FIELD ACTIVITY REPORT

**Project Name:** Beazer East **Project No.** 93-145

**Field Activity:** Surface Water Treatment

**Personnel On Site:** B. Geho **Subcontractor:** WATEC

**Description on Daily Activities and Events:**

Wayne Thompson explains that graded surface will be raked following grading and prior to seeding so that prepared seed bed will be lawn quality.

Triangle Grading is currently staging borrow material at NW corner of Fire Pond, using Unit Structures driveway for access to the site.

1400 Pond level 5.75 in below initial level.

1500 BG and Steve Kalemeneky discuss odor observed by Wayne Thompson (Triangle Grading) during [illegible] the [illegible] WATEC [illegible] prepared letter to document the incident. BG has [illegible] Steve Kalemeneky to notify that the level [illegible] by [illegible] the grading [illegible] Wayne Thompson [illegible] (WATEC) [illegible]

Jim Cook.

1600 Steve Kalemeneky leaves site for the day. WATEC to measure rise in water level from time pumping ceased [illegible] (approximately 19:00) to time WATEC returns in the morning (approximately 07:30).

1730 BG leaves site for the day. WATEC to pump to approx. 19:00.

**Pay Quantities:**

**Project Changes/Unusual Observations:**

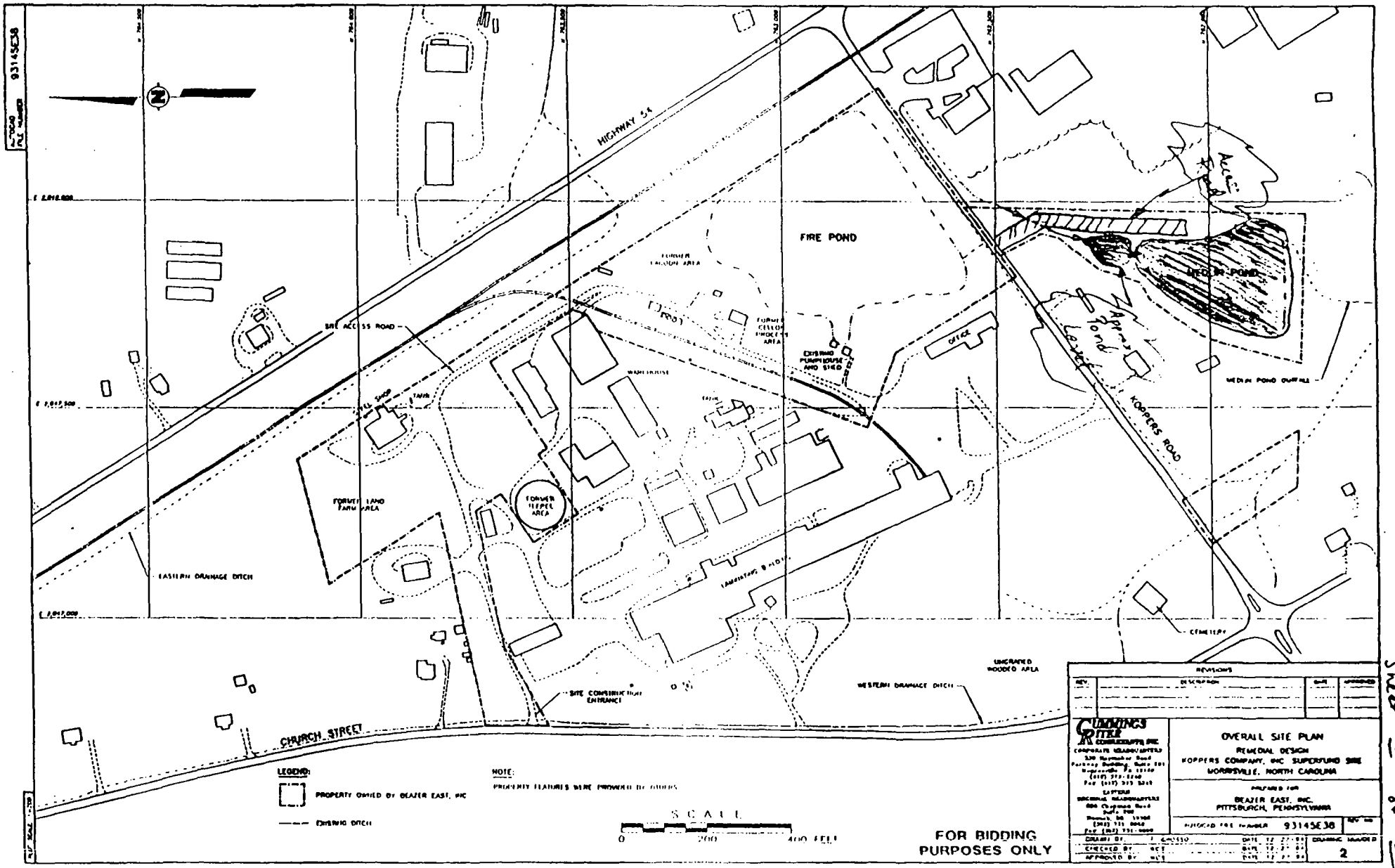
**Weather Conditions:**
*a.m.*
*p.m.*

**Health & Safety PPE:**

**Air Monitoring Results:**

**Field Representative:** **Date:**

f40/corp



HIGHWAY 54
FIRE POND
FORMER LAGOON AREA
FORMER CELLOR PROCESS AREA
EXISTING PUMPHOUSE AND SHED
OFFICE
MEDIUM POND
Access Road
Approx Pond Level
KOPPERS ROAD
MEDIUM POND OUTFALL
SITE ACCESS ROAD
STEEL SHOP
TANK
WAREHOUSE
FORMER LAND FARM AREA
FORMER TEEPEE AREA
EASTERN DRAINAGE DITCH
LAMINATING BUILDING
CEMETERY
UNGRADED WOODED AREA
WESTERN DRAINAGE DITCH
SITE CONSTRUCTION ENTRANCE
CHURCH STREET
LEGEND:
PROPERTY OWNED BY BEAZER EAST, INC
EXISTING DITCH
NOTE:
PROPERTY FEATURES WERE PROVIDED BY OTHERS
SCALE
0
200
400 FEET
FOR BIDDING PURPOSES ONLY
REVISIONS
REV.
DESCRIPTION
DATE
APPROVED
CUMMINGS RITER CONSULTANTS, INC.
CORPORATE HEADQUARTERS
EASTERN REGIONAL HEADQUARTERS
OVERALL SITE PLAN
REMEDIAL DESIGN
KOPPERS COMPANY, INC SUPERFUND SITE
MORRISVILLE, NORTH CAROLINA
PREPARED FOR
BEAZER EAST, INC.
PITTSBURGH, PENNSYLVANIA
AUTOCAD FILE NUMBER 93145E38
DRAWN BY
CHECKED BY
APPROVED BY
DRAWING NUMBER
2


Sheet 3 of 3

**CUMMINGS RITER CONSULTANTS, INC.**

| | |
|---|---|
| Date | 11/2/95 |
| Day of Week | Thurs |
| No. | 9 |
| Sheet | 1 of 4 |

# FIELD ACTIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East - Koppers Superfund Site | **Project No.** 93-145 |
| **Field Activity:** Surface Water Treatment | |
| **Personnel On Site:** B. Gene | **Subcontractor:** WATEC |

**Description on Daily Activities and Events:**

0815 BG arrives on site. WATEC has diesel pump running for surface water treatment. Steve Kelemencky has held site safety meeting. Asks BG if BG should be signing off on Daily Tailgate Safety Meeting form. BG does not believe to be necessary. Ask Steve Kelemencky to tie in Diversion Ditch 2 to existing natural drainage course at NE corner of Fire Pond. Steve K. explains that tie-in was delayed due to high pond level. Steve K. agrees to complete tie-in this A.M. before heavy rains forecasted.

0945 Dave Lown [illegible] Randy McElveen (NC Superfund [illegible] progress and schedule [illegible] to be excavated - approx. 500 [illegible] for off-site [illegible] [illegible] dioxin [illegible] [illegible] may not be [illegible] for soils with detectable concentrations of dioxins. Randy McElveen asks if we intend to excavate sediments for treatment. BG explains that sediment concentrations of dioxin and penta are below treatment standard and therefore do not require treatment. BG explains that EPA Project Manager Beverly Hudson has promised community that EPA will sample pond sediments again prior to soil capping of Fire Pond. Dave Lown agrees that schedule for sediment sampling is closing in.

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| **Pay Quantities:**<br>WATEC: Site Supervisor (Steve Kelemencky)<br>Foreman (Terry Hall)<br>2 Technicians (Forrest Hodges, John Cutlip<br>Triangle Grading: Wayne Thompson<br>Larry Walker | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.* overcast, drizzle, low 70's<br>*p.m.* overcast, periods hvy rain, 70's | **Health & Safety PPE:**<br>hd hat, steel toed boots, safety glasses | **Air Monitoring Results:** |

**Field Representative:** Bruce Gene **Date:** 11/2/95

f40/corp

GUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 11/2/95 |
| Day of Week | Thurs. |
| No. | 9 |
| Sheet | 2 of 4 |

# FIELD ACTIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East | **Project No.** 93-145 |
| **Field Activity:** Surface Water Treatment | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description on Daily Activities and Events:**

1010 Dave Lown & Randy McElveen (NC Superfund) leave trailer area to observe site south of McCrimmon Road. Expect to return next week when Jim Cook (Beazer East) is here.

1100 BG reviews results of overnight recharge measurement. Water level may have risen from 7 in. to 6 5/8 in. overnight from about 1930 to about 0730 (12 hrs).

1115 BG faxes comments on Nov. 1, 1995 "Subsurface Conditions Around the Fire Pond" letter by Joe Gunn. Letter revised to indicate that area has not been [illegible] with caution tape, and to indicate that odors observed from two incidences may be different. Source of [illegible] should be evacuated by grading contractor immediately [illegible] detection.

1130 Joe Gunn faxes revised letter to BG with aforementioned comments. Joe Gunn suggests referencing area in As-Built final survey dwgs at project closeout. BG will try to get Wayne Thompson draw area on copy of design dwgs. Joe Gunn calls to ask BG about substitution of fill for topsoil. BG is aware of WATEC's substitution request. Joe Gunn and BG review QC Testing requirements for fill/topsoil in accordance with Section 1400 of Specifications: Moisture Content, Atterberg Limits, Standard Proctor, Sieve Analysis, organic content. Triangle Grading continues to stockpile soil at NW corner of pond. Soil smells of organics (i.e. manure)

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:** p.m. | **Health & Safety PPE:** | **Air Monitoring Results:** |

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|---|---|
| **Field Representative:** | **Date:** |

f40/corp

CUMMINGS RITER CONSULTANTS, INC.

Date 1/2/95
Day of Week Thurs
No. 9
Sheet 2 of 4

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Brazer East | **Project No.** 02-145 |
| **Field Activity:** Surface Water Treatment | |
| **Personnel On Site:** BGers | **Subcontractor:** WATEC |

**Description on Daily Activities and Events:**

1230 - 1430 Site recieves approximately 0.9" rain. Heavy thunder showers. BG requests that WATEC erect silt fence downslope of stockpile near NE corner of Fire Pond, upslope of Diversion Ditch 2 (second request). Steve Kolomenchy agrees to install fence.

1430 - 1515 BG walks site and photographs drainage features. (See photo log).

1630 Steve Kolomenchy (WATEC) leaves site for the day. Technicians to remain to approximately 20:00.

1700 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health & Safety PPE:** | **Air Monitoring Results:** |

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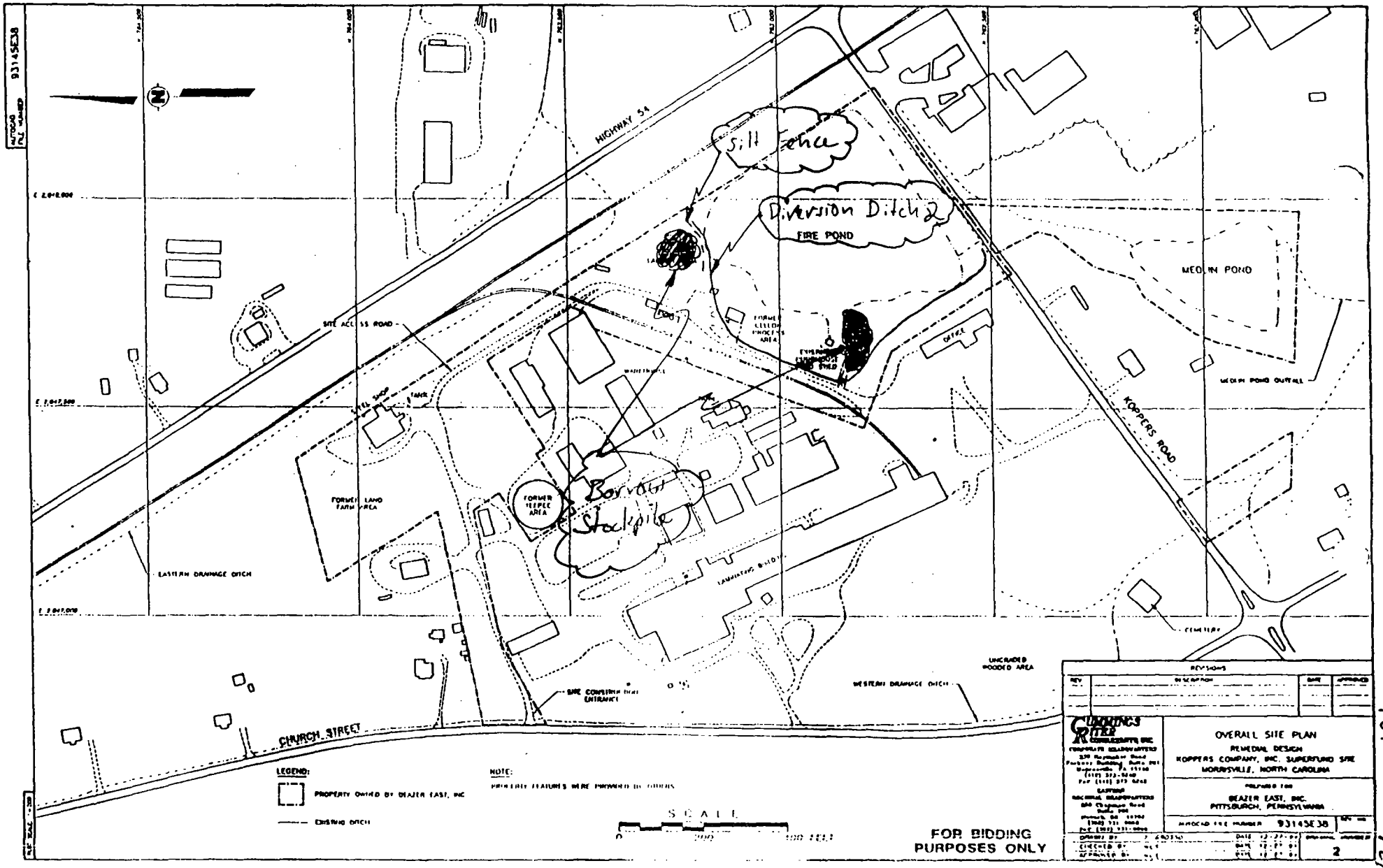
|---|---|
| **Field Representative:** | **Date:** |

f40/corp


93145E38
HIGHWAY 54
Silt Fence
Diversion Ditch 2
FIRE POND
MEDIUM POND
MEDIUM POND OUTFALL
SITE ACCESS ROAD
OFFICE
KOPPERS ROAD
FORMER LAND FARM AREA
FORMER TEPEE AREA
Borrow Stockpile
EASTERN DRAINAGE DITCH
CEMETERY
UNGRADED WOODED AREA
WESTERN DRAINAGE DITCH
SITE CONSTRUCTION ENTRANCE
CHURCH STREET
LEGEND:
PROPERTY OWNED BY BEAZER EAST, INC
EXISTING DITCH
NOTE:
SCALE
FOR BIDDING PURPOSES ONLY
REVISIONS
OVERALL SITE PLAN
REMEDIAL DESIGN
KOPPERS COMPANY, INC. SUPERFUND SITE
MORRISVILLE, NORTH CAROLINA
BEAZER EAST, INC.
PITTSBURGH, PENNSYLVANIA
93145E38
2

4 of 4

11/2/95

TO: Bruce Geno FAX: 919-462-1539
Cummings/Riter Consultants, Inc.
Oversight Engineer

FROM: Joe Gunn
Project Manager

DATE: November 1, 1995

SUBJECT: Koppers Company, Inc.
Surface Water Remediation Contract
Subsurface Conditions around the Fire Pond

During the installation of the diversion ditch around the Fire Pond, our grading contractor (Wayne Thompson) uncovered some creosote coated railroad timbers directly north of Soil Contamination Area 2. The timbers were removed with a trackhoe to facilitate the construction of the diversion ditch, and the timbers removed were staged inside of Area 2 for future disposal. The grading contractor, along with his trackhoe operator developed headaches while working through this zone.

On a second occasion, while the grading contractor was working in the area north of the former pumphouse, the grading contractor observed organic odors similar to those observed while removing the creosote coated railroad ties, and he again developed a headache. The grading contractor did not observe visible indications of contamination (e.g.soil staining or waste material). The suspect area was covered with approximately 3 feet of fill as a result of grading operations. WATEC has instructed the grading contractor to avoid work in the vicinity of this area, and has instructed the grading contractor to immediately evacuate the area and notify the Site Manager the instant such odors are observed.

**CUMMINGS RITER CONSULTANTS, INC.**

| | |
|---|---|
| Date | 11/3/95 |
| Day of Week | Fri |
| No. | 10 |
| Sheet | 1 of 2 |

# FIELD ACTIVITY REPORT

**Project Name:** Beazer East - Koppers Superfund Site **Project No.** 93-145 [illegible]

**Field Activity:** Surface Water Trtmt

**Personnel On Site:** B. Gunn **Subcontractor:** WATEC

**Description on Daily Activities and Events:**

0800 BG arrives on site. WATEC has conducted Daily Tailgate Safety Meeting.

0900 Level in Fire Pond is 6½" below initial water surface elevation. Raleigh-Durham precipitation information is as follows:

Gal per in rain (4.5 ac):

$4.5\ ac \times 1'' = 4.5(43560\ ft^2) \times \frac{1}{12}\ ft \times 7.48\ \frac{GAL}{Ft^3}$

$= 122^k$ Gal.

| | |
|---|---|
| 10/23 - 10/26 | 0" |
| 10/27 | 1.18" |
| 10/28 | 0.06" |
| 10/31 | 0.1" |
| 11/1 | 0.01" |
| 11/2 | 1.12" |
| | [illegible] since ownership began |

To date, WATEC has [illegible] 1.579 × 10⁶ Gal. Triangle Grading Contractors not on site.

[illegible] of Fire Pond on [illegible] (REB for Joe Gunn [illegible]) for well abandonment.

1100 Fax Joe Gunn letter requesting proposal for abandonment of well M-1. Joe Gunn calls BG to request well permit no. so that well abandonment record may be completed for NC. BG to try to find telephone no for Soil Testing Services (firm which originally installed the well). WATEC to subcontract Trigon.

1100 - 1200 Work on material quantity and labor estimates for comparison with WATEC estimate of costs for additional Erosion and Sedimentation Controls (Change Order 5)

12 - 1230 Lunch

**Pay Quantities:**

WATEC: Site Manager: Steve Kelemencky

2 technicians: John Cuttip

Forrest Hodges

**Project Changes/Unusual Observations:**

—

**Weather Conditions:**

a.m. overcast, low 70's

p.m. overcast, brief sun, mid 70's

**Health & Safety PPE:**

Steel-toad boots, hd hat, safety glasses

**Air Monitoring Results:**

—

**Field Representative:** [signature] **Date:** 11/3/95

f40/corp

**CUMMINGS RITER CONSULTANTS, INC.**

| | |
|---|---|
| Date | 11/3/95 |
| Day of Week | Fri |
| No. | 10 |
| Sheet | 2 of 2 |

# FIELD ACTIVITY REPORT

| | |
|---|---|
| **Project Name:** Beaver Fox | **Project No.** 93-145.30.5 |
| **Field Activity:** Surface Water Treatment | |
| **Personnel On Site:** B. Gero | **Subcontractor:** WATEC |

**Description on Daily Activities and Events:**

1330 Recieve call from Kieth Madison (Black & Beach - EPA oversight contractor) informing B.G. that EPA Fire Pond sediment sampling to be performed the week of 11/6/95.

1400 B. Smith calls B.G. to inform that Dave Lowry (NC Superfund) has notified Cummings/Riter that EPA will be performing sediment sampling. B. Smith asks BG to make note and document sediment sampling, sample equipment decontamination, and record keeping procedures employed for sediment sampling. Also note any indications as to depth of sediment.

1500 BG receives call from Buck (Bone & Cove) regarding site visit to look at Monitoring Well [illegible] for access. Buck plans to visit 11/6/95 for purpose of estimating [illegible] to abandon well.

1600 WATEC reports that 6" diesel pump has mechanical problems and rental company is scheduled to install new starter so that pumping may resume. Pumped approx. 200k Gal. today. WATEC hopes to have pump operable in a couple of hours. BG performs site walk. WATEC has installed 4" PVC line from Medlin Pond to Fire Pond. 4" line has been placed through McCrimmon Road culvert.

1800 Steve Kolamensky (WATEC) reports that pump will be down until tomorrow AM. WATEC leaves site for the day.

1830 BG leaves site. Locks gate.

| | |
|---|---|
| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

| | | |
|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health & Safety PPE:** | **Air Monitoring Results:** |

| | |
|---|---|
| **Field Representative:** | **Date:** |

f40/corp

**CUMMINGS RITER CONSULTANTS, INC.**

| | |
|---|---|
| Date | 11/6/95 |
| Day of Week | Mon |
| No. | 11 |
| Sheet | 1 of 5 |

# FIELD ACTIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East - Kopper Superfund Site | **Project No.** 93-145.20.55 |
| **Field Activity:** Surface Water Treatment | |
| **Personnel On Site:** B. Gano | **Subcontractor:** WATEC |

**Description on Daily Activities and Events:**

0800 BG arrives on site. WATEC has conducted Daily Tailgate Safety Meeting. Water level has dropped 10 in. and has receded approximately 10 ft from original shoreline at North end of Fire Pond. Total volume pumped to date ~ $2.2 \times 10^6$ GAL. Spoke to Steve Kelemencky (WATEC) regarding delineation by Wayne Thompson of Triangle Grading Contractors of area along North end of Fire Pond where organic odors observed while grading. Need location put on dwg for future reference. Triangle Grading is stockpiling fill material at NW corner of Fire Pond. BG to give Kieth Matson (Black & Beech) call to inform him of backfilling schedule.

0915 BG talks to Jim Cook (Beazer East, Inc.) to discuss Fire Pond backfilling schedule. Joe Gunn (WATEC) has indicated [illegible] backfilling/geogrid [illegible] WATEC [illegible] 20 - 50 [illegible] [illegible] begins Jim Cook [illegible] [illegible] 11/[illegible] BG [illegible] meet [illegible] Mike Kelly & Dave Lown (NC Superfund) 11/9/95 to show the site and tour Seagandollar wetlands. BG to talk to Dave Hails to determine Seagandollar wetlands planting schedule, and notify Seagandollar of site visit by NC Superfund administrators. BG informs J. Cook that manual calibration of flow meter has not been performed, as WATEC has indicated a change order would be needed. J. Cook requests that manual calibration be performed. BG explains WATEC has proposed option of additional flow meter. J. Cook prefers manual calibration. BG explains that PE tank is 1500 Gal. and flow meter varies (cycles) between approx 480 - 525 GPM (~10%). Manual check of meter should require 2. - 3.1 min to fill tank. Perform several times.

| | |
|---|---|
| **Pay Quantities:**<br>WATEC: Steve Kelemencky (Site Manager)<br>Terry Hall (Foreman)<br>John Cutlip (Tech)<br>Forrest Hodges (Tech)<br>Dan Kitchen (Tech)<br>Triangle Grading: 2 trucks: tandem & trailer, DH5x | **Project Changes/Unusual Observations:**<br>— |

| | | |
|---|---|---|
| **Weather Conditions:**<br>am sunny, mid 40's to low 50's<br>pm sunny | **Health & Safety PPE:**<br>hd hat, safety glasses, steel toes boots | **Air Monitoring Results:**<br>— |

**Field Representative:** Brian Gano **Date:** 11/6/95

f40/corp

**CUMMINGS RITER CONSULTANTS, INC.**

| | |
|---|---|
| Date | 11/6/95 |
| Day of Week | Mon |
| No. | 11 |
| Sheet | 2 of 5 |

# FIELD ACTIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East | **Project No.** 93-14530.55 |
| **Field Activity:** Surface Water Treatment | |
| **Personnel On Site:** B Geno | **Subcontractor:** WATEC |

**Description on Daily Activities and Events:**

1030 BG asks Wayne Thompson to sketch areas where organic odors were observed during grading near former (now demolished) pumphouse.

1100 Steve Kelemencky (WATEC) and B. Geno discuss manual calibration of flow meter. Steve K. informs B.Geno that first change out of sediment bag filters (temp. surface water treatment system) to be performed today. System is designed to be able to isolate filters to be changed without shutting down system. Steve K. informs BG that he believes manual calibration of flow meter would be less accurate and approx [illegible] installation of second flow meter.

1135 Joe Gunn (WATEC) calls to discuss abandonment of Monitoring Well [illegible] and [illegible] flow meter. Joe [illegible] state [illegible] time to abandon [illegible] would [illegible] have to be changed [illegible] time. Joe Gunn has cost from subcontractor of $1400. Joe Gunn will also look into cost of manual calibration of flow meter vs. third-party certification of calibration. Costs of each will be beneficial to determine course of action. Joe Gunn says he plans to be on site 11/9/95. Joe Gunn indicates that Trigon has told him that well installation permit is not important, but that well abandonment form will be filed with NC. WATEC to perform dioxin sampling today.

| | |
|---|---|
| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

| | | |
|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health & Safety PPE:** | **Air Monitoring Results:** |

| | |
|---|---|
| **Field Representative:** | **Date:** |

f40/corp

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 11/6/95 |
| Day of Week | Mon |
| No. | 11 |
| Sheet | 3 of 5 |

# FIELD ACTIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East | **Project No.** 93-145.[illegible] |
| **Field Activity:** Surface Water Treatment | |
| **Personnel On Site:** BGeno | **Subcontractor:** WATEC |

**Description on Daily Activities and Events:**

1400 BG speaks to Randy Bodner (EAP) regarding Seagandollar wetlands planting and plans by NC DEHNR to visit wetlands Thursday 11/9/95. Obtain D Hails (EAP) number. Dave H. travelling to Cary, NC to perform planting 11/6 - 11/10/95.

1500 BG calls Dave Hails (EAP) to inform him of plans to visit Seagandollar wetlands 11/9/95. Dave H. expects to still be at Seagandollar 11/9/95.

1515 Water level has dropped 3/4 at $2.364 \times 10^6$ Gal.

1530 BG calls Brian Seagandollar for permission of NC DEHNR to visit (with BG) Seagandollar wetlands. Brian S. approves.

1600 BG talks [illegible] (CRC - [illegible]) to confirm that the [illegible] the [illegible] Med [illegible]

[illegible]

1620 BG talks to Jim Cook (Beazer) to inform him that Joe Gunn (WATEC) is not scheduled to arrive until week of 11/13/95. Calibration alternatives (manual vs. third-party certification) is being evaluated by CRC/WATEC. Jim Cook agrees that Doppler or other certification methods would be more accurate than manual method with stopwatch and 1500 Gal tank.

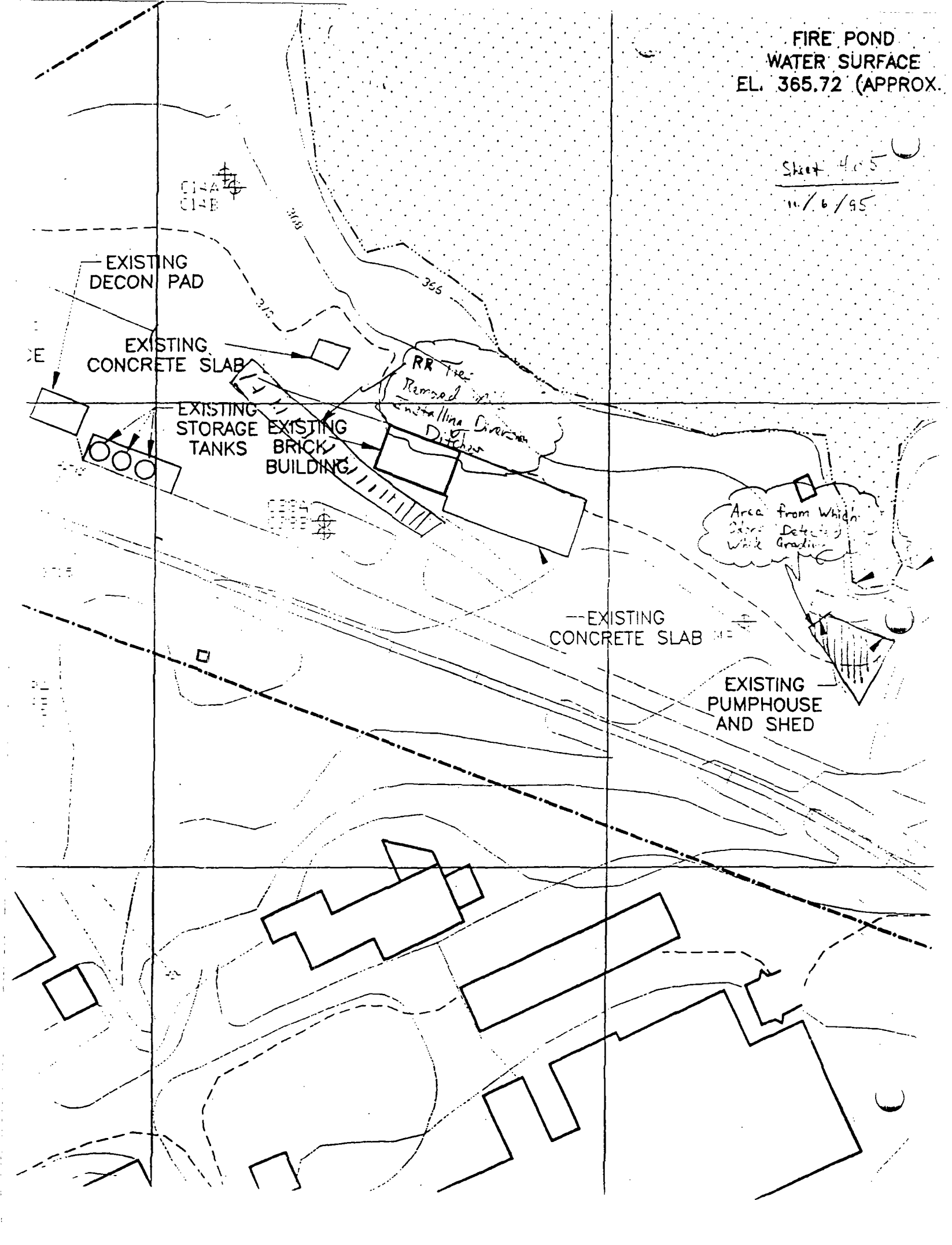
1640 BG leaves site for the day. WATEC to pump until ~ 20:00

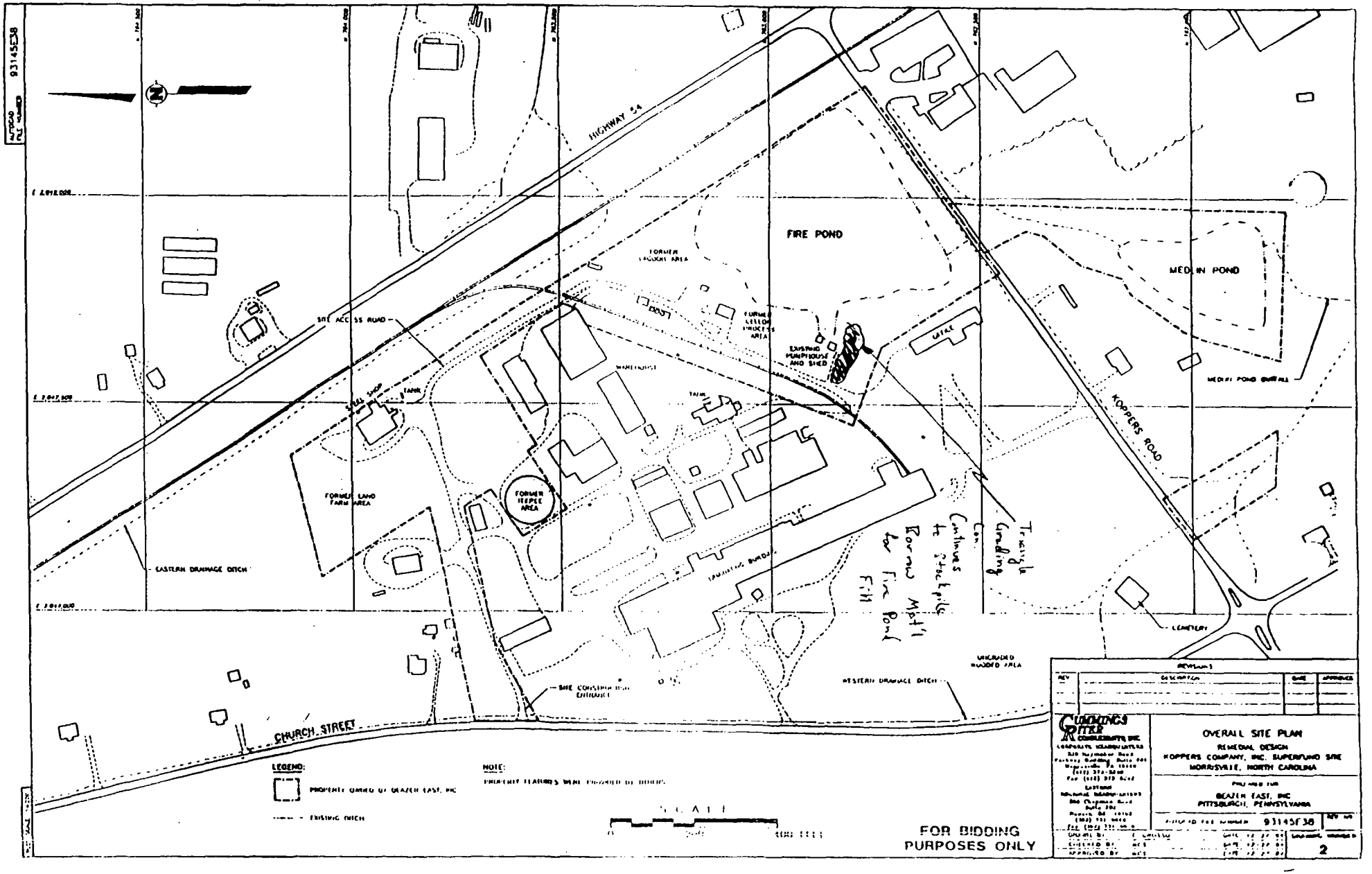
| | |
|---|---|
| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

| | | |
|---|---|---|
| **Weather Conditions:** 0 m [illegible] | **Health & Safety PPE:** | **Air Monitoring Results:** |

| | |
|---|---|
| **Field Representative:** | **Date:** |

f40/corp


FIRE POND
WATER SURFACE
EL. 365.72 (APPROX.
Sheet 4 of 5
11/6/95
EXISTING
DECON PAD
EXISTING
CONCRETE SLAB
EXISTING
STORAGE
TANKS
EXISTING
BRICK
BUILDING
RR Tie
Removed
Installing Diversion
Ditches
Area from Which
Odors Detected
While Grading
EXISTING
CONCRETE SLAB
EXISTING
PUMPHOUSE
AND SHED
366
368



AUTOCAD FILE NUMBER 93145E38
HIGHWAY 54
FIRE POND
MEDLIN POND
FORMER LAGOON AREA
FORMER CELLOR PROCESS AREA
EXISTING PUMPHOUSE AND SHED
SITE ACCESS ROAD
STEEL SHOP
TANK
WAREHOUSE
FORMER LAND FARM AREA
FORMER TEEPEE AREA
EASTERN DRAINAGE DITCH
KOPPERS ROAD
MEDLIN POND OUTFALL
CEMETERY
UNGRADED WOODED AREA
WESTERN DRAINAGE DITCH
SITE CONSTRUCTION ENTRANCE
CHURCH STREET
Triangle Grading Con. Continues to Stockpile Borrow Mat'l for Fire Pond Fill
LEGEND:
PROPERTY OWNED BY BEAZER EAST, INC
EXISTING DITCH
NOTE:
PROPERTY FEATURES WERE PROVIDED BY OTHERS
SCALE
FOR BIDDING PURPOSES ONLY
REVISIONS
REV
DESCRIPTION
DATE
APPROVED
CUMMINGS RITER CONSULTANTS, INC.
OVERALL SITE PLAN
REMEDIAL DESIGN
KOPPERS COMPANY, INC. SUPERFUND SITE
MORRISVILLE, NORTH CAROLINA
PREPARED FOR
BEAZER EAST, INC
PITTSBURGH, PENNSYLVANIA
AUTOCAD FILE NUMBER 93145E38
DRAWN BY
CHECKED BY
APPROVED BY
2

**CUMMINGS RITER CONSULTANTS, INC.**

| | |
|---|---|
| Date | 11/7/95 |
| Day of Week | Tues |
| No. | 12 |
| Sheet | 1 of 2 |

# FIELD ACTIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East - Koppers Superfund Site | **Project No.** 93 - 145.30.55 |
| **Field Activity:** Surface Water Treatment | |
| **Personnel On Site:** BG | **Subcontractor:** WATEC |

**Description on Daily Activities and Events:**

0815 BG arrives on site. WATEC has arrived and has conducted Daily Tailgate Safety Meeting. Steve Kelemencky informs BG that WATEC is considering shifting to 24-hr operation. Not concerned so much about cost as to noise. Do not want local residents to complain.

1000 Talk to Bill Smith (CRC) to discuss monthly report. B. Smith is of the understanding that Beazer was to create monthly progress to EPA/NC DEHNR. B. Smith to talk to Jim Cook (Beazer) to decide who will publish monthly progress report. B. Smith has reviewed Change Orders 4 and 5, but has not [illegible] 6 ([illegible]). RFP for soil excavation put [illegible] hold [illegible] /River [illegible] may [illegible]. BG informs B. Smith [illegible] for certification. [illegible] informed that WATEC [illegible] 11/7/95 [illegible] 24-hours. Will begin pumping [illegible] CRC will provide monthly NPDES surface water treatment verification sampling results to NC DEHNR. Format should be similar to Daily Construction Monitoring Report.

1100 BG talks to Joe Gunn (WATEC). BG informs Joe G. that review of Change orders 5 & 6 is underway. BG to overnight comments to WATEC. Also, BG has completed list of submittals for surface water treatment contract. BG to overnight submittal list to Joe Gunn.

| | |
|---|---|
| **Pay Quantities:**<br>WATEC: Steve Kelemencky (Site Man.)<br>Terry Hall (Foreman)<br>Forrest Hodges ] technicians<br>John Cutlip<br>Dan Kitchen<br>(Triangle Grading (on not on site due to rain) | **Project Changes/Unusual Observations:**<br>— |

| | | |
|---|---|---|
| **Weather Conditions:**<br>**a.m.** overcast, steady rain, low 50's<br>**p.m.** overcast, steady hvy rain, low 60's | **Health & Safety PPE:**<br>hd hat, safety glasses, steel toed boots | **Air Monitoring Results:**<br>— |

**Field Representative:** [signature] **Date:** 11/7/95

f40/corp

**CUMMINGS RITER CONSULTANTS, INC.**

| | |
|---|---|
| Date | 11/7/95 |
| Day of Week | Tues |
| No. | 12 |
| Sheet | 2 of 2 |

# FIELD ACTIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment | |
| **Personnel On Site:** [illegible] | **Subcontractor:** WATEC |

**Description on Daily Activities and Events:**

1130 Kieth Matteson (Black & Veach) arrives on site to sample sediment for EPA. Kieth M. has copy of RAWP, but is not familiar with remediation plans. Kieth M. to be on site through 11/10/95.

1145 Kieth M. leaves site for lunch. Dave Harris (EAP) arrives at site trailer. Dave H. will begin planting at Seagandollar wetlands. Dave H. believes Fire Pond to be ~11' deep (lost fish net while shocking for fish).

1230-1300 BG breaks for lunch.

1330 Kieth M. returns to site. Steve Kelemencky leaves site for the day. John Cutlip & Forrest Hodges [illegible] will later be [illegible] by Terry [illegible] Steve Kelemencky.

1330 - 1500 Buck Daniels / Bore & Core) visits site to provide CRC with estimate of [illegible] to abandon Monitoring Well [illegible]. Buck D. [illegible] that [illegible] Services (name [illegible]) [illegible] longer in business. Buck D. believes access along top of berm should not be problematic - may have to remove a couple of trees. Buck D. indicates he does not need well installation permit. Well Abandonment form to be submitted to NC.

1500 - 1800 BG prepares submittal to Joe Gunn (WATEC) for review of Change Orders 3, 5, and 6. Joe Gunn faxes Change Order 7 for certification of flow meter. Kieth M. (Black and Veach, leaves site for the day).

1830 Rain has stopped. Measure 1.7" on rain gage. WATEC to pump to midnight. BG leaves site for the day.

| | |
|---|---|
| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

| | | |
|---|---|---|
| **Weather Conditions:** | **Health & Safety PPE:** | **Air Monitoring Results:** |
| [illegible] m. | | |
| [illegible] m. | | |

| | |
|---|---|
| **Field Representative:** | **Date:** 11/7/95 |

f40/corp

**CUMMINGS RITER CONSULTANTS, INC.**

| | |
|---|---|
| Date | 11/8/95 |
| Day of Week | Wed |
| No. | 13 |
| Sheet | 1 of 2 |

# FIELD ACTIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East Koppers Superfund Site | **Project No.** 93-145:30 SS |
| **Field Activity:** Surface Water Treatment | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description on Daily Activities and Events:**

0830 BG arrives on site. John Cutlip and [illegible] of WATEC are monitoring pump.

0900 Kieth Matteson (Black & Veach) arrives. BG discusses changes to design documents since issuing for bid geogrid, underdrain, prefabricated groundwater treatment building, E&S Controls. BG informs that these changes are not reflected in the Remedial Action Work Plan, but are documented in a letter to Beverly Hudson (EPA Project Manager), Kieth M. has discussed projected backfilling schedule with John Cutlip (WATEC). WATEC expects to begin backfilling of Fire Pond week of 11/13/95. Kieth M. indicates that he try to sample from the edge of the geogrid during backfilling process. BG asks whether remaining [illegible] Kieth M. [illegible] 2-4" of remaining [illegible] problem to sampling of [illegible]. BG indicates that plan for backfilling communicated by WATEC is to place 2 to 3 ft. of fill over grid immediately following laying of grid. Some siltation may occur of Fire Pond due to backfilling.

0945 Kieth M. leaves site. 3.004 x $10^6$ GAL pumped according to flow meter. Drawdown is 11.25" below original level. Rec'd approx. 1.7" rain 11/7/95.

1030 Talk to Bill Smith (CRC-Wilmington) to discuss review of Change Orders 3, 5 and 6. B. Smith suggests obtaining company letterhead for correspondence with WATEC. Also, BG to send weekly package to CRC-PGH of all outgoing correspondence to keep file current.

| | |
|---|---|
| **Pay Quantities:**<br>WATEC: Steve Kalemencky (Site Manager)<br>Terry Hall (Foreman)<br>John Cutlip, Forrest Hodges, Dan Kitchen — Tech.s | **Project Changes/Unusual Observations:**<br>— |

| | | |
|---|---|---|
| **Weather Conditions:**<br>a.m. sunny, westerly wind to 40mph, low-mid 50's<br>p.m. see above, low-mid 60's | **Health & Safety PPE:**<br>Steel toed boots, hd. hat, safety glasses | **Air Monitoring Results:**<br>— |

**Field Representative:** [signature] **Date:** 11/8/95

f40/corp

GUMMINGS RITER CONSULTANTS, INC.

Date 11/8/95
Day of Week Wed
No. 13
Sheet 2 of 2

# FIELD ACTIVITY REPORT

**Project Name:** Beazer East - Koppers Superfund Site | **Project No.** 93-145.30.55

**Field Activity:** Surface Water Treatment

**Personnel On Site:** B. Gero | **Subcontractor:** WATEC

**Description on Daily Activities and Events:**

1100 Talk to Jim Cook (Beazer East). BG to fax pumping totals and precipitation record to Jim Cook. J. Cook is trying to estimate water balance and account for difference between pumped vol. of water and estimated Fire Pond volume.

1130 BG faxes Jim Cook record of pumping volume and precipitation, and estimate of recharge calculated from rise in water level during down period.

1400 BG talks to Joe Conn (WATEC) concerning submittal requirements. WATEC to prepare list of submittals and schedule of submittals per specifications section 1300. Section 01115 details TAL/TCL analysis of borrow material and logging requirements for sampling.

1400 - 1800 BG prepares list of required submittals and submittal register.

1830 Steve Kolamenchy leaves site. WATEC to pump 24 hours.

1900 BG leaves site.

**Pay Quantities:**

**Project Changes/Unusual Observations:**

**Weather Conditions:** a.m.

**Health & Safety PPE:**

**Air Monitoring Results:**

**Field Representative:**

**Date:**

f40/corp

**CUMMINGS RITER CONSULTANTS, INC.**

| | |
|---|---|
| Date | 11/9/95 |
| Day of Week | Thurs |
| No. | 14 |
| Sheet | 1 of 2 |

# FIELD ACTIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment | |
| **Personnel On Site:** B. Gunn | **Subcontractor:** WATEC |

**Description on Daily Activities and Events:**

0830 BG arrives on site. WATEC is pumping Fire Pond.

0915 Steve Kelemencky (WATEC) arrives on site. WATEC pumped 24 hrs 11/8/95. 577,856 Gals/30 hrs.

0945 Drawdown 15 in., 2.589 x 10^6 gals.

1030 Jim Cook (Beazer East) arrives on site.

1030-1100 Jim Cook & B.G. discuss recharge estimate to Fire Pond from groundwater. Potentiometric map from Remedial Investigation indicates groundwater mound to the north of the Fire Pond.

1100-1200 BG and Jim Cook walk site. Jim Cook advises placement of more [illegible] at [illegible] of Fire Pond, more silt fence around [illegible] at NE corner of Fire Pond.

1200 [illegible] BG & J. Cook break for lunch [illegible] (EAP). Dave [illegible] to return to Seagandollar [illegible] lunch.

1330-1440 BG and J. Cook visit Seagandollar wetlands. Dave Hails is busy planting wetlands species.

1500 BG and J. Cook return to site to wait for Sherry [illegible] (Daily Observer). Photographer does not show. J. Gunn (WATEC) faxes attached letter.

1600 Jim Cook leaves site for day. BG receives [illegible] and Standard Proctor results as submittal from WATEC per specifications.

1800 BG leaves site for the day. WATEC to pump 24 hrs.

| | |
|---|---|
| **Pay Quantities:**<br>WATEC: Steve Kelemencky (Site Manager)<br>Terry Hall (Foreman)<br>John Cutlip, Dan Kitchen, Forrest Hodges — Tech.s | **Project Changes/Unusual Observations:**<br>— |

| | | |
|---|---|---|
| **Weather Conditions:**<br>a.m. Sunny, mid 40's - 50's<br>p.m. Sunny, high 50's | **Health & Safety PPE:**<br>Steel - Toed Boots<br>Safety Glasses | **Air Monitoring Results:**<br>— |

**Field Representative:** Bruce Gunn **Date:** 11/9/95

f40/corp

11/9/95
Pg 2 of 2

**WATEC**

**Waste Abatement Technology, L.P.**
1300 Williams Drive, Suite H
Marietta, Georgia 30066
(404) 427-1947, FAX (404) 427-1907

November 9, 1995

Mr. Bruce Geno
Cummings/Riter Consultants, Inc.
339 Haymaker Road
Parkway Building Suite 201
Monroeville, Pennsylvania 15146

Reference: Surface Water Remediation
Koppers Company, Inc. Superfund Site
Schedule of Alternate Costs

Dear Mr. Geno:

Based on the current meter readings @ 2:15pm today for the surface water treatment(3,721,840 gallons), WATEC is notifying you that it will be necessary to extend our contract under the Schedule of Alternate Costs - Item 1, Pond Dewatering in order to complete the dewatering phase of the project. Please advise Steve Kelemencky, WATEC Site Manager to proceed based on approvals from Jim Cook @ Beazer East, Inc.

Should you have any questions, please give me a call.

Sincerely,

*Waste Abatement Technology, L.P.*

Joseph F. Gunn
Project Manager

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 11/10/95 |
| Day of Week | Friday |
| No. | 15 |
| Sheet | 1 of 2 |

# FIELD ACITIVITY REPORT

**Project Name:** Beazer East Inc. - Koppers Superfund Site **Project No.** 93-145.30.55

**Field Activity:** Surface Water Treatment

**Personnel On Site:** B. Geno **Subcontractor:** WATEC

**Description of Daily Activities and Events:**

0830 BG arrives on site. WATEC has pumped last 48 hours. Drawdown has reached approximatley 18.5 inches.

1030 Jim Cook (Beazer East) arrives on site. J. Cook discusses progress with pumping, and expected volume verses actual volume of water pumped. BG and J. Cook work on water balance of calculated pond volume, pumped volume to date, rainfall, and recharge. J. Cook decides that the calibration of the flow meter is critical. BG makes call to Joe Gunn (WATEC) to determine whether or not the subcontractor for the calibration service can shorten schedule from scheduled date of 11/20/95. Joe Gunn to call subcontractor and let BG know results.

1050 J. Gunn informs BG that subcontractor selected to perform calibration was not available, but J. Gunn will keep BG informed of calibration schedule.

1100 BG and J. Cook discuss difference in pumped volume versus anticipated volume of approx. 3.6 million gallons in Fire Pond with Steve Kelemencky (WATEC). S. Kelemencky offers that the pre-pumping pond level was higher than that used for design due to the debris in front of the culvert. S. Kelemencky believes that a beaver had placed debris in front of culvert outfall of Fire Pond raising the water level in the pond by as much as two ft. BG asks S. Kelemencky to use transit to measure the difference in elevation from the outfall invert to the pre-pumping water surface.

1150 BG and J. Cook travel to the Seagandollar site to visit with Dave Hails (EAP). Dave has nearly finished first planting of Seagandollar wetlands, and is planning to return to Pittsburgh this evening.

1200 BG and J. Cook go to lunch.

**Pay Quantities:**

WATEC: Joe Gunn (p.m.)
Steve Kelemencky (s.m.)
Dan Kitchen (tech.)
John Cutlip (tech.)
Terry Hall (2nd shift, foreman)
Forrest Hodges (2nd shift, tech.)

**Project Changes/Unusual Observations:**
None

**Weather Conditions:**
*a.m.* sunny, low 50's
*p.m.* sunny, low-mid 60's

**Health and Safety PPE:**
steel-toed boots, safety glasses

**Air Monitoring Results:**
Background

**Field Representative:** [signature] **Date:** 11/10/95

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 11/10/95 |
| Day of Week | Friday |
| No. | 15 |
| Sheet | 2 of 2 |

# FIELD ACITIVITY REPORT

**Project Name:** Beazer East Inc. - Koppers Superfund Site **Project No.** 93-145.30.55

**Field Activity:** Surface Water Treatment

**Personnel On Site:** B. Geno **Subcontractor:** WATEC

**Description of Daily Activities and Events:**

1340 S. Kelemencky has measured elevation difference from the bottom of the lowest culvert at the Fire Pond outfall to the pre-pumping water surface. The difference is approximately 2 ft. BG and J. Cook examine the beaver dam at the Fire Pond outfall. The outfall consists of two side-by-side culverts at the southwest corner of the Fire Pond through the earth berm. The east-most culvert has the lowest invert elevation, and is clogged with debris, as this culvert is half-filled with water. There is no visible debris in the east-most culvert. The inlet of the west-most culvert contains sediment and debris filling approximately one-quarter of the culvert. No water is outletting from either culvert. BG recalls from initial site walks that there was flow from the west-most culvert, however the water surface is now below the invert of the west-most culvert (approximately 19 inches less).

1420 John Funk (RUST) arrives on site to deliver Health and Safety Plan, Quality Control Plan and drawings of treatment components for groundwater portion of remediation. Electrical subcontractor to visit week of 11/13/95.

1440 J. Cook leaves site to return to Pittsburgh.

1515 J. Funk leaves site. J. Funk will be out of the office 11/13/95 to 11/15/95, but will leave contact for B. Geno.

1530 BG talks to S. Kelemencky to request that WATEC measure any rise in water level during periods from 11/10/95 to 11/13/95.

1600 BG leaves site to travel to Pittsburgh. WATEC to pump until midnight 11/11/95, barring problems with pump. WATEC may pump 11/12/95 for 8 to 10 hours.

**Pay Quantities:**

**Project Changes/Unusual Observations:**

**Weather Conditions:**
*a.m.*
*p.m.*

**Health and Safety PPE:**

**Air Monitoring Results:**

**Field Representative:**

**Date:**

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 11/13/95 |
| Day of Week | Monday |
| No. | 16 |
| Sheet | 1 of 2 |

# FIELD ACITIVITY REPORT

**Project Name:** Beazer East Inc. - Koppers Superfund Site **Project No.** 93-145.30.55

**Field Activity:** Surface Water Treatment

**Personnel On Site:** B. Geno **Subcontractor:** WATEC

**Description of Daily Activities and Events:**

1130 BG arrives on site after driving from Pittsburgh 11/12/95. WATEC had problems with the 6-in. diesel pump on 11/11/95/. Measured recharge from 1700 11/11/95 to 0700 11/13/95 at approximately 1 inch. Drawdown approximately 19.5 inches. Received approximately 0.8 in. rain 11/11/95. Joe Gunn arrived 11/11/95. Anticipates draining Fire Pond prior to Thanksgiving break, and considering beginning backfilling of Fire Pond 11/27/95. Calibration of flow meter/totalizer to occur 11/16/95, 11/17/95, or 11/20/95.

1230 Lee Cox of Elk Electric, Inc. visits site to look at the transformers, proposed treatment building location, and proposed overhead power line location for groundwater treatment system which has been contracted to RUST Environment and Infrastructure. Elk Electric is subcontractor to RUST.

1310 BG talks to Jim Cook (Beazer East). Jim is concerned with schedule for the backfilling of the Fire Pond, and does not want to leave the sediments exposed for the Thanksgiving break. Jim Cook, Joe Gunn, and BG to have conference call at 1500 to discuss schedule.

1400 Alan Weed with the Cary News stops by to obtain photographs of the site. Photographs fill stockpile at the northwest corner of the Fire Pond, temporary carbon treatment system and flow meter setup.

1515 J. Cook calls for conference call to discuss scheduling. J. Cook concerned of leaving Fire Pond sediments exposed for Thanksgiving break. J. Cook and Bob Fisher (Beazer East) propose switching pumping to Medlin Pond to try to backfill Medlin Pond before the holiday. J. Cook would also like to combine Medlin Pond habitat mitigation plan with Medlin Pond backfilling. BG to call Randy Bodnar or Dave Hails of EAP to determine planting window and concerns EAP may have regarding grading of Medlin Pond for preparation of wetlands planting. J. Gunn agrees to switching pumping to Medlin Pond if Triangle Grading Contractors can remobilize for 11/20/95 to begin placing backfill in Medlin Pond.

**Pay Quantities:**

WATEC: Joe Gunn (p.m.)
Steve Kelemencky (s.m.)
Dan Kitchen (tech.)
John Cutlip (tech.)
Terry Hall (2nd shift, foreman)
Forrest Hodges (2nd shift, tech.)

**Project Changes/Unusual Observations:**
Beazer proposes switch of pumping from Fire Pond to Medlin Pond

**Weather Conditions:**
*a.m.* sun, high 50's, breezy
*p.m.* sun, mid 60's, breezy

**Health and Safety PPE:**
steel-toed boots, safety glasses

**Air Monitoring Results:**
Background

**Field Representative:** [signature] **Date:** 11/13/95

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 11/13/95 |
| Day of Week | Monday |
| No. | 16 |
| Sheet | 2 of 2 |

# FIELD ACITIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

1730 J. Gunn informs BG that WATEC would rather continue pumping Fire Pond until Thanksgiving break, place geogrid on exposed sediments, return with partial crew on 11/24/95 to continue pumping Fire Pond. WATEC will plan to pump Fire Pond approx. 10 to 12 hours per day on 11/24/95 and 11/25/95. WATEC to bring in an additional 4 in. pump and tie in with Y-fitting to existing treatment influent line to try to maintain flow through treatment system of 550 gpm. System is currently averaging about 420 gpm. Second feed pump will also provide backup should one pump fail. BG to inform J. Cook. J. Gunn also informs BG that WATEC needs letter from Beazer East stating ability to draw against Alternate Schedule 1 in bid.

| | |
|---|---|
| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

| | | |
|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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|---|---|
| **Field Representative:** | **Date:** |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 11/14/95 |
| Day of Week | Tuesday |
| No. | 17 |
| Sheet | 1 of 4 |

# FIELD ACITIVITY REPORT

**Project Name:** Beazer East Inc. - Koppers Superfund Site **Project No.** 93-145.30.55

**Field Activity:** Surface Water Treatment

**Personnel On Site:** B. Geno **Subcontractor:** WATEC

**Description of Daily Activities and Events:**

0830 BG arrives on site. WATEC has been pumping since 0700 11/13/95. Drawdown about 20.25 in. Received approximately 0.25 in. rain overnight. Approximately 6 more feet of sediment at north end of Fire Pond exposed since yesterday.

0900 S. Kelemencky (WATEC) reports that a seep at the north end of the Fire Pond has been located (see attached map) about 10 feet south (i.e., toward pond) from between two western-most impacted soil areas. Flow from seep appears to be about 5 to 10 gpm. BG obtains photos of seep. Area of seep has been observed several times, however this is the first time that water has been observed flowing from this area. J. Gunn (WATEC) has left site to purchase section of culvert place vertically in seep outlet to isolate flow. BG walks perimeter of Fire Pond to survey additional seeps or recharge sources.

1030 BG talks to Jim Cook (Beazer East) and conveys WATEC's schedule for the pumping of the Fire Pond and placement of the geogrid before Thanksgiving. J. Cook is more optomistic that WATEC can be done before the Christmas break if WATEC increases pumping rate and manpower commitment over Thanksgiving break. J. Cook is concerned with die-off of fish and visibility of dead fish prior to backfilling if too much water is withdrawn to sustain fish during Thanksgiving break. J. Gunn (WATEC) has indicated to BG that oxygen transfer is optimal with cold weather and fish should also require less oxygen due to dormancy. BG to ask J. Gunn about need for aeration of pond water to sustain fish until complete dewatering and backfilling. BG and J. Cook discuss options for isolating seep water from the Fire Pond. J. Cook suggests discharging to diversion ditch with verification sampling for NPDES requirements or filtering through 55-gal. carbon drum and discharging without sampling. BG to provide options for discharge to WATEC.

1100 Randal Bodnar (EAP) talks with BG concerning grading of Medlin Pond and possible wetlands planting over next 2 weeks. R. Bodnar explains that plants are being stored in greenhouse by Dave Hails (EAP), but storage is not a problem. R. Bodnar indicates that the window for the fall

**Pay Quantities:**

WATEC: Joe Gunn (p.m.)
Steve Kelemencky (s.m.)
Dan Kitchen (tech.)
John Cutlip (tech.)
Terry Hall (2nd shift, foreman)
Forrest Hodges (2nd shift, tech.)

**Project Changes/Unusual Observations:**
WATEC locates culvert (see text and attached map)

**Weather Conditions:**
*a.m.* overcast, high 30's
*p.m.* overcast, low 40's

**Health and Safety PPE:**
steel-toed boots, safety glasses

**Air Monitoring Results:**
Background

**Field Representative:** Bruce Dr

**Date:** 11/14/95

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 11/14/95 |
| Day of Week | Tuesday |
| No. | 17 |
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## FIELD ACITIVITY REPORT

**Project Name:** Beazer East Inc. - Koppers Superfund Site **Project No.** 93-145.30.55

**Field Activity:** Surface Water Treatment

**Personnel On Site:** B. Geno **Subcontractor:** WATEC

**Description of Daily Activities and Events:**

planting season is quickly passing and may already be too late. R. Bodnar does not think that grading of the Medlin Pond in preparation for the wetlands (Chester grading plan shown on Sheet 5 of 8 of Habitat Mitigation Plan) would create problems with erosion and sedimentation.

1130 BG and J. Gunn discuss options for diverting/treating of seep flow. BG suggests that treatment with 55-gal. drum of carbon would be cheaper than hard piping to temporary surface water treatment system, especially given possible intermittent flow of seep. BG and J. Gunn agree that the water does not necessarily need to be isolated from Fire Pond water until fill is placed over the area to maintain stability of subgrade and prevent washing out of backfill. Additionally, BG and J. Gunn talk about erosion and sedimentation controls outside of approved E&S Plan. BG explains that ditch on former Medlin property created for construction of access road will have to be stabilized. BG reviews grading scheme for Medlin Pond Habitat Mitigation Plan with J. Gunn. J. Gunn indicates that the soil berms can be done by grading contractor during backfilling of Medlin Pond. Silt fence and sod planned for Medlin Pond channel will be used upstream where channel was cut for access road to Medlin Pond.

1235 BG breaks for lunch. J. Gunn leaves site for the afternoon.

1330 BG returns to site.

1430 J. Gunn returns to the site. WATEC uses backhoe to dig in area of seep. The outlet end of a culvert is pulled up with the backhoe. The backhoe is used to try to replace the culvert from where it was disturbed. Thus, the suspected seep is actually a storm water outfall draining to the Fire Pond.

1530 BG and J. Gunn conduct storm drain surveillance to determine source of storm drainage feeding culvert which was earlier suspected as a seep. Storm water catch basin feeding culvert is located about 5 feet north of the perimeter road (see attached map). Water is running through the base of

**Pay Quantities:**

**Project Changes/Unusual Observations:**

**Weather Conditions:**
*a.m.*
*p.m.*

**Health and Safety PPE:**

**Air Monitoring Results:**

**Field Representative:**

**Date:**

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 11/14/95 |
| Day of Week | Tuesday |
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# FIELD ACITIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

the storm water structure at approximately the same rate as that coming from the culvert. WATEC to plug outlet of catch basin and let overflow to diversion ditch. A small gravel channel to be constructed across the perimeter road for drainage from the catch basin.

1600 BG leaves message for J. Cook of discovery of culvert stormwater discharge and plans to divert water from flowing into Fire Pond. BG also conveys information from WATEC that WATEC needs letter authorizing billing against Alternate Schedule 1 in bid document. (The purchase order with Beazer is currently lump sum.)

1700 J. Gunn leaves site for the day.

1800 BG site leaves site for the day.

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|---|---|
| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

| | | |
|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

| | |
|---|---|
| **Field Representative:** | **Date:** |

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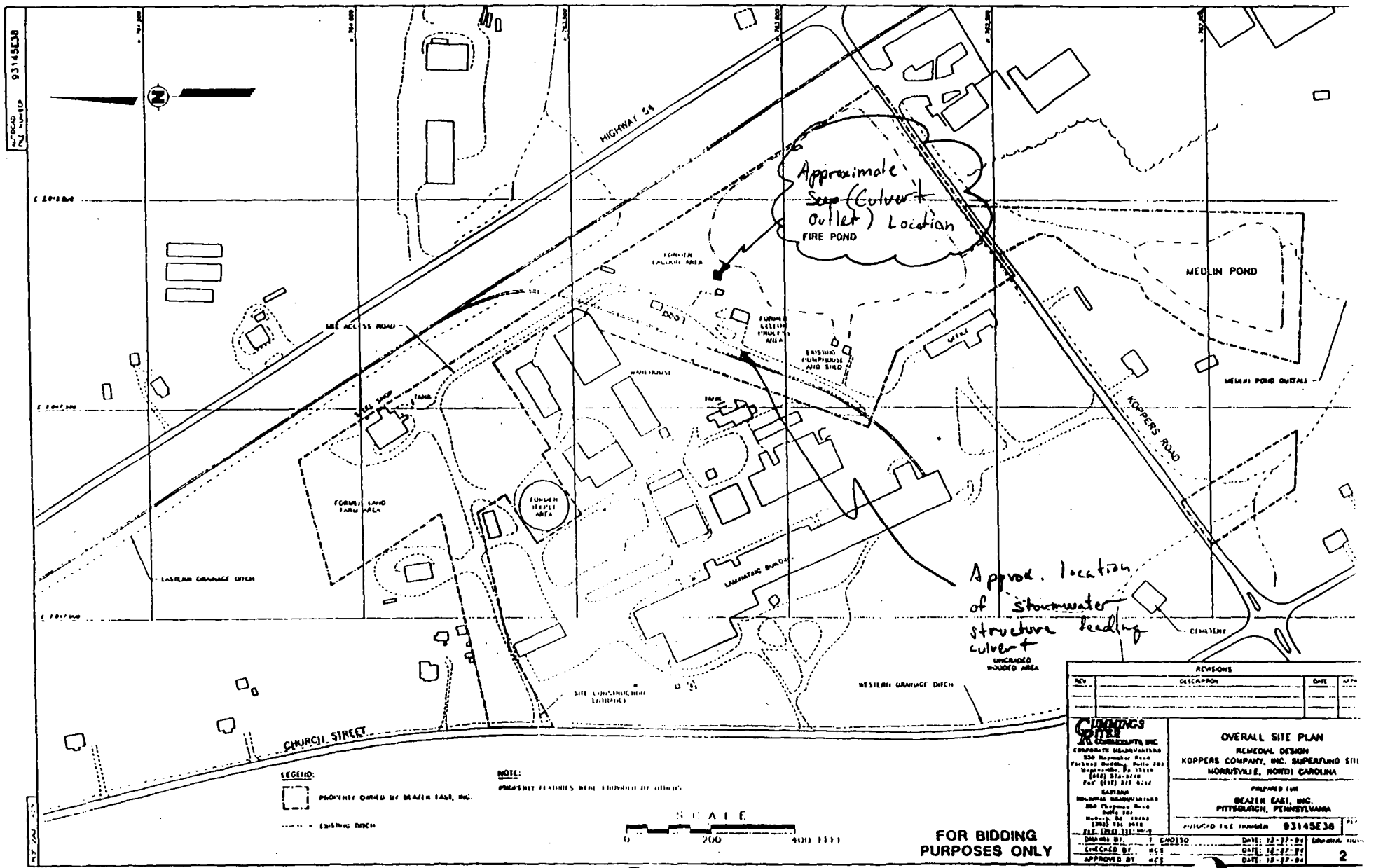
11/14/95



CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 11/15/95 |
| Day of Week | Wednesday |
| No. | 18 |
| Sheet | 1 of 4 |

# FIELD ACITIVITY REPORT

**Project Name:** Beazer East Inc. - Koppers Superfund Site **Project No.** 93-145.30.55

**Field Activity:** Surface Water Treatment

**Personnel On Site:** B. Geno **Subcontractor:** WATEC

**Description of Daily Activities and Events:**

0900 BG arrives on site. WATEC has problem with 6 in. diesel pump. Pump failed approximately midnight 11/14/95. Drawdown about 25 in. at 5,515,651 gal. Ben Hester (Black and Veach) has arrived from Atlanta office to sample Fire Pond sediments. B. Hester decides to wait until geogrid is placed over sediments to obtain samples. B. Hester to photograph site for oversight report to USEPA.

0940 WATEC has fixed pump and resumes pumping of Fire Pond.

1030 BG talks with Shannon Craig and Jim Cook (Beazer East) and Jim Zubra (RI geologist/Keystone Environmental). Recharge to pond may be via diabasic dike following path of least resistance such as bedrock fracture. S. Craig is concerned that by blocking up storm drain structure on Beazer side of tracks that flooding of the storm drain system will create flooding problems on Unit Structures property. S. Craig states that Unit Structures should not be discharging storm drainage from Unit Structures property to Beazer East property without Beazer permission. Additionally, Unit Structures should be sampling storm drain outfall in accordance with NPDES storm water point source monitoring requirements. J. Cook requests that BG obtain grading plans by Bass, Nixon, and Kennedy to regrade the site to divert surface runoff and storm water from the Fire Pond. J. Cook explains that the grading plan was not implemented due to cost versus treating storm water discharge to Fire Pond. S. Craig agrees that storm water flow from discharge point (i.e., outlet end of culvert near Fire Pond) will need to be diverted during backfilling of Fire Pond.

1115 J. Gunn leaves site to return to Atlanta, GA.

1130 B. Smith (CRC-DE) calls to discuss progress. B. Smith asks BG to track WATEC down time due to mechanical failure of pump or other equipment. B. Smith will likely visit site 11/20/95. B. Smith to overnight drawings by Bass, Nixon, and Kennedy for site grading work to divert storm runoff from Fire Pond. BG informs B. Smith J. Gunn indicated an estimate of $5-$15/CY for excavation and stockpiling of impacted soil from designated excavation areas.

**Pay Quantities:**

WATEC: Joe Gunn (p.m.)
Steve Kelemencky (s.m.)
Dan Kitchen (tech.)
John Cutlip (tech.)
Terry Hall (2nd shift, foreman)
Forrest Hodges (2nd shift, tech.)

**Project Changes/Unusual Observations:**

**Weather Conditions:**
*a.m.* sunny, high 30's, gusty
*p.m.* sunny, low 40's, gusty

**Health and Safety PPE:**
steel-toed boots, safety glasses

**Air Monitoring Results:**
Background

**Field Representative:** Bruce Geno **Date:** 11/15/95

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 11/15/95 |
| Day of Week | Wednesday |
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# FIELD ACITIVITY REPORT

**Project Name:** Beazer East Inc. - Koppers Superfund Site **Project No.** 93-145.30.55

**Field Activity:** Surface Water Treatment

**Personnel On Site:** B. Geno **Subcontractor:** WATEC

**Description of Daily Activities and Events:**

1210 lunch

1300 BG returns to site. BG and S. Kelemencky (WATEC) discuss action for diverting flow from storm drainage features away from Fire Pond. BG informs S. Kelemencky that blocking of catch basin outlet pipe downgradient of Unit Structures is not acceptable to Beazer East. BG and S. Kelemecky try to trace storm drainage network (see attached map). BG and S. Kelemencky believe that using submersible pump during storm event to empty the drainage structures will probably not be effective if a large surge occurs and pump is unable to keep up with flow. S. Kelemencky offers plugging of outlet end of culvert and letting the upstream catch basin overflow. BG is skeptical as to hydraulic integrity of approx. 150 ft. section of pipe downstream of catch basin to outlet. Leakage of pipe section and short circuiting of outlet obstruction is likely. WATEC to set up sump at culvert outlet and pump to diversion ditch during storm event.

1530 Laura Faulconer of Wake Co. Community Development Sediment Control Division visits site. BG and L. Faulconer walk site to observe fill stockpiles, diversion ditches, Fire Pond perimeter road, Medlin Pond access road, treated water discharge, temporary culvert, and Medlin Pond. BG informs L. Faulconer of intent to grade Medlin Pond area in preparation of wetlands mitigation. BG shows L. Faulconer the Habitat Mitigation Plan regrade contours for Medlin Pond. L. Faulconer agrees that series of berms will prevent sediment from travelling off site. L. Faulconer expresses concern as to final stabilization of channel created for Medlin Pond access road upstream of Medlin Pond. Final stabilization may be excelsior and grass if velocities are sufficiently low. Channel does not need to be permanently stabilized upon removal of Medlin Pond dam due to series of pools created for Habitat Mitigation which will act to retain sediment.

1350 L. Faulconer leaves site. BG to provide calculations for selection of permanent stabilization of channel upstream of Medlin Pond.

**Pay Quantities:**

**Project Changes/Unusual Observations:**

**Weather Conditions:**
*a.m.*
*p.m.*

**Health and Safety PPE:**

**Air Monitoring Results:**

**Field Representative:**

**Date:**

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 11/15/95 |
| Day of Week | Wednesday |
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# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

1710 BG leaves site for the day. 6 in. pump is running. WATEC to continue pumping 24 hours. Piping of 4 in. pump in parallel with 6 in. pump to resume 11/16/95. 4-in. Y-connection sent from manufacturer is Sch. 40 drain. Need Sch. 40 pressure fitting.

| | |
|---|---|
| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

| | | |
|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

| | |
|---|---|
| **Field Representative:** | **Date:** |

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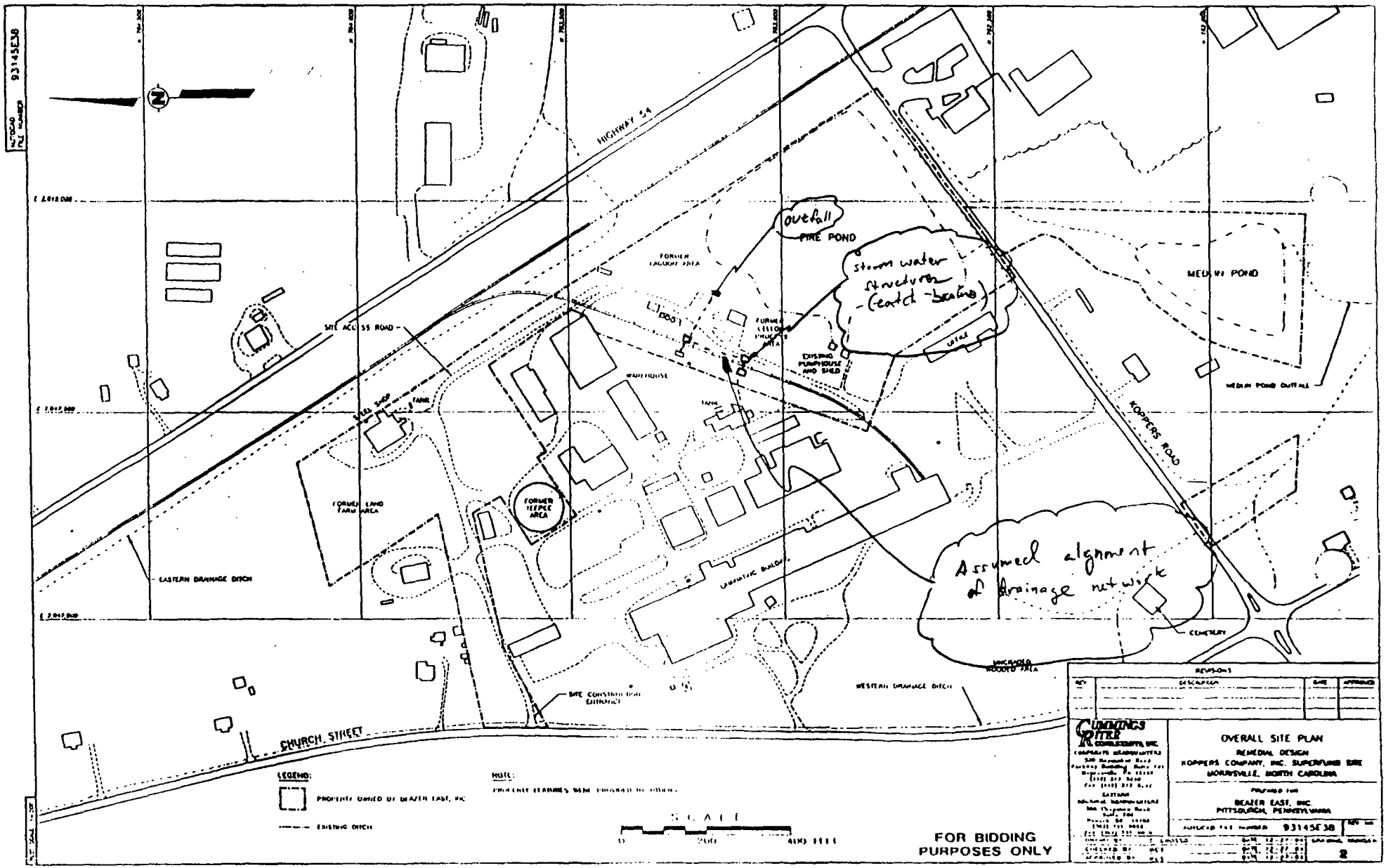
11/15/95



CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 11/16/95 |
| Day of Week | Thursday |
| No. | 19 |
| Sheet | 1 of 1 |

# FIELD ACITIVITY REPORT

**Project Name:** Beazer East Inc. - Koppers Superfund Site **Project No.** 93-145.30.55

**Field Activity:** Surface Water Treatment

**Personnel On Site:** B. Geno **Subcontractor:** WATEC

**Description of Daily Activities and Events:**

0900 BG arrives on site. WATEC had problem with 6 in. diesel pump. Pump failed approximately 1830 11/15/95. Worked until 0100 11/16/95 to try to reprime pump with no success. Totalizer reading of 5,734,670 gal. Drawdown of about 26.5 in. from pre-pumping Fire Pond level. Pump would run intermittently at about 200 to 250 gpm. Returned at approximately 0700 11/16/95 and pump seems to be maintaining prime and pumping at approx. 320 gpm. .

0950 Pump has lost prime. WATEC has drained influent lines to treatment system and is checking intake line.

1030 WATEC resumes pumping. Pump seems to maintaining approx. 420 gpm. S. Kelemencky is beginning to assemble lines to bring 4 in. pump on line with 6 in. pump.

1200 BG breaks for lunch.

1300 BG returns to site. Diesel pump is not operating. Totalizer reading of 5,830,301 gal. Drawdown of approx. 27.25 in. below pre-pumping Fire Pond level. WATEC has connected new high pressure intake line to ITT Marlow 6TK18 (Air Tech engine by Deutz) pump hoping to reduce amount of air in . WATEC is awaiting delivery of Sch. 80 4 in. Y-connector in order to bring 4 in. Godwin CD100 gas-powered pump on line.

1700 BG leaves site for the day. WATEC is piping in 4-in. Godwin pump for additional flow. Pumping operations have been stopped since about 1200.

**Pay Quantities:**

WATEC: Steve Kelemencky (s.m.)
Dan Kitchen (tech.)
John Cutlip (tech.)
Terry Hall (2nd shift, foreman)
Forrest Hodges (2nd shift, tech.)

**Project Changes/Unusual Observations:**

| Weather Conditions: | Health and Safety PPE: | Air Monitoring Results: |
|---|---|---|
| *a.m.* sunny, high 30's<br>*p.m.* sunny, low 40's | steel-toed boots, safety glasses | Background |

**Field Representative:** [signature] **Date:** 11/16/95

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 11/17/95 |
| Day of Week | Friday |
| No. | 20 |
| Sheet | 1 of 2 |

# FIELD ACITIVITY REPORT

**Project Name:** Beazer East Inc. - Koppers Superfund Site **Project No.** 93-145.30.55

**Field Activity:** Surface Water Treatment

**Personnel On Site:** B. Geno **Subcontractor:** WATEC

**Description of Daily Activities and Events:**

0900 BG arrives on site. WATEC has been unable to resume pumping of Fire Pond since approx. 1200 11/16/95. 6 in. diesel ITT Marlow 6TK18 pump has not been able to maintain prime. Hardlined 4 in. gas non-priming trash pump (Godwin CD100) in parallel with 6 in. pump, but 4 in. pump was unable to overcome head required to feed treatment system. WATEC worked until approx. 1900 11/16/95. WATEC has decided to remove both pumps and replace with different 6 in. diesel non-priming pump capable of higher flow rates/head. Technicians are using chain saw to level trees and stumps along north end of Fire Pond in preparation of geogrid placement.

1030 6-in. diesel replacement pump arrives - CD150M Godwin trash pump. WATEC begins installation.

1130 WATEC has pump running, but unable to achieve flow through treatment system. Suspect problems with overcoming pressure in system. Only able to close bleeder valve near intake about halfway to achieve flow of about 200 gpm through treatment system. Upon closing valve, no flow through system.

12100 BG leaves for lunch.

1300 BG returns from lunch. WATEC has system running at about 520 to 570 gpm. Problem was traced to bag filters. WATEC has determined that slight film on bag filters results in dramatic impact on pressure. Pressure gages on bag filter housings were fluctuating or not reading at all due to freeze, making tracing of problem to high pressure through bag filters more difficult. Sedimentation of bag filters due to weight of new high pressure hose used for pump intake weighing down intake line to bottom of pond and introducing pond sediment to treatment system.

1410 Flow through system has dropped to approx. 450 gpm likely due to sediment loading of bag filters. WATEC to add more flotation to intake line to lift intake further from pond bottom.

**Pay Quantities:**

WATEC: Steve Kelemencky (s.m.)
Dan Kitchen (tech.)
John Cutlip (tech.)
Terry Hall (2nd shift, foreman)
Forrest Hodges (2nd shift, tech.)

**Project Changes/Unusual Observations:**

**Weather Conditions:**
*a.m.* sunny, low 40's, breezy
*p.m.* sunny, low 50's, breezy

**Health and Safety PPE:**
steel-toed boots, safety glasses

**Air Monitoring Results:**
None

**Field Representative:** Bruce [signature] **Date:** 11/17/95

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 11/17/95 |
| Day of Week | Friday |
| No. | 20 |
| Sheet | 2 of 2 |

# FIELD ACITIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

1600 BG talks with Bill Smith (CRC-DE) concerning progress of pumping, groundwater recharge observations, and surface water inflow to Fire Pond. BG explains that Shannon Craig (Beazer East) raised concerns as to blocking of storm structure and possible flooding of Unit Structures property. BG indicates that at this time inflow from storm drain system is less than 1 gpm, however, during precipitation event flow is likely to be much greater. WATEC has offered to use submersible electric pump powered by generator, but pump capacity is 15 gpm and unlikely to keep pace with storm flow. At this point, plan to let surface runoff continue to flow into Fire Pond. Pond level during pump shut-down did not measurably rise. Therefore, groundwater recharge may be decreasing.

1630 BG talks to Jim Cook (Beazer East). J. Cook would like WATEC to try to block storm water structure near the site trailers to prevent surface runoff from Unit Structures from entering Fire Pond through storm drains. BG informs J. Cook that groundwater recharge has not been significant since pumping ceased

1730 Pumping at approx. 250 gpm. Drawdown at 28 in. BG asks S. Kelemencky (WATEC) to clean out storm drainage inlet near site trailers and attempt to block outlet which presumably discharges to north of Fire Pond. WATEC to try to clean out structure before rain expected 11/17/95 pm.

1800 BG leaves site for the day. WATEC to pump 24 hours to midnight 11/17/95.

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|---|---|
| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

| | | |
|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

| | |
|---|---|
| **Field Representative:** | **Date:** 11/17/95 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 11/20/95 |
| Day of Week | Monday |
| No. | 21 |
| Sheet | 1 of 2 |

# FIELD ACITIVITY REPORT

**Project Name:** Beazer East Inc. - Koppers Superfund Site **Project No.** 93-145.30.55

**Field Activity:** Surface Water Treatment

**Personnel On Site:** B. Geno **Subcontractor:** WATEC

**Description of Daily Activities and Events:**

0830 BG arrives on site. WATEC is staging geogrid and temporary decontamination facilities at north end of Fire Pond. Water has receeded approx. 50 feet at northeast edge of Fire Pond. No odors or Hnu photoionization detector readings above background have been observed. WATEC uses backhoe to excavate a trench approximately 18 inches deep near pre-pumping shoreline in order to anchor geogrid fabric. WATEC worked 24 hours 11/17/95 through 11/18/95, and pumped approximately 15 hours 11/19/95. Site has recieved no rain since 11/13/95 (0.3 in.).

1030 WATEC has placed geogrid in approximately 40 ft. long by 50 ft. wide area along northeast corner of the Fire Pond, working from east to west. WATEC workers are sinking approximately 12 inches into sediments near the water line while stepping on geogrid. Tensar factory representative John Bolton recommends increasing geogrid seam overlap from 18 inches to 3 to 4 ft. to improve interlocking of geogrid along seams. Increasing seam width to 3 ft. would result in approximately 1/3 increase in geogrid quantity required to cover Fire Pond area. WATEC proposes tracking material cost and charging Beazer for material cost only with no markup. Terry Hall (WATEC) leaves site for the day (sick).

1300 John Bolton (Tensar) leaves site for the day. Joe Gunn (WATEC) and BG discuss grading plan to divert surface runoff from north of rail spur away from Fire Pond. WATEC to temporarily block storm drainage structures to prevent storm drainage from discharging from culvert located at north edge of Fire Pond.

1400 Branum Equipment arrives to perform calibration of flow for WATEC flow meter check. Calibration equipment consists of a 250 gal. tank of with 3-in. inlet. WATEC decides that Branum Equipment is not capable of performing calibration. WATEC is not confident that calibration would be as accurate as WATEC's flow meter and would involve approx. 24-hr down time. J. Gunn (WATEC) will try to locate alternate service for flow calibration.

**Pay Quantities:**

WATEC: Joe Gunn (p.m.)
Steve Kelemencky (s.m.)
Dan Kitchen (tech.)
John Cutlip (tech.)
Forrest Hodges (tech.)

**Project Changes/Unusual Observations:**

| Weather Conditions: | Health and Safety PPE: | Air Monitoring Results: |
|---|---|---|
| *a.m.* sunny, low 40's-50's<br>*p.m.* sunny, low 60's | steel-toed boots, safety glasses | None |

**Field Representative:** [signature] **Date:** 11/20/95

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 11/20/95 |
| Day of Week | Monday |
| No. | 21 |
| Sheet | 2 of 2 |

# FIELD ACITIVITY REPORT

**Project Name:** Beazer East Inc. - Koppers Superfund Site **Project No.** 93-145.30.55

**Field Activity:** Surface Water Treatment

**Personnel On Site:** B. Geno **Subcontractor:** WATEC

**Description of Daily Activities and Events:**

1430 B. Smith (CRC-DE) calls to discuss progress and grading drawings prepared by Bass, Nixon, and Kennedy for storm water drainage to prevent storm runoff from entering Fire Pond. BG explains that temporary option may be to block outlet from drainage structure on low side of tracks which feeds culvert draining to Fire Pond and let flow overtop catch basin and drain across road to diversion ditch. More permanent option is to implement the plans designed by Bass, Nixon, and Kennedy.

1500 J. Gunn (WATEC) and BG review drawings prepared by Bass, Nixon and Kennedy for storm water drainage. First step is to determine if culverts beneath access road to Fire Pond near site trailers are draining. WATEC will then remove culvert and block structures as indicated in Bass, Nixon, and Kennedy drawings. J. Gunn is concerned about planting of fescue as temporary seed in December. Suggests planting 100 percent winter rye, as the weather is getting too cold for germination of fescue. BG to check with Dave Hails as to mix for temporary seeding.

1520 B. Smith leaves message that J. Cook (Beazer East) would like action taken before Thanksgiving 11/23/95 to prevent storm water drainage from culvert from entering Fire Pond. J. Cook would prefer implementation of plans by Bass, Nixon, and Kennedy for permanent measure.

1640 J. Gunn leaves site for the day.

1710 S. Kelemencky (WATEC) leaves site for the day.

1800 Dan Kitchen and Forrest Hodges leave site for the day. Pumping of Fire Pond ceased for the day.

1830 BG leaves site for the day.

**Pay Quantities:**

**Project Changes/Unusual Observations:**

**Weather Conditions:**
*a.m.*
*p.m.*

**Health and Safety PPE:**

**Air Monitoring Results:**

**Field Representative:**

**Date:** 11/20/95

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 11/21/95 |
| Day of Week | Tuesday |
| No. | 22 |
| Sheet | 1 of 3 |

# FIELD ACITIVITY REPORT

**Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55

**Field Activity:** Surface Water Treatment

**Personnel On Site:** B. Geno | **Subcontractor:** WATEC

**Description of Daily Activities and Events:**

0830 BG arrives on site. WATEC began pumping approx. 0730, and is maintaining approx. 450 gpm. WATEC has excavated culvert on high side of railroad spur near site trailers. Culvert has been exposed to a 90 degree elbow which passes beneath the rail spur perpendicular to the spur. The culvert and elbow are galvanized steel. The elbow is sleeved inside a larger diameter galvanized culvert section which passes under the rail spur. Elevation drop of exposed section is approximately 1.5 feet over distance of approximately 60 feet. Appears to be sufficient elevation drop to be able to grade back to inlet No. 5 from elbow per design by Bass, Nixon, and Kennedy (see attached map). WATEC to remove 20 foot section of culvert nearest inlet leading to elbow and backfill remaining exposed culvert. WATEC to place erosion control mat around new inlet. Culvert on low side of spur (No. 6) does not appear to be draining, or is draining very slowly. Action on this culvert to wait until week of 11/27/95 when B. Smith (CRC) will visit site.

1030 WATEC has removed debris from structure No. 4 (see attached map). WATEC believes the easiest way to plug outlet is to remove first section of conduit (16 in. RCP) to expose round end for seal and seal end of culvert with metal plate. Excavation will then be backfilled to storm structure No. 4. Upon removing first section of culvert, WATEC observes wax-like (however, more brittle than wax) substance in the bottom of the exposed end of RCP. WATEC cuts 1/4 in.-thick 17-in. diameter plate to fit over exposed end of RCP draining from structure No. 4.

1130 BG talks with J. Cook (Beazer East) to explain difficulty with locating a service for calibration of flow from treatment system. According to WATEC, the service they have located to perform calibration cannot perform calibration for 4 weeks. WATEC has offered to install either additional flow meter identical to the meter they have installed, or to install a meter of Beazer's choice. J. Cook suggests call to RUST to see if they can suggest a firm to perform calibration. Otherwise, installation of flow meter identical to the one they have will suffice.

1150 BG unable to reach John Funk of RUST to inquire about flow calibration subcontractors. J. Gunn (WATEC) has left for lunch.

**Pay Quantities:**

WATEC: Joe Gunn (p.m.)
Steve Kelemencky (s.m.)
Terry Hall (foreman)
John Cutlip (tech.)
Dan Kitchen (tech.)
Forrest Hodges (tech.)

**Project Changes/Unusual Observations:**

**Weather Conditions:**
*a.m.* partly sunny, mid 40's
*p.m.* sunny, low 70's, breezy

**Health and Safety PPE:**
steel-toed boots, safety glasses

**Air Monitoring Results:**
None

**Field Representative:** Bruce [illegible] | **Date:** 11/21/95

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 11/21/95 |
| Day of Week | Tuesday |
| No. | 22 |
| Sheet | 2 of 3 |

# FIELD ACITIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

1200 Peter Romocki (Tensar) arrives on site. BG shows P. Romacki application of geogrid. Explains that WATEC has increased overlap from 18 in. to 36 in. to decrease sinkage into sediments during application.

1230 J. Gunn returns to site. BG informs J. Gunn that installation of second flow meter identical to that presently being used has been requested by Beazer. P. Romocki calls Tensar from CRC phone and discusses application of goegrid over Fire Pond. P. Romocki suggests increasing grid thickness to BX 1200 to provide more rigidity. Other option is to place non-woven geotextile below geogrid as has been done for site where sediments were even softer, but is more labor intensive. Application of geotextile beneath geogrid involves unrolling of geogrid over geotextile and rolling back up together. J. Gunn does not believe placing geotextile beneath geogrid would provide additional support. J. Gunn believes only solution to achieving greater rigidity is to increase overlap. BG explains that Beazer is unlikely to agree to Change Order for increased material costs (estimated at $15,000) due to increased overlap. J. Gunn explains that he will have to apply the $15,000 against the 3 cent/gal water treatment cost, and will therefore be less negotiable on water treatment cost.

1300 Terry Hall (WATEC) leaves site for the day. BG asks J. Gunn to have soil excavation areas resurveyed as three (or more) survey stakes have been destroyed by equipment running over them. BG explains that this is sensitive issue in that areas need to be isolated and avoided. BG asks J. Gunn to place a marker in the water to mark the final water line for the end of pumping 11/21/95. J. Gunn to have survey crew return to resurvey areas. J. Gunn also agrees to place water marking stake in pond at the end of the day, and measure rise in water level (if any) over holiday break.

1415 F. Hodges and J. Gunn leave site for the day. J. Gunn to return 11/ 24/95 to install second flow meter and pump 11/25/95.

1500 Shannon Arrowood (ENSYS) calls to remind BG that immunoassay certification is scheduled for 11/28/95. BG reschedules training for 12/15/95.

1720 WATEC and BG leave site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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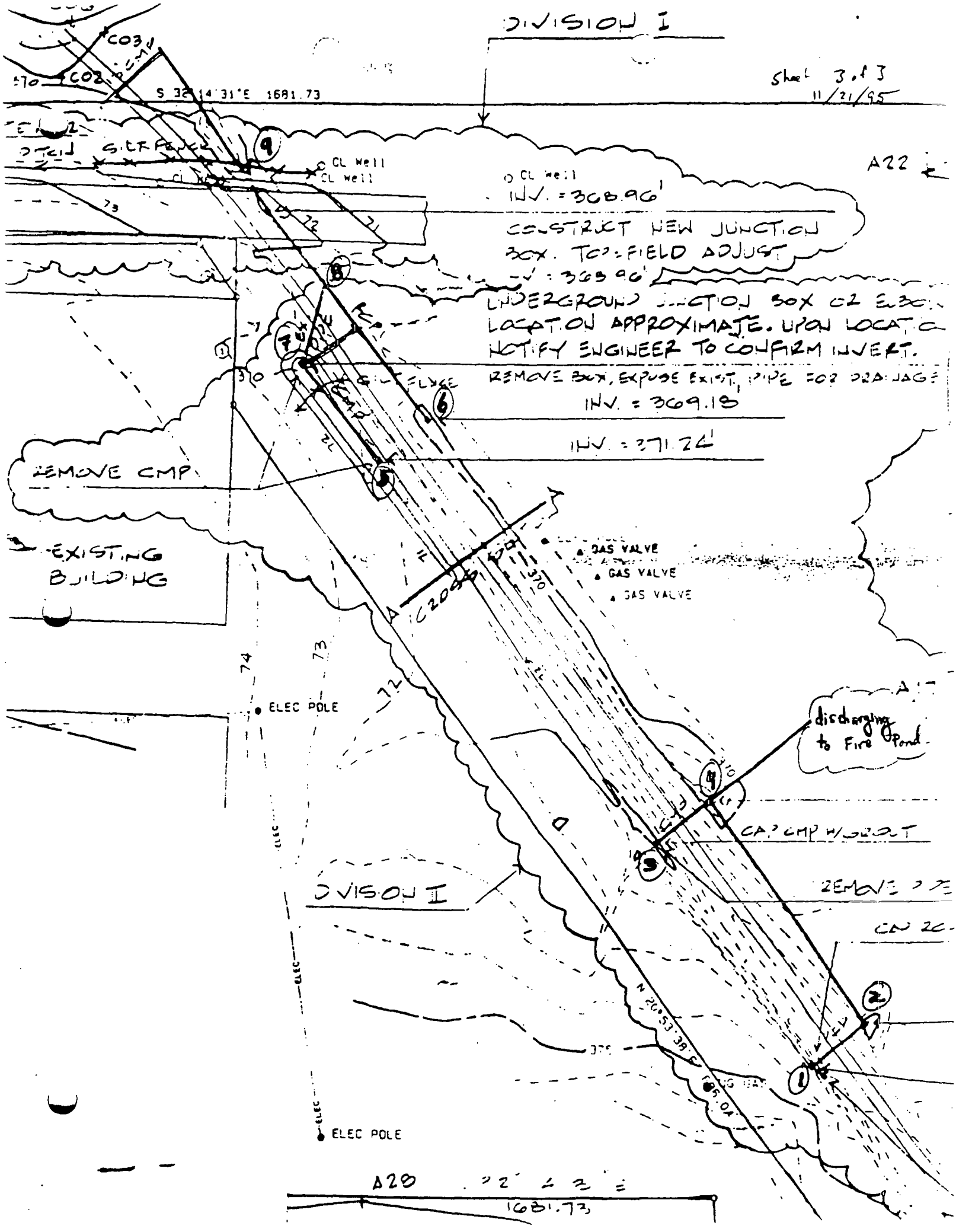
|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

| | |
|---|---|
| **Field Representative:** | **Date:** 11/21/95 |


DIVISION I
Sheet 3 of 3
11/21/95
S 32°14'31"E 1681.73
CO3
CO2
SILT FENCE
CL Well
CL Well
CL Well
A22
INV. = 368.96'
CONSTRUCT NEW JUNCTION BOX. TOP=FIELD ADJUST
INV. = 368.96'
UNDERGROUND JUNCTION BOX OR ELBOW LOCATION APPROXIMATE. UPON LOCATION NOTIFY ENGINEER TO CONFIRM INVERT.
REMOVE BOX, EXPOSE EXIST. PIPE FOR DRAINAGE
INV. = 369.18'
INV. = 371.24'
REMOVE CMP
EXISTING BUILDING
GAS VALVE
GAS VALVE
GAS VALVE
ELEC POLE
discharging to Fire Pond
CAP CMP W/GROUT
DIVISION II
ELEC POLE
A28
1681.73

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 11/22/95 |
| Day of Week | Wednesday |
| No. | 23 |
| Sheet | 1 of 1 |

# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0800 BG arrives on site. WATEC has secured site until 11/24/95.

0830 BG listens to staff meeting.

0930 BG talks with J. Cook (Beazer East) and informs J. Cook that WATEC has decided to increase overlap between rolls of geogrid from 18 in. to 36 in., resulting in about a 30% increase in geogrid material required to cover the pond. J. Gunn (WATEC) had proposed a change order, but BG had indicated that the decision to increase overlap was not necessarily a design change based on change in conditions versus change for ease of installation. Peter Romocki (Tensar) indicated that simultaneous placement of geogrid and geotextile has been done over even softer sediments, but is more labor intensive. Thus, increase in material is a trade off for more labor. J. Gunn indicated that he would recover cost for $15k additional geogrid by applying against $0.03/gal. pond water treatment cost. BG indicated to J. Cook that negotiation of lower treatment cost hinges on Beazer approval of change order requests. J. Cook indicated to BG that he would avoid change orders unless warranted by change in scope or change in conditions, and would rather stick to contract terms for water treatment, with a chance that WATEC would be willing to negotiate lower treatment cost near the end of the contract when WATEC is more certain as to project costs and profits. J. Cook indicated that BG should keep an accurate record of change order requests, and changes in the contract requirements resulting in less costs to WATEC.

1030 BG measures water level increase in Fire Pond since 18:00 11/21/95. No measurable increase in Fire Pond level for 16.5 hrs.

1200 BG breaks for lunch.

1300 BG returns from lunch.

1500 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.* sunny, mid 40's<br>*p.m.* sunny,mid 60's, breezy | **Health and Safety PPE:** | **Air Monitoring Results:** |

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|---|---|
| **Field Representative:** | **Date:** 11/22/95 |

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 11/27/95 |
| Day of Week | Monday |
| No. | 24 |
| Sheet | 1 of 4 |

# FIELD ACITIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Fire Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0800 BG arrives on site. WATEC has arrived and is preparing area for delivery of fill by moving vehicles and stored materials near field trailers. Triangle Grading Contractors (WATEC sub.) has mobilized Catapillar D5H XL low ground pressure dozer for pushing fill over geogrid in Fire Pond area. WATEC reports returning to site 11/24/95 and pumping for approximately 6 hours, and pumping approximately 10 hours 11/25/95. The site received approximately 0.25 in. rain 11/24/95. The water level in the Fire Pond 11/23/95 at 10:00 indicated no recharge (i.e., no rise in water level) since pumping ceased 11/21/95. WATEC reports that water level did not seem to rise above what could be attributed to precipitation. Blocking of the storm drain to the north of the Fire Pond was effective. Storm water backed up and overflowed into perimeter diversion ditch.

0830 Randy Bodnar (EAP) calls with regard to RFP for soil excavation. BG informs R. Bodnar that RFP for soil excavation should be ready 11/29/95. BG refers R. Bodnar to design drawings for excavation areas, and estimates of contaminated soil (500 CY) and clean soil associated with excavation (400 CY). John Bolton (Tensar) arrives on site to videotape placement of fill over geogrid and offer technical recommendations to WATEC.

0840 Ben Hestir (Black and Veach) arrives on site to collect sediment samples from Fire Pond for USEPA oversight. B. Hestir makes call to Black and Veach home office to discuss need for dioxin chain-of-custody for sediment samples.

0900 Philip Post and Assiciates arrive on site to resurvey soil excavation areas, because a couple of posts have been lost by WATEC activities near north end of Fire Pond. BG discusses storm water drainage plan with John Wilcox (Philip Post) and Joe Gunn (WATEC). Joe Gunn decides that WATEC can implement grading plan for storm water drainage designed by Bass, Nixon, and Kennedy without survey. WATEC will use laser to measure ditch grades.

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| **Pay Quantities:**<br>WATEC: Joe Gunn (p.m.)<br>Steve Kelemencky (s.m.)<br>Dan Kitchen (tech.)<br>John Cutlip (tech.)<br>Forrest Hodges (2nd shift, tech.)<br>Triangle Grading Contractors: Wayne Thompson<br>Larry Walker | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.* overcast, low 50's<br>*p.m.* sunny,high 60's | **Health and Safety PPE:**<br>safety glasses, steel-toed boots | **Air Monitoring Results:**<br>Background |

| | |
|---|---|
| **Field Representative:** Bruce [illegible] | **Date:** 11/27/95 |

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 11/27/95 |
| Day of Week | Monday |
| No. | 24 |
| Sheet | 2 of 4 |

# FIELD ACITIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Fire Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0930 Triangle Grading Con. (TGC) begins placing fill at north end of Fire Pond. TGC is using two trucks (tandem dump and trailer dump) to deliver fill. Tandem dump has approx. 12 CY capacity, and trailer dump has approximately 17 CY capacity. Wayne Thompson (TGC) indicates trucks are being overloaded (to WATEC's advantage) to approximately 13 and 21 CY, respectively. Wherefill surcharge has been placed over geogrid-covered sediments, streams are observed from mudwave near base of fill as the sediments dewater. Mudwave measures approximately 8 to 10 inches high with approx. 6 feet of fill over geogrid, however, fill is not yet being placed in softest sediments. John Bolton indicates the highest the mudwave can go depends on the depth of the sediment. If all sediment is squeezed into mudwave, the hieght of the mudwave can grow indefinately. J. Bolton indicates he has seen mudwaves much higher than those presently observed.

1000 Post and Associates has completed resurvey of proposed soil excavation areas.

1100 BG asks S. Kelemencky (WATEC SHO) whether all grading subcontractor personnel currently working on the site have attended Daily Tailgate Health and Safety Meeting and have signed acceptance form for Health and Safely Plan. S. Kelemencky indicates that TGC personnel have signed acceptance form for HASP and were initially attending daily tailgate meetings, but WATEC did not consider continued participation in daily tailgate meetings necessary. BG expresses concern that the dozer operator does not look familiar and wanted to make sure that the operator is aware of site hazards. S. Kelemencky indicates that the dozer operator has worked on site previously and has signed HASP acceptance form. S. Kelemencky assures BG that all subcontractor personnel have been instructed to stay on the machines, and in particular, to avoid contact with the pond sediments. TGC has mobilized one more trailer dump (17 CY capacity) and one more tandem dump (12 CY capacity) for transporting fill to site.

1200 WATEC is proceeding with installation of second flow meter for calibration/comparison with first flow meter. S. Kelemencky indicates that volumes measured by each flow meter will be compared, versus trying to compare flow rates, because flow rate continually fluctuates by approximately 5 %.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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|---|---|
| **Field Representative:** | **Date:** 11/27/95 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 11/27/95 |
| Day of Week | Monday |
| No. | 24 |
| Sheet | 3 of 4 |

# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Fire Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

1230 B. Hestir (Black and Veach) is preparing to obtain Fire Pond sediment samples.

1330 BG asks J. Gunn if TGC can grade area which was previously very wet and soft near northeast corner of Fire Pond at tie in of diversion ditch to existing drainage and seed and mulch area. J. Gunn agrees that today would be a good day for work in this area and will ask TGC to grade this area before TGC leaves for the day.

1345 WATEC has completed installation of second flow meter. Flows measured by each meter compare within about 4 gpm at about 500 gpm flow. WATEC treatment system was down for about 2 hours for installation of second flow meter.

1350 B. Hestir has obtained 4 sediment samples from the west (1), east (1), and north (2) sides of the Fire Pond. Photos obtained of east and north sample points. Grab samples of sediment were obtained with dedicated stainless steel bowls and spoons (4 each), which were decontaminated prior to arrival on site and wrapped in aluminum foil. Foil wrapping was removed immediately before sampling at each location.

1430 J. Gunn informs BG that grading in the area near the northeast corner of the Fire Pond will not be possible as the area is still too wet. J. Gunn to have WATEC personnel erect silt fence on either side of the drainage ditch.

1500 Jim Cook of Beazer East calls. BG informs J. Cook that WATEC worked 11/24/95 and 11/25/95 and pumped approx. 300 k gallons; site received about 0.25 in. rain 11/24/95 am; water level in Fire Pond did not indicate recharge; and, backfilling started at north end of Fire Pond. J. Cook indicates that Shannon Craig and Bob Fisher (Beazer East) will be on site 12/1/95. J. Cook will not visit. BG to determine whether or not soil excavation RFP has been distributed. J. Cook would prefer to have Bob Fisher review RFP before sending to potential bidders. Bob Fisher has suggested that contractor responsible for drum removal also receive soil excavation RFP.

1530 WATEC completes one hour run of new flow meter reading. Reading after one hour on new flow meter of 29,631 gallons. Total flow on old meter of 8,047,748 gallons, with 30,080 measured in the last hour. Difference of about 450 gallons between one-hour readings of old flow meter and

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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|---|---|
| **Field Representative:** | **Date:** 11/27/95 |

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 11/27/95 |
| Day of Week | Monday |
| No. | 24 |
| Sheet | 4 of 4 |

# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Fire Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

new flow meter, which is about 1.5 % difference.

1545 BG shows S. Kelemencky where silt fence should be placed at northeast corner of Fire Pond area on either side of diversion ditch. Backfilling operations in area northeast corner of Fire Pond has resulted in some filling of perimeter diversion ditches. S. Kelemencky informs BG that WATEC plans to continue 24-hr pumping operations.

1600 B. Hestir leaves site to deliver sediment samples to Compuchem (3306 Chapel Hill Rd) for phenol/penta analysis. Dioxin samples to be sent by overnight courier to Zenon Environmental Laboratories in Cheektowaga, New York. Black and Veach has requested 14-day turnaround on sediment samples.

1700 TGC ends operations for the day (dusk).

1730 J. Gunn leaves site for the day. J. Gunn is scheduled to return to site 11/29/95.

1745 BG leaves site for the day. WATEC to continue pumping on 24-hr basis.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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|---|---|
| **Field Representative:** | **Date:** 11/27/95 |

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 11/28/95 |
| Day of Week | Tuesday |
| No. | 25 |
| Sheet | 1 of 2 |

# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Fire Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0830 BG arrives on site. WATEC has arrived and is pumping Fire Pond. WATEC reports pumping 24 hours 11/27/95 for a total of about 588 k gallons. Triangle Grading Contractors (TGC) continues to stockpile fill material on geogrid placed at northeast end of Fire Pond. BG and Steve Kelemencky (WATEC) review placement of silt fence on either side of diversion ditch at northeast corner of Fire Pond.

0900 WATEC begins excavating shallow trench for installation of silt fence. TGC has two tandem dumps with 12 CY capacity and two trailer dumps with 17 CY capacity delivering fill to site, and one Catapillar DH5 XL low ground pressure dozer.

1200 BG leaves for lunch.

1230 BG returns to site.

1300 Paul Gorski (WATEC Field Op. Manager) arrives on site for site visit. WATEC technicians are digging trench for silt fence near northeast corner of Fire Pond.

1400 BG observes placement of fill over geogrid-covered sediments in north area of Fire Pond prior to placement of geotextile. Geotextile is supposed to be placed over sediments to separate fill from pond sediment. Area between geogrid anchor trench and pond sediments does not need to be covered with geotextile. BG requests that WATEC make sure that TGC does not place fill over sediments without first covering with geotextile. WATEC directs TGC to discontinue placement of fill over sediment, instead placing fill in westerly direction at north end of Fire Pond.

1440 BG speaks to J. Gunn (WATEC) to request OSHA medical monitoring information for J. Cutlip, S. Kelemencky, and F. Hodges and 8 hour refresher for F. Hodges. BG informs J. Gunn that T. Hall, J. Cutlip, and S. Kelemencky are due for 8-hr refresher training. BG also discusses disposal of PPE and used bag filters with J. Gunn. J. Gunn informs BG that typically PPE is sampled and sent to lab for TCLP analysis. If PPE samples pass TCLP, the PPE is disposed of in a solid waste

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| **Pay Quantities:**<br>WATEC: Paul Gorski (op. m.)<br>Steve Kelemencky (s.m.)<br>Dan Kitchen (tech.)<br>John Cutlip (tech.)<br>Forrest Hodges (2nd shift, tech.)<br>Triangle Grading Contractors: (4) truck drivers<br>(1) dozer operator | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.* overcast, low 50's,breezy<br>*p.m.* sunny, high 70's | **Health and Safety PPE:**<br>safety glasses, steel-toed boots | **Air Monitoring Results:**<br>Background |
| **Field Representative:** [illegible] | | **Date:** 11/28/95 |

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 11/28/95 |
| Day of Week | Tuesday |
| No. | 25 |
| Sheet | 2 of 2 |

# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Fire Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

landfill. Bag filters may be handled same way. J. Gunn to discuss with Bob Fisher (Beazer East) 11/30/95.

1500 BG talks with B. Smith (CRC) to discuss progress. B. Smith to visit site 11/29/95 for the day. B. Smith still working on RFP for soil excavation.

1600 WATEC has completed installation of silt fence near northeast corner of Fire Pond at tie-in of diversion ditch to existing drainage course. Erosion control fabric, seed, and mulch has been placed in ditch. S. Kelemencky asks BG if BG believes it is necessary for Beazer representatives and subcontractors (i.e., BG and TGC personnel) to attend daily tailgate safety meeting. BG informs S. Kelemencky that he believes it is sufficient for BG and subcontractors to sign off on HASP. However, BG to check with B. Smith.

1715 TGC finishes transport of fill for the day (dusk). BG reviews WATEC air monitoring activities. WATEC is currently monitoring with HNu photoionization detector at two off-site locations once each day. HNu detector is calibrated at beginning and end of each day. In addition, sediments have been screened periodically throughout project. Calibration logs, sampling locations, and sampling results are recorded by WATEC. BG to review air monitoring requirements with B. Smith.

1745 BG leaves site for the day. WATEC to pump to about 00:00 11/29/95.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

| | | |
|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

| | |
|---|---|
| **Field Representative:** | **Date:** 11/28/95 |

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 11/29/95 |
| Day of Week | Wednesday |
| No. | 26 |
| Sheet | 1 of 2 |

# FIELD ACITIVITY REPORT

**Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55

**Field Activity:** Surface Water Treatment - Fire Pond Backfilling

**Personnel On Site:** B. Geno | **Subcontractor:** WATEC

**Description of Daily Activities and Events:**

0730 BG arrives on site. WATEC is pumping Fire Pond. WATEC reports pumping 24 hours 11/28/95 for a total of about 588 k gallons. Triangle Grading Contractors (TGC) continues to stockpile fill material on geogrid placed at northeast end of Fire Pond. Site has received about 0.05 in. precipitation so far today, with light rain.

0745 Paul Gorski and Steve Kelemencky (WATEC) arrive on site. BG informs S. Kelemencky that fill is near edge of geogrid. S. Kelemencky to roll out more geogrid. BG receives fax for J. Gunn (WATEC) from Tensar with recommendations for fill placement over geogrid: (1) use lower total weight dozer (Catapillar D4C LGP vs. D5H XL) and (2) use granular material (free draining) vs cohesive material presently being stockpiled for fill to prevent mudwave formation. See attached copy of recommendation letter from Tensar.

0830 B. Smith (CRC) arrives on site. BG and B. Smith walk site and find the following issues:
(1) Stockpile at northeast corner of Fire Pond over geogrid contains material greater than 3 in. particle size and looks like debris material from another site (i.e., burned wood, roots);
(2) Pipe at north end of Fire Pond seeming to originate from between demolished building and remaining brick building with oily sheen on water at outlet end;
(3) May want to discharge treated water downstream of Medlin Pond;
(4) Soil blocking diversion ditch at northwest corner of Fire Pond.

0945 Triangle Grading Contractors (TGC) has ceased transport of fill to site due to rain.

1030 BG informs S. Kelemencky that fill stockpiled since 11/27/95 contains debris (i.e., roots, brick, rags) which classifies as unsuitable fill material according to Specification Section 2200. BG informs S. Kelemencky that material stockpiled since 11/27/95 is different than other stockpiled material and should be sampled for geotechnical and analytical (TCL/TAL) testing, in accordance with Contract Specifications. Material which fails tests will have to be removed. S. Kelemencky

**Pay Quantities:**

WATEC: Paul Gorski (op. m.)
Steve Kelemencky (s.m.)
Dan Kitchen (tech.)
John Cutlip (tech.)
Forrest Hodges (2nd shift, tech.)

Triangle Grading Contractors: (4) truck drivers
(1) dozer operator

**Project Changes/Unusual Observations:**

**Weather Conditions:**
*a.m.* overcast, 40's, light rain
*p.m.* overcast, low 50's

**Health and Safety PPE:**
safety glasses, steel-toed boots

**Air Monitoring Results:**
Background

**Field Representative:** Bruce Geno | **Date:** 11/29/95

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 11/29/95 |
| Day of Week | Wednesday |
| No. | 26 |
| Sheet | 2 of 2 |

# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Fire Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

orders TGC to stop stockpiling of fill that contains debris and root matter. TGC claims all fill is from same borrow stockpile. S. Kelemencky agrees to sample material stockpiled since 11/27/95 per specifications and to remove visible debris and large roots. S. Kelemencky acknowledges that stockpiled material which has not been approved based on sampling is stockpiled at WATEC's risk and will have to be removed if material fails tests.

1200 P.Gorski leaves site. BG and B. Smith leave site for lunch.

1300 BG and B. Smith visit Seagandollar wetlands site.

1320 BG and B. Smith return to Koppers site.

1400 BG informs S. Kelemencky of pipe seemingly originating from between remaining concrete slab and remaining brick building with sheen near outlet end. BG requests that WATEC not backfill over end of pipe until J. Cook (Beazer East) is informed of sheen. S. Kelemencky agrees. In addition, several vertical pipes have been observed near edge of concrete slab which may be pipe vents. S. Kelemencky agrees to investigate with backhoe to determine if pipes are supports or are pipe vents.

1500 BG requests that WATEC remove soil from diversion ditch near northwest corner of Fire Pond. S. Kelemencky agrees to restore drainage through diversion ditch. BG requests that WATEC construct improved decontamination facility for workers exiting from sediment areas. S. Kelemencky proposes using remaining brick building for decontamination facility. BG to obtain Beazer approval.

1520 B. Smith leaves site. BG to relabel photographs for photograph log so that photographs are in sequential order from project start to finish.

1600 BG requests that WATEC label drums (hazardous and non-hazardous labels). S. Kelemencky to order adhesive labels.

1740 BG leaves site.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

| | | |
|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

| | |
|---|---|
| **Field Representative:** | **Date:** 11/29/95 |

TENSAR
Environmental Systems, Inc.

5775-B Glenridge Drive
Lakeside Center, Suite 450
Atlanta, Georgia 30328-5383
404 • 250 • 1290
Fax: 404 • 250 • 9056
1 • 800 • 292 • 4459

November 28, 1995

Mr. Joe Gunn
Waste Abatement Technology, L.P.
1300 Williams Drive
Suite B
Marietta, Georgia 30066

Dear Mr. Gunn:

As a follow-up to our discussions at the Koppers Superfund Site yesterday, I wanted to highlight two key points of concern that we discussed during my visit.

**Construction Equipment:**
Tensar recommends using dozers with wide tracks; a maximum contact pressure of 4.3 psi and a maximum total weight of 17,500 lbs (i.e. Caterpillar D4C LGP Series II) to be used to place the fill over the geogrid layers. Due to the low shear strength of sludge, lighter weight equipment may be necessary to minimize mudwaving.

During my visit to the site, I noticed that a much heavier piece of equipment (Caterpillar D5H weight = 35,000 lbs.) was being used to place the fill material. Although the contact pressure of the recommended Caterpillar D4C LGP (hereafter, D4C) and the Caterpillar D5H (hereafter, D5H) is essentially the same, the real issue is the total weight of the equipment. You may note that the D5H is twice as heavy as what we have recommended. We have no objections to letting the contractor continue to use a D5H if no mud wave develops. However, if a mudwave begins to develop, we strongly recommend that the contractor switch to a D4C.

**Fill Material:**
I noticed that the fill material that was being hauled to the site and placed around the edge of the waste lagoon was cohesive in nature. If the cohesive material becomes too wet to work with, it is suggested that a free draining fill material be used to eliminate the problem.

It's important to realize that while the construction of the project may appear to be progressing nicely at the present time, the selection of construction equipment and type of fill material may have adverse affects as consolidation proceeds.

Please let either myself or Peter Romocki (800-292-4459) know if we can be of further assistance to you as the job progresses.

Very Truly Yours,

John W. Bolton, Jr.
Sales Engineer

cc: Bob Mattox
Pete Romocki
Pete Vanderzee

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 11/30/95 |
| Day of Week | Thursday |
| No. | 27 |
| Sheet | 1 of 3 |

# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Fire Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0830 BG arrives on site. WATEC is grading fill in Fire Pond. Two trailer trucks (17 CY) and two tandem trucks (12 CY) capacity are delivering fill to north end of Fire Pond. Triangle Grading Contractors (TGC) has mobilized Catapillar D5C dozer to site for backfilling of Fire Pond, which is substatially smaller in size to Catapillar D5H XL being used to grade fill.

0900 BG talks with Bill Smith (CRC) and Jim Cook (Beazer East) in conference call. B. Smith informs J. Cook that material stockpiled since 11/27/95 at north end of Fire Pond is out of specification due to debris and wood and that WATEC is to sample for analytical analysis for acceptance. BG to prepare field change for material. WATEC has been instructed not to deliver any material containing debris or undue root matter. J. Cook agrees that material will suffice for backfill provided the material passes analytical tests. BG to measure and show on As-Built drawings the pipe leading from the concrete slab to the north edge of the Fire Pond which may be a floor drain for demolished building (see attached map). BG to have WATEC investigate vertical pipes southwest of remaining building near remaining floor slab. BG to inquire of WATEC for cost to implement Bass, Nixon, and Kennedy surface water drainage plan on high side of rail spur, and construct improved drainage course for groundwater treatment system discharge parallel to railroad tracks.

1030 Shannon Craig and Bob Fisher (Beazer East) arrive at site for site visit. BG shows B. Fisher outlet end of culvert; pipe leading from floor slab at north end of Fire Pond; and vertical pipes immediately south of floor slab near remaining brick building. B. Fisher explains that vertical pipes are not tank fill pipes but are structural supports. B. Fisher instructs BG not to have WATEC investigate vertical pipes near remaining brick building. BG shows S. Craig and B. Fisher PVC vertical pipe and black seep at northwest corner of Fire Pond. B. Fisher believes seep is sewage, and is not a concern for remediation. S. Craig to determine nature of PVC pipe. J.

**Pay Quantities:**

WATEC: Joe Gunn (p.m.)
Steve Kelemencky (s.m.)
Dan Kitchen (tech.)
John Cutlip (2nd shift, tech.)
Forrest Hodges (2nd shift, tech.)

Triangle Grading Contractors: (4) truck drivers
(2) dozer operators

**Project Changes/Unusual Observations:**
WATEC to sample debris-laden fill for analytical requirements per specifications, field change exception of root material in fill; potential elimination of geotechnical testing of borrow material (pending USEPA approval); potential demolition of brick structure

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|---|---|---|
| **Weather Conditions:** | **Health and Safety PPE:** | **Air Monitoring Results:** |
| *a.m.* sunny, 40's | safety glasses, steel-toed boots | Background |
| *p.m.* sunny, 50's | | |

**Field Representative:** [signature] **Date:** 11/30/95

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 11/30/95 |
| Day of Week | Thursday |
| No. | 27 |
| Sheet | 2 of 3 |

# FIELD ACITIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Fire Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

Gunn (WATEC) explains strategy for diverting storm runoff from Medlin Pond area during draining and backfilling of Medlin Pond. S. Craig requests that the contractor leave remaining trees in Medlin Pond area, and conserve removal of trees during grading of Fire Pond.

1215 S. Craig and B. Fisher leave site for lunch and to visit Seagandollar wetlands.

1315 S. Craig and B. Fisher return from lunch and discuss demolition of remaining brick structure at north end of Fire Pond with Jim Cook (Beazer East) in a conference call.

1415 S. Craig leaves message for Beverly Hudson (USEPA RPM) requesting approval for demolition of building at north end of Fire Pond.

1500 B. Fisher and S. Craig leave site.

1530 TGC mobilizes Catapillar 315 track excavator to remove wood and rail ties from proposed soil excavation areas.

1615 TGC has finished removing rail ties and clearing debris from proposed soil excavation areas and demobilizes track excavator.

1715 TGC leaves site for the day.

1745 BG leaves site for the day. WATEC to pump to 00:00 12/1/95.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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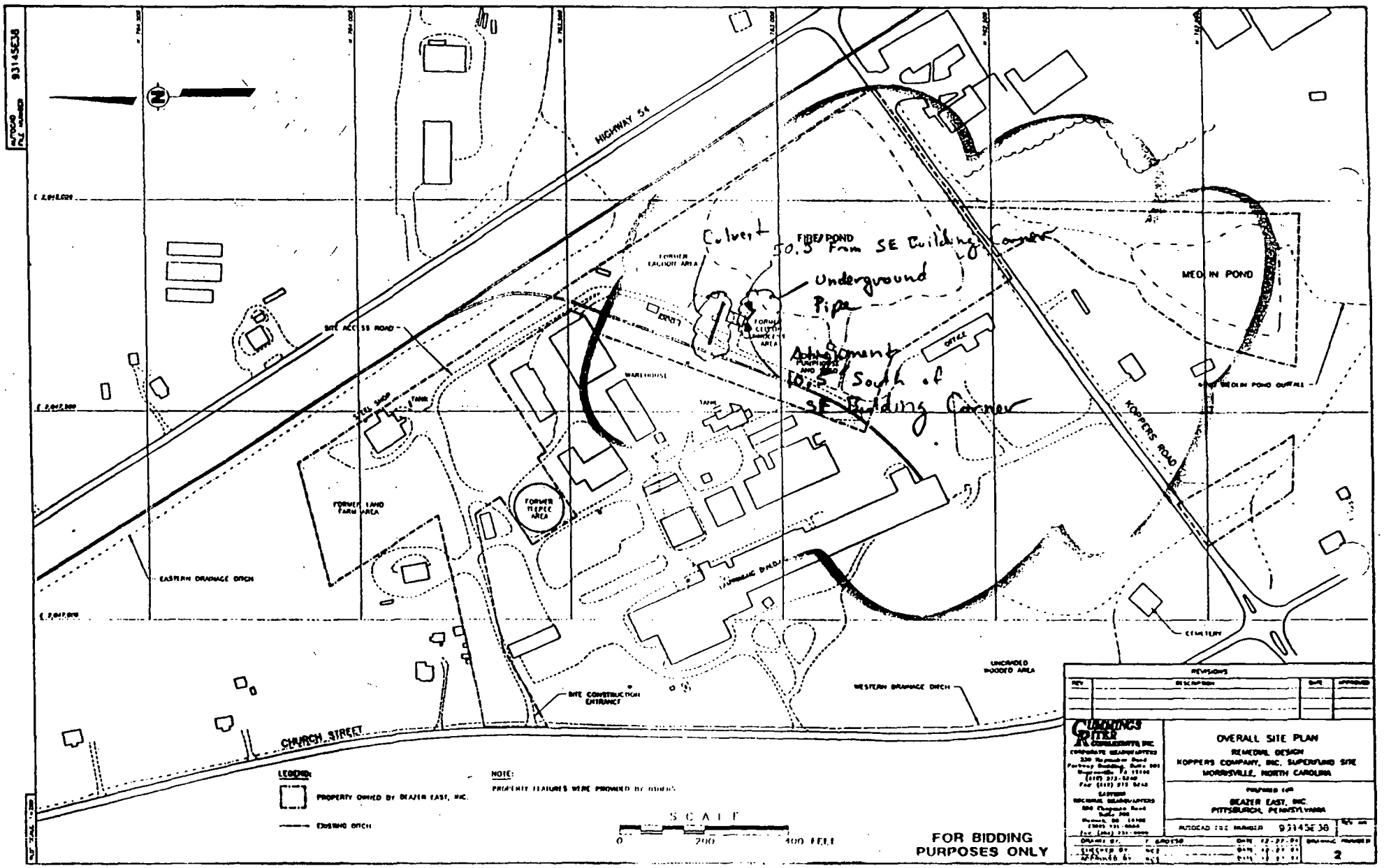
|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

| | |
|---|---|
| **Field Representative:** | **Date:** 11/29/95 |

Sheet 3 of 3
11/30/95

Culvert Outlet 17.3' from Pt 7
26.0' " Pt 8 ] Soil Excavation Areas



CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 12/1/95 |
| Day of Week | Friday |
| No. | 28 |
| Sheet | 1 of 2 |

# FIELD ACITIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Fire Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0830 BG arrives on site. Triangle Grading Contractors (TGC) is grading fill at north end of Fire Pond. One trailer truck 17 CY and one tandem truck (12 CY) are delivering fill to northwest end of Fire Pond. Triangle Grading Contractors (TGC) is using Catapillar D5H XL dozer for leveling fill delivered to fill stockpile.

0900 Joe Gunn (WATEC) informs BG that WATEC is concerned that geogrid is not sufficient for eliminating mudwave and facilitating backfilling of Fire Pond. Sediments are softer than WATEC anticipated. WATEC is considering foam, cement, or kiln dust to stabilize sediments. WATEC is bringing in Tensar vice president to make sure that WATEC is following all Tensar recommendations before considering other alternatives.

1130 BG requests analytical data for treated surface water from J. Gunn (especially dioxin). J. Gunn indicates that Triangle Laboratory probably sent hard copy to WATEC Atlanta office and J. Gunn to obtain copy of laboratory results week of 12/3/95. BG informs J. Gunn that WATEC is behind on reporting surface water treatment results for dioxin. J. Gunn informs BG that TGC is delivering granular fill to site to place over geogrid per Tensar recommendations. WATEC will also try placing geotextile under geogrid to evaluate effect of placement methods for eliminating mudwave and covering sediments. BG requests information from WATEC for cost estimate to demolish brick building at north end of Fire Pond. J. Gunn recommends wipe samples of walls, metal roof trusses, floor, and additional analytical work to characterize contents of pressure vessels and to identify methods of decontamination. J. Gunn suggests two-phased approach to characterize contamination, then remediation followed by additional analytical for remediation verification.

1200 J. Gunn leaves site for the day. One of TGC dozer operators leaves for the day.

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| **Pay Quantities:**<br>WATEC: Joe Gunn (p.m.)<br>Steve Kelemencky (s.m.)<br>John Cutlip (tech.)<br>Dan Kitchen (2nd shift, tech.)<br>Forrest Hodges (2nd shift, tech.)<br>Triangle Grading Contractors: (2) truck drivers<br>(2) dozer operators | **Project Changes/Unusual Observations:** |

| | | |
|---|---|---|
| **Weather Conditions:**<br>*a.m.* sunny, 40's<br>*p.m.* sunny, 50's | **Health and Safety PPE:**<br>safety glasses, steel-toed boots | **Air Monitoring Results:**<br>Background |

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|---|---|
| **Field Representative:** [illegible] | **Date:** 12/1/95 |

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 12/1/95 |
| Day of Week | Friday |
| No. | 28 |
| Sheet | 2 of 2 |

# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Fire Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

1400 Jim Cook (Beazer East) calls to discuss Fire Pond surface water treatment volume, analytical requirements for building demolition, and CRC Operations Plan for soil excavation. J. Cook does not believe wipe samples of building walls and floor are necessary; however, decontamination and verification samples of pressure vessels will be required. BG informs J. Cook of WATEC concerns regarding geogrid effectiveness in providing stable subgrade for backfilling of sediments in Fire Pond and plans to investigate methods of geogrid placement. BG informs J. Cook that WATEC is behind on reporting of treated surface water analytical results. J. Cook and BG discuss treated volume of water in Fire Pond. The pre-pumping water level was approximately 2 feet above the invert of the lowest culvert at the Fire Pond outfall. The two feet of water accounts for about 4 million gallons of water. Additionally, the Fire Pond recieved approximately 1 million gallons of rain during pumping period of 10/28/95 to 12/1/95. J. Cook does not believe recharge to Fire Pond from groundwater is significant.

1530 J. Cook and Bob Fisher (Beazer East) call to discuss soil RFB. J. Cook would like to include Section 4.0 of approved Remedial Action Work Plan as an attachment to RFB. BG foresees schedule of soil excavation occuring mid-January 1996. J. Cook requests clarification of CRC scope for soil excavation in an Operations Plan (including air monitoring) by mid-December.

1600 BG informs S. Kelemencky that WATEC is behind on analytical reporting for treated surface water. S. Kelemencky informs BG that initially samples were collected for 8270, but not 8290, as S. Kelemencky was of the mistaken understanding that 8270 included both penta and dioxin analysis. Results on first batch of 8290 results should be available week of 12/2/95.

1700 TGC leaves site for the day.

1730 BG leaves site for the day. WATEC to continue pumping to 00:00 12/2/95 and continue from 08:00 12/2/95 to about 17:00 12/2/95.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 12/1/95 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 12/4/95 |
| Day of Week | Monday |
| No. | 29 |
| Sheet | 1 of 2 |

# FIELD ACITIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Fire Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0830 BG arrives on site. WATEC is unrolling geotextile/geonet at the northwest corner of the Fire Pond. WATEC worked 12/2/95 pumping remaining water from Fire Pond and preparing rolls of geotextile/geonet. 10.66 Million gallons on flow totalizer. Geotextile/geonet rolls were prepared by unrolling the geotextile, unrolling the geonet on top of the geotextile, and rolling the two materials back up together.

0920 Triangle Grading Contractors (TGC) begins using Catapillar D5C dozer to place cohesive material on top of geotextile/geogrid composite. Dave Fuqua (Tensar) is offering technical advice to TGC for placement of fill on geogrid. Dozer speed near edge of fill and lift thickness are critical, as is total weight and ground pressure of dozer. D. Fuqua recommends half-blade full of fill as dozer approaches fill edge. D. Fuqua also recommends lighter dozer than Cat D5C. WATEC has tried since 12/1/95 to locate Catapillar D4 or D3 series dozer. Placement of silty sand versus clayey silt does not appear to result in difference in mud wave formation.

1320 BG talks with J. Cook (Beazer East) regarding project schedule. BG informs J. Cook that schedule provided in Monthly Progress Report to USEPA is still achievable, even though WATEC is approx. 3 weeks behind in forecasted schedule. BG provides analytical data (pentachlorophenol and phenol) for treatment system effluent for Monthly Progress Report.

1430 WATEC is continuing to place geotextile beneath the geogrid by unrolling and rolling operations. TGC has covered approximately 100 sy of grid near northwest corner of Fire Pond. TGC is concerned that 2.5 feet of fill will not provide stable surface for construction equipment and indicates that 3.5 feet of fill over geogrid is minimum for equipment used. D. Fuquar indicates that blading behind leading edge to required depth of 2.5 ft is acceptable. However, lighter dozer

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| **Pay Quantities:**<br>WATEC: Joe Gunn (p.m.)<br>Steve Kelemencky (s.m.)<br>John Cutlip (tech.)<br>Dan Kitchen (tech.)<br>Terry Hall (tech.)<br>Don Webster (tech.)<br>Triangle Grading Contractors: (2) dozer operators | **Project Changes/Unusual Observations:** |

| | | |
|---|---|---|
| **Weather Conditions:**<br>*a.m.* ptly sunny, 40's<br>*p.m.* sunny, 60's | **Health and Safety PPE:**<br>safety glasses, steel-toed boots | **Air Monitoring Results:**<br>Background |
| **Field Representative:** Bruce Geno | | **Date:** 12/4/95 |

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 12/4/95 |
| Day of Week | Monday |
| No. | 29 |
| Sheet | 2 of 2 |

# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Fire Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

may enable TGC to reduce initial lift to 2.5 feet. Pond surface appears to have less relief than shown in design drawings. WATEC is concerned that more fill will be needed to raise grade at outside edge of Fire Pond to achieve slope for drainage. WATEC agrees to have surveyor determine elevations around perimeter of former Fire Pond. WATEC to have third-party verification of lift thickness provided by Trigon.

1700 TGC and WATEC agree that road built across Fire Pond during fill will enable trucks to deliver fill near center of making backfilling more efficient. TGC to install access area near southeast corner of former Fire Pond. WATEC agrees that tight control of TGC to ensure final lift thickness of no more than 2.5 feet is critical to prevent cost overrun on fill.

1730 Wayne Thompson (TGC) leaves site for the day.

1745 WATEC leaves site for the day. Joe Gunn to return 12/11/95.

1830 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

| | | |
|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |
| **Field Representative:** | | **Date:** 12/4/95 |

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 12/5/95 |
| Day of Week | Tuesday |
| No. | 30 |
| Sheet | 1 of 4 |

# FIELD ACITIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Fire Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0830 BG arrives on site. WATEC is unrolling geotextile/geonet at the north of the Fire Pond. Triangle Grading Contractors has two dozer operators (Cat D5H XL and D5C) blading material at northwest corner of former Fire Pond to bring fill down to 2.5 lift thickness. BG talks with B. Smith regarding letter to WATEC documenting status of analytical and geotechnical testing of borrow material.

0930 BG talks with Bob Sledge of NCDEHNR Water Quality Section regarding surface water treatment monitoring reporting. BG requests report Discharge Monitoring Report (DMR) Form for pentachlorophenol, phenol, and dioxin monitoring parameters. BG explains that these are the only parameters that NCDEHNR has specified for monitoring requirements, but these parameters are not listed on DEM Form MR-1 (12/93). B. Sledge indicates that reporting in letter form should be sufficient and to direct letter to attention of Judy Garrett. B. Sledge to mail alternate reporting form with blank headings to fill in appropriate monitoring parameters.

1045 John Funk (RUST) and Stan James (INCO) arrive on site to observe areas for RUST field trailer, groundwater treatment building, site water line alignment and drainage ditch for groundwater treatment effluent discharge. BG indicates Beazer East's desire to save as many trees along water line alignment as possible. Discharge will enter very shallow ditch, with shallow pools. J. Funk agrees that pooling is probably unavoidable due to shallow grade along east side of Beazer property. BG indicates preferred alignment of water line (east of Fire Pond, out of pond sediments). S. James believes there is sufficient room along east bank of Fire Pond to use ditch witch for trenching of water line. RUST has applied for meter from Morrisville town authorities for water line. Stan James explains that critical date is delivery of pre-fabricated treatment building, which will be approximately 11 weeks from order date of 11/20/95 (approximately last week of January). RUST/INCO will plan to mobilize 4 weeks before building arrival to install extraction well sump, water line, building foundation and electrical. BG to provide copy of design

| | |
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| **Pay Quantities:**<br>WATEC: Steve Kelemencky (s.m.)<br>John Cutlip (tech.)<br>Dan Kitchen (tech.)<br>Terry Hall (tech.)<br>Don Webster (tech.)<br>Triangle Grading Contractors: (2) dozer operators | **Project Changes/Unusual Observations:** |

| | | |
|---|---|---|
| **Weather Conditions:**<br>*a.m.* ptly sunny, 40's<br>*p.m.* overcast, lt rain, 60's | **Health and Safety PPE:**<br>safety glasses, steel-toed boots | **Air Monitoring Results:**<br>Background |
| **Field Representative:** B. [illegible] | | **Date:** 12/5/95 |

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 12/5/95 |
| Day of Week | Tuesday |
| No. | 30 |
| Sheet | 2 of 4 |

# FIELD ACITIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Fire Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

drawings on disk to RUST for building permit application.

1200 WATEC and TGC break for lunch.

1230 WATEC resumes fabrication of geogrid/geotextile composite for placement in the Fire Pond and installation of geogrid/geotextile. TGC operators continue to shave off fill at northwest corner of former Fire Pond.

1330 BG prepares letter for monthly surface water treatment effluent monitoring. B. Smith provides contact person at NCDEHNR (Jeanette Powell) and NPDES permit no. (NC 0084366). BG to hold off on sending letter until J. Cook (Beazer East) has a chance to look at the reporting letter.

1400 BG receives letter from Joe Gunn (WATEC) to Wayne Thompson (TGC) concerning importance of maintaining no more than 2.5 feet of fill over geogrid in Fire Pond (see attached copy of letter).

1600 Laura Faulconer (Wake Co. Dept. of Health Div. of Community Services E&S) arrives on site. Wayne Thompson (TGC) informs BG that Enwood Structures and Adams Products are very concerned about removal of trees along southern bank of former Fire Pond, and would prefer to leave trees. W. Thompson has referred questions to Shannon Craig (Beazer East).

1620 L. Faulconer leaves site. Provides contact name for NCDOT Raleigh office (Chris McGee) concerning possible replacement of culvert crossing McCrimmon Rd.

1720 WATEC leaves site for the day.

1730 BG leaves site for the day.

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|---|---|
| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

| | | |
|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |
| **Field Representative:** | | **Date:** 12/5/95 |

WATEC
Waste Abatement Technology, L.P.
1300 Williams Drive, Suite 8
Marietta, Georgia 30066
(404) 427-1947, FAX (404) 427-1907

December 5, 1995

Mr. Wayne Thompson
Triangle Grading Contractors, Inc.
2019 Hardee Lane
Clayton, North Carolina 27520

Reference: Koppers Superfund Site
Backfill Operations

Dear Wayne:

Based on our discussions in the field on Monday, December 4, 1995, with Mr. David Fuqua of Tensar, and Bruce Geno, Oversight Engineer for Beazer East, Inc., it will be imperative that we maintain a 2.5' lift over the Fire Pond to avoid cost overruns. WATEC has incorporated into the original design a change for increased overlaps to facilitate placement of the fill material, which will constitute a change order request for additional geotextiles to close the pond. Beazer will not pay for additional lift material unless authorized under a change order based on field conditions that meet with the approval of Bruce Geno and Beazer's Project Manager. Therefore, I am requesting Post and Associates to establish survey controls around the pond with locations, and Trigon will verify the loose lift depths in the pond for contract compliance. Granted, you are trucking loose material into the site, and some compaction is occurring during installation in the pond over the grid. Surveys will verify actual yardage placed in the pond area. WATEC can not authorize additional fill material outside of the 2.5' lift in the pond area without Beazer's approval. It will be your responsibility to meet these contract conditions unless we are authorized to change the depth of the fill to achieve drainage of storm water from the pond site.

I am extremely satisfied with the performance of you and your staff personnel in the contract to-date. This phase of work activity is very critical to the success of this contract. I know you will be able to meet these contract conditions. Site coordination with Bruce, Trigon and Post & Associates will allow both of us to be successful in the capping of these pond sediments.

If you have any questions, please do not hesitate to call me. I look forward to returning back to Raleigh and "walking" across the closed pond.

Sincerely,

*Waste Abatement technology, L.P.*

Joseph F. Gunn
Project Manager

cc: Steve Kolomencky - WATEC
Bruce Geno - CRC, Inc.
File #50007

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 12/6/95 |
| Day of Week | Wednesday |
| No. | 31 |
| Sheet | 1 of 3 |

# FIELD ACITIVITY REPORT

**Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55

**Field Activity:** Surface Water Treatment - Fire Pond Backfilling

**Personnel On Site:** B. Geno | **Subcontractor:** WATEC

**Description of Daily Activities and Events:**

0830 BG arrives on site. WATEC is preparing goegrid/geotextile for placement in former Fire Pond. WATEC has placed rolls of geogrid/geotextile to approximately 50 feet from leading edge of fill. Triangle Grading Contractors (TGC) begins delivering fill to site with 6 trucks. Fill appears to be clayey silt and is reportedly from borrow source 2. Surveyors arrive (Post and Associates) on site and set up to shoot perimeter of former Fire Pond to determine elevations at former shoreline and at leading edge of fill. Survey locations are to be shown on plan view (60 scale). Wayne Thompson (TGC) indicates he does not need survey locations of pond perimeter staked. BG requests from surveyors that lower corners of at least 3 plastic bins in pond (where bins touch pond bottom) be surveyed to estimate pond bottom topography.

0900 Steve Kelemencky indicates WATEC will begin removing perimeter fence around Medlin Pond 12/7/95. S. Kelemencky informs BG that W. Thompson has indicated that 4.5 to 5 ft. lift thickness over geogrid is needed for truck to dump on fill. BG indicates to S. Kelemencky that BG would prefer to see spurs built up to 4.5 to 5 ft. as needed for traffic, rather than build up entire span of fill to 4.5 to 5 ft. W. Thompson indicates that spurs are being considered for closer to center of pond once response of geogrid near perimeter is determined. W. Thompson states that he wants to get further away from perimeter of pond and closer to middle before considering construction of road. BG indicates to S. Kelemencky that Beazer will be very sensitive to change order for additional fill. S. Kelemencky indicates that WATEC understands sensitivity to additional fill, and believes WATEC has taken appropriate steps to communicate this concern to TGC. S. Kelemencky states that W. Thompson has indicated that if TGC needs to place additional 6 in. fill over entire Fire Pond to create stable subbase for equipment during placement, it will not be a change order.

1035 S. Kelemencky informs BG that he has been reassigned to another WATEC site, and Joe Gunn will

**Pay Quantities:**

WATEC: Steve Kelemencky (s.m.)
John Cutlip (tech.)
Dan Kitchen (tech.)
Terry Hall (tech.)
Forrest Hodges (tech.)

Triangle Grading Contractors: (2) dozer operators

**Project Changes/Unusual Observations:**

| **Weather Conditions:** | **Health and Safety PPE:** | **Air Monitoring Results:** |
|---|---|---|
| *a.m.* ptly sunny, 40's<br>*p.m.* sunny, 60's | safety glasses, steel-toed boots | Background |

**Field Representative:** [signature] | **Date:** 12/6/95

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 12/6/95 |
| Day of Week | Wednesday |
| No. | 31 |
| Sheet | 2 of 3 |

## FIELD ACITIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Fire Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

be resuming site manager duties, as well as continuing project manager duties. John Cutlip will be assisting J. Gunn with site manager duties.

1120 Post and Associates (John and Fred) leave site. Survey points indicate approx. 7 feet of fall from north edge to south edge of former Fire Pond. S. Kelemencky indicates that the puddle remaining near the pump intake at the low point of the former pond is growing by about 10 ft. per day in diameter. Sediments appear to be draining toward low point as fill is placed over geogrid.

1145 BG talks with Jim Cook (Beazer East). BG informs J. Cook of warning by WATEC to TGC to limit fill thickness to 2.5 feet to avoid overage on fill required to backfill Fire Pond. BG warns J. Cook that bottom of Fire Pond may not be as deep as indicated in design. Sediments have tended to naturally migrate to low spot. In addition, sediments are being moved by fill placement. Grades will likely require field adjustment. BG asks J. Cook about possibility of leaving dam and trees along southern edge of former Fire Pond. BG informs J. Cook that BG has not witnessed, but suspects that W. Thompson (TGC) is resistant to removal of trees and is trying to rally local support of Enwood Structures and Adams Products. BG informs J. Cook that Laura Faulconer (Wake Co.) provided contact person at NCDOT who may know about replacement of culvert crossing McCrimmon Rd. BG to follow up with contact to see whether it is feasible for Beazer to propose to expedite culvert replacement (to increase capacity). J. Cook indicates that Beazer would probably be willing to spend $40k to save trees along McCrimmon Rd. Money could be used to contribute to NCDOT for culvert replacement.

1315 BG informs Bill Smith of BG's efforts to study saving dam at southern edge of Fire Pond.

1330 BG and Bill Smith conference call to Beazer to speak with Jim Cook and Bob Fisher regarding RFB for soil excavation.

1430 BG talks with Rod Butler, Engineer for town of Morrisville. BG questions whether R. Butler has requested replacement of culvert from DOT. R. Butler informs BG that he has notified Raleigh district of NCDOT that the detention is being somewhat reduced by regrading activities, and that is the extent of his conversations with NCDOT. R. Butler does not know whether NCDOT is

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

| | |
|---|---|
| **Field Representative:** | **Date:** 12/6/95 |

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 12/6/95 |
| Day of Week | Wednesday |
| No. | 31 |
| Sheet | 3 of 3 |

# FIELD ACITIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Fire Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

considering replacement of culvert or not.

1530 Chris McGee of NCDOT calls and provides contact in hydraulics unit of Raleigh district of NCDOT (Dave Henderson).

1545 BG speaks to Dave Henderson regarding replacement of culvert crossing McCrimmon Rd. Dave Henderson explains that directive of NCDOT is to provide traffic routes and not to protect downstream properties. However, earlier conversations with R. Butler (town of Morrisville) seem to indicate that Beazer could be liable for downstream changes in hydrology. BG to send Dave Henderson a copy of Erosion and Sedimentation Control Plan calculations. D. Henderson indicates that drainage area size is the most important parameter in determining sizing of culvert. Following review of CRC calculations, D. Henderson indicates that a site visit with the Raleigh district engineer for NCDOT (Tim Johnson) may be worthwhile. BG emphasizes that timely response will be necessary from NCDOT if trees are to be saved.

1630 S. Kelemencky completes sampling of three borrow source materials for TCL/TAL analysis. BG requests geotechnical data for material stockpiled at northeast corner of former Fire Pond, and for granular quarry screened material. S. Kelemencky to defer geotechnical sampling to J. Gunn.

1700 TGC leaves site for the day (dusk).

1720 BG and WATEC leave site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

| | | |
|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

| | |
|---|---|
| **Field Representative:** | **Date:** 12/6/95 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 12/7/95 |
| Day of Week | Thursday |
| No. | 32 |
| Sheet | 1 of 1 |

# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Fire Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0830 BG arrives on site. WATEC and Triangle Grading Contractors have called off due to rain. Site received about 0.5 in. of rain overnight and still receiving light rain.

0900 BG begins review B. Smith's comments on RUST Health and Safety Plan and Contractor Quality Control Plan.

1630 Ann of Ensys calls to inform BG that one PCP screening sample can be run in about 30 min. or 8 in one hour.

1730 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.* overcast, lght rain, 40's<br>*p.m.* overcast, 50's | **Health and Safety PPE:** | **Air Monitoring Results:** |

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|---|---|
| **Field Representative:** B. Geno | **Date:** 12/7/95 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 12/8/95 |
| Day of Week | Friday |
| No. | 33 |
| Sheet | 1 of 2 |

# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Fire Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0830 BG arrives on site. Triangle Grading Contractors (TGC) begins using 4 trucks, two tandem and two trailer dumps, delivering fill to site. TGC has removed culvert in diversion ditch at northeast corner of former Fire Pond which was placed to allow trucks and dozer to cross diversion ditch. Culvert was crushed and plugged, and was not allowing diversion ditch to drain. TGC graded layer of aggregate off of access road near trailers to more stable material. TGC also dug shallow ditch upgradient of soil stockpiled near northeast corner of Fire Pond in area of proposed groundwater treatment building to divert runoff from stockpile. WATEC workers are preparing more geogrid and geotextile to be placed in the former Fire Pond.

0940 J. Gunn (WATEC) arrives on site. BG delivers RFB for soil excavation to J. Gunn. BG informs J. Gunn that post-excavation screening samples can be processed at a rate of approx. 8/hour, and warns J. Gunn that excavation sampling will result in down time of excavator. BG informs J. Gunn that soils designated as exceeding action levels as a result of previous sampling efforts will be stockpiled for off-site treatment without field screening. Soil previously designated as non-impacted will be screened for verification.

1300 WATEC tech.s begin to excavate trench for placement of new culvert in diversion ditch near the northeast corner of the former Fire Pond.

1530 Bob Fisher (Beazer East) calls to inform BG that he will be on site 10:00 a.m. 12/12/95 to meet with Joe Gunn (WATEC) and John Funk (Rust) to discuss bids for soil excavation. B. Fisher indicates that fiberglass storage tanks near decontamination pad should not be used to store supply of decontamination water.

1545 Jean Wolf and Robert Bixler (concerned Morrisville citizens) visit site and ask questions regarding activities performed at site. BG refers J. Wolf and R. Bixler to Shannon Craig and James Cook of Beazer East to answer any questions.

1600 Joe Gunn (WATEC) leaves site for the day.

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| **Pay Quantities:**<br>WATEC: Joe Gunn (s.m.)<br>John Cutlip (tech.)<br>Terry Hall (tech.)<br>Triangle Grading Contractors: Forrest Hodges (tech.)<br>(2) dozer operators<br>(4) truck drivers | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.* sunny, low 40's<br>*p.m.* sunny, low 50's | **Health and Safety PPE:**<br>safety glasses, steel-toed boots | **Air Monitoring Results:**<br>Background |

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|---|---|
| **Field Representative:** B. Geno | **Date:** 12/8/95 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 12/8/95 |
| Day of Week | Friday |
| No. | 33 |
| Sheet | 2 of 2 |

# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Fire Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

1700 WATEC and TGC leave site for the day.
1800 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |
| **Field Representative:** | | **Date:** 12/8/95 |

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 12/11/95 |
| Day of Week | Monday |
| No. | 34 |
| Sheet | 1 of 4 |

# FIELD ACITIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Fire Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

1030 BG arrives on site from PGH. WATEC is preparing geotextile/geogrid composite for placement in Fire Pond. Sediments in Fire Pond have approximately 3/16-in. frozen layer. Triangle Grading Contractors (TGC) is using Cat D5H XL to grade fill delivered to area near northwest corner of former Fire Pond.

1040 BG talks to B. Smith regarding comments on Rust's Contractor Quality Control Plan and Operations Plan. B. Smith to review Rust's Operations Plan before arrival on site 12/12/95. BG to review comments on Rust Contractor Quality Control Plan and Health and Safety Plan with John Funk (Rust) 12/12/95.

1100 BG talks with Jim Cook (Beazer East) concerning J. Cook's travel plans. J. Cook may visit site 12/20/95. Bob Fisher to arrive about 10:30 a.m. 12/12/95. BG and J. Cook discuss probability of simultaneous performance of soil excavation and installation of groundwater treatment system. Bob Fisher is concerned that there is not enough space to avoid contractors getting in each others way. J. Cook would like to avoid extending schedule submitted to USEPA and have groundwater treatment system installed by end of first week in 2/96 and have soils excavated by end of 1/96. BG and J. Cook discuss procedures for soil excavation and estimated time to stockpile impacted soils. BG estimates 3 to 4 days to excavate soils suspected to be impacted based on pre-design activities, and 4 more days to achieve post-excavation verification. Incineration costs est. at $700/ton. Beazer is able to ship 8 trucks/day to incineration facility. J. Cook would like to have B. Smith and BG have a couple of different scheduling options to try to prevent delay in schedule.

1400 BG witnesses placement of boulders in fill by TGC and informs J. Gunn that boulders should be pushed aside and not used as fill due to unacceptable particle size.

1430 BG discusses alternate grading plans with Wayne Thompson (TGC) and Joe Gunn (WATEC). BG asks J. Gunn and W. Thompson cost difference between saving dam and trees at southern edge of former Fire Pond and staying with design grading plan. W. Thompson indicates that he is

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| **Pay Quantities:**<br>WATEC: Joe Gunn (s.m.)<br>Dan Kitchen (tech.)<br>John Cutlip (tech.)<br>Terry Hall (tech.)<br>Forrest Hodges (tech.)<br>Triangle Grading Contractors: (1) dozer operator<br>(4) truck drivers | **Project Changes/Unusual Observations:**<br>BG/Joe Gunn (WATEC) and Wayne Thompson (TGC) discuss alternate grading plans and upgrading of McCrimmon Rd. culvert (see sheet 2 of 4) |

| | | |
|---|---|---|
| **Weather Conditions:**<br>*a.m.* sunny, low 30's<br>*p.m.* sunny, low 40's | **Health and Safety PPE:**<br>safety glasses, steel-toed boots | **Air Monitoring Results:**<br>Background |
| **Field Representative:** [signature] | | **Date:** 12/11/95 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 12/11/95 |
| Day of Week | Monday |
| No. | 34 |
| Sheet | 2 of 4 |

# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Fire Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

concerned that mudwave will make it difficult to achieve design grades as the mudwave will pile up in the middle of the pond resulting in a higher elevation than shown on design drawings. BG indicates that he believes it is to everyone's benefit to try to save the trees, if possible. BG informs W. Thompson and J. Gunn that Dave Henderson with NCDOT hydraulics group is tentatively scheduled to visit site 12/14/95. BG would like to have idea of cost difference before NCDOT visit. J. Gunn indicates that he would prefer to place catch basins in the middle of the former Fire Pond, and place RCP pipe through dam. W. Thompson indicates that he would prefer to sheet grade from north side of former Fire Pond toward south to about midway across Fire Pond, then break grade in east-west slope direction. W. Thompson's grading plan to drain regraded Fire Pond area to southwest and southeast corners of former Fire Pond, with sediment basins at either corner. W. Thompson indicates he can implement his grading plan with no additional cost to Beazer, and may result in some savings if fence does not need to be replaced. J. Gunn indicates that his bid included $12K for fence replacement. W. Thompson indicates that he can credit about 3,000 CY of borrow material toward regrading of Fire Pond area if dam is not removed, so that W. Thompson's plan should not result in net increase in cost to Beazer. Additionally, W. Thompson would like to construct access road to former Fire Pond from McCrimmon Rd. near southeast corner of Fire Pond. W. Thompson believes that replacement (upgrading) culvert beneath McCrimmon Rd. would cost about $20K to bore and jack new culvert. Fiber optic line on south side of McCrimmon Rd. and avoiding interruption of truck traffic makes boring and jacking more attractive than closing road. Boring and jacking should not be more expensive than conventional methods, but would require access from Adams Products. J. Gunn indicates that he wishes TGC would reduce lift thickness from 4 to 5 ft. above geogrid to about 2.5 ft. above geogrid. W. Thompson defends placement method indicating that 4 to 5 ft. is minimum for truck safety if trucks are to deliver fill to managable distance from leading edge of fill. Dozers will lose effectiveness at greater push distance. J. Gunn instructs TGC to avoid placement of boulders as fill.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

| | |
|---|---|
| **Field Representative:** | **Date:** 12/11/95 |

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 12/11/95 |
| Day of Week | Monday |
| No. | 34 |
| Sheet | 3 of 4 |

# FIELD ACITIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Fire Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

1530 Paul Duffy (Trigon) arrives on site to verify lift thickness with hand auger - 3rd party check of TGC fill placement for WATEC. BG to overnight drawing of regraded Fire Pond area to Trigon for location of hand auger locations.

1620 J. Gunn leaves site for the day.

1630 BG speaks to John Funk (Rust). J. Funk to arrive on site about 10:00 a.m. 12/12/95.

1700 Locations where fill has been placed over geogrid and stockpiled are indicated on attached map (sheet 4 of 4). TGC and WATEC leave site for the day (dusk).

1715 BG leaves site for the day.

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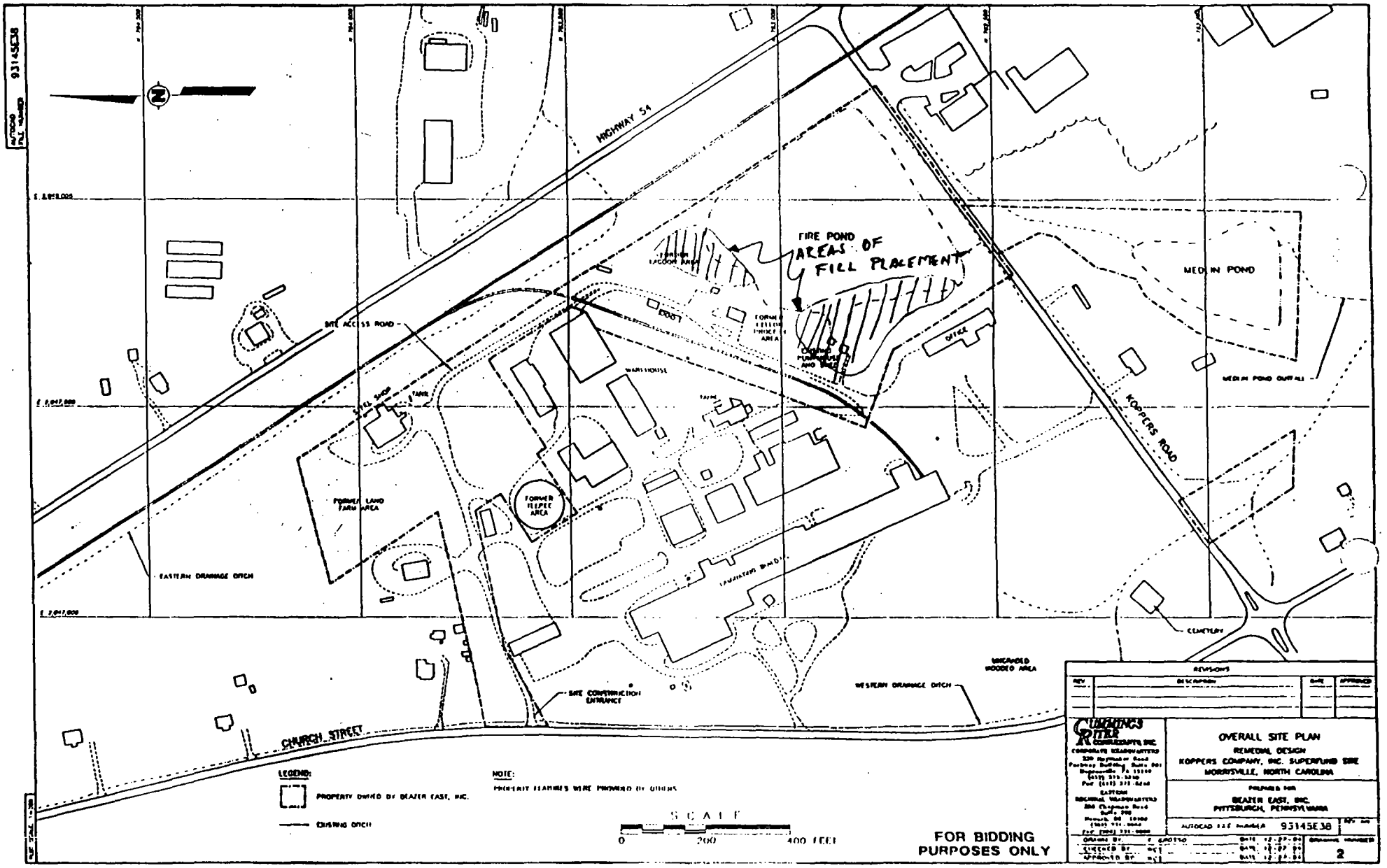
| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

| | | |
|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

| | |
|---|---|
| **Field Representative:** | **Date:** 12/11/95 |

Pg 4 of 4
12/11/95



CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 12/12/95 |
| Day of Week | Tuesday |
| No. | 35 |
| Sheet | 1 of 4 |

# FIELD ACITIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Fire Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0800 BG arrives on site. WATEC is preparing geotextile/geogrid composite for placement in Fire Pond. Sediments in Fire Pond have approximately 1/2-in. frozen layer. Triangle Grading Contractors (TGC) is using Cat D5H XL, D5C, and John Deere 750C to grade fill delivered to area near northwest corner of former Fire Pond.

1000 Bob Fisher (Beazer East) arrives on site and discusses building decontamination/cleaning versus demolition. B. Fisher explains that he is more inclined to clean out building than to demolish building at this time. B. Fisher has asked WATEC to submit estimates for sampling, decontamination, and disposal of debris in building, including vessels, piping, breaker boxes, etc.

1010 Stan James (INCO) and John Funk (Rust) arrive on site to meet with B. Fisher and BG to discuss soil excavation RFP. BG asks Stan James and John Funk if groundwater treatment building will have sloped floor toward sump. Stan James indicates that floor can be sloped.

1020 Meeting to discuss soil operations and RFB begins. B. Fisher explains rational for staging area design, and truck loading concerns, shipping rate (7 trucks/day), and decontamination of equipment. B. Fisher would prefer to keep excavation equipment out of excavations, and to have excavator loading trucks for long haul to Calvert City, KY (LWD). Decontamination and storm water removed from excavations to be placed in existing fiberglass storage tanks for Beazer disposal. Soil to be managed as K001 waste. B. Fisher also anticipates one rolloff of F032 waste for disposal in Pinewood, SC generated from rail ties and building "cleaning". Rail ties are to be cut in half and stockpiled for Beazer disposal. Beazer will not require confirmatory sampling prior or after of existing ground beneath proposed stockpile area. Photo documentation and oversight inspection to suffice for verification that floor of staging area not impaired. Oversight engineer (CRC) to coordinate trucks and direct excavator. Contractor to provide truck scales. Pathway to staging area from excavation to be managed as a clean zone. Transport manifests to be generated and signed by Beazer. Turnaround time for dioxin post-excavation verification sampling to be

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| **Pay Quantities:**<br>WATEC: Joe Gunn (s.m.)<br>John Cutlip (tech.)<br>Terry Hall (tech.)<br>Forrest Hodges (tech.)<br>Don Webster (tech.)<br>Triangle Grading Contractors: (2) dozer operators<br>(4) truck drivers | **Project Changes/Unusual Observations:** |

| | | |
|---|---|---|
| **Weather Conditions:**<br>*a.m.* sunny, low 40's<br>*p.m.* sunny, low 50's | **Health and Safety PPE:**<br>safety glasses, steel-toed boots | **Air Monitoring Results:**<br>Background |

| | |
|---|---|
| **Field Representative:** Bruce Geno | **Date:** 12/12/95 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 12/12/95 |
| Day of Week | Tuesday |
| No. | 35 |
| Sheet | 2 of 4 |

# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Fire Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

determined by CRC. Excavator bucket to have teeth removed and plate welded to front of bucket to avoid smearing of clean and impacted soil.

1110 B. Smith arrives on site. Meeting with Rust and WATEC to discuss soil excavation continues.

1230 B. Smith, BG, Joe Gunn and Bob Fisher discuss alternate grading plans and difficulty of achieving design grades given Fire Pond floor topography. W. Thompson has expressed concern that if he keeps pushing the mudwave toward the depression near the pump intake, the depression will fill with sediment and will actually become a topographic high. B. Fisher and B. Smith emphasize necessity of trapping mudwave whenever possible by disecting pond with geogrid/geotextile and filling in small areas to control mudwave formation. B. Smith, BG, and B. Fisher agree that reversing slope and filling depression with fill/sed. to make a topographic high of the existing depression would result in O&M problems in trying to maintain drainage of the regraded slopes due to settlement.

1245 W. Thompson joins the discussion of alternate grading schemes. B. Fisher explains that Beazer has no plans to use the former Fire Pond area for development or construction (i.e., building on the Fire Pond). W. Thompson explains that he believes that by sloping regraded surface toward southeast and southwest corner and creating sediment basin/filter feature at each corner would help to trap sediment and save trees. B. Smith and B. Fisher explain to W. Thompson concerns with O&M related to maintaining drainage on regraded slope as it settles if sediments are piled up in depression. B. Smith explains that W. Thompson should use every opportunity to trap sediments and cut off mudwave by sectioning pond into quadrants. W. Thompson indicates that fill price can come down to $6.60 (includes WATEC markup) from the budgeted $8.80 for additional fill in Fire Pond to achieve stability for equipment. W. Thompson further states that he can credit 6,000 CY to project if dam at south edge of Fire Pond is not removed. B. Smith indicates to W. Thompson that it is undesirable to have a mudwave which continues to grow as the fill is placed in one direction across pond, and thus importance of taking any measures possible to reduce mudwave formation. Cummings/Riter to evaluate hydrology of alternate grading plans.

| | |
|---|---|
| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

| | | |
|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

| | |
|---|---|
| **Field Representative:** | **Date:** 12/12/95 |

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 12/12/95 |
| Day of Week | Tuesday |
| No. | 35 |
| Sheet | 3 of 4 |

# FIELD ACITIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Fire Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

1400 B. Fisher leaves site. B. Smith and BG walk site. B. Smith indicates it may be desirable to place settlement markers on fill to get indication of when asymptotic settlement curve is reached. Also, B. Smith to check on availability of small aircraft to obtain aerial photos of site. BG and B. Smith observe that PVC pipe next to small pine tree near northwest corner of former Fire Pond has been covered over by dozer. BG to inform WATEC that PVC pipe needs to be uncovered.

1500 J. Gunn leaves site for the day.

1600 BG and B. Smith travel south along Church St. to follow drainage course from Medlin Pond to Crabtree reservoir and inventory culvert sizes (see attached figure)

1630 BG and B. Smith look at grading plan to discuss alternate grading plans and review hydrology calculations in E&S Control Plan.

1700 TGC and WATEC leave site for the day (dusk).

1845 BG and B. Smith leave site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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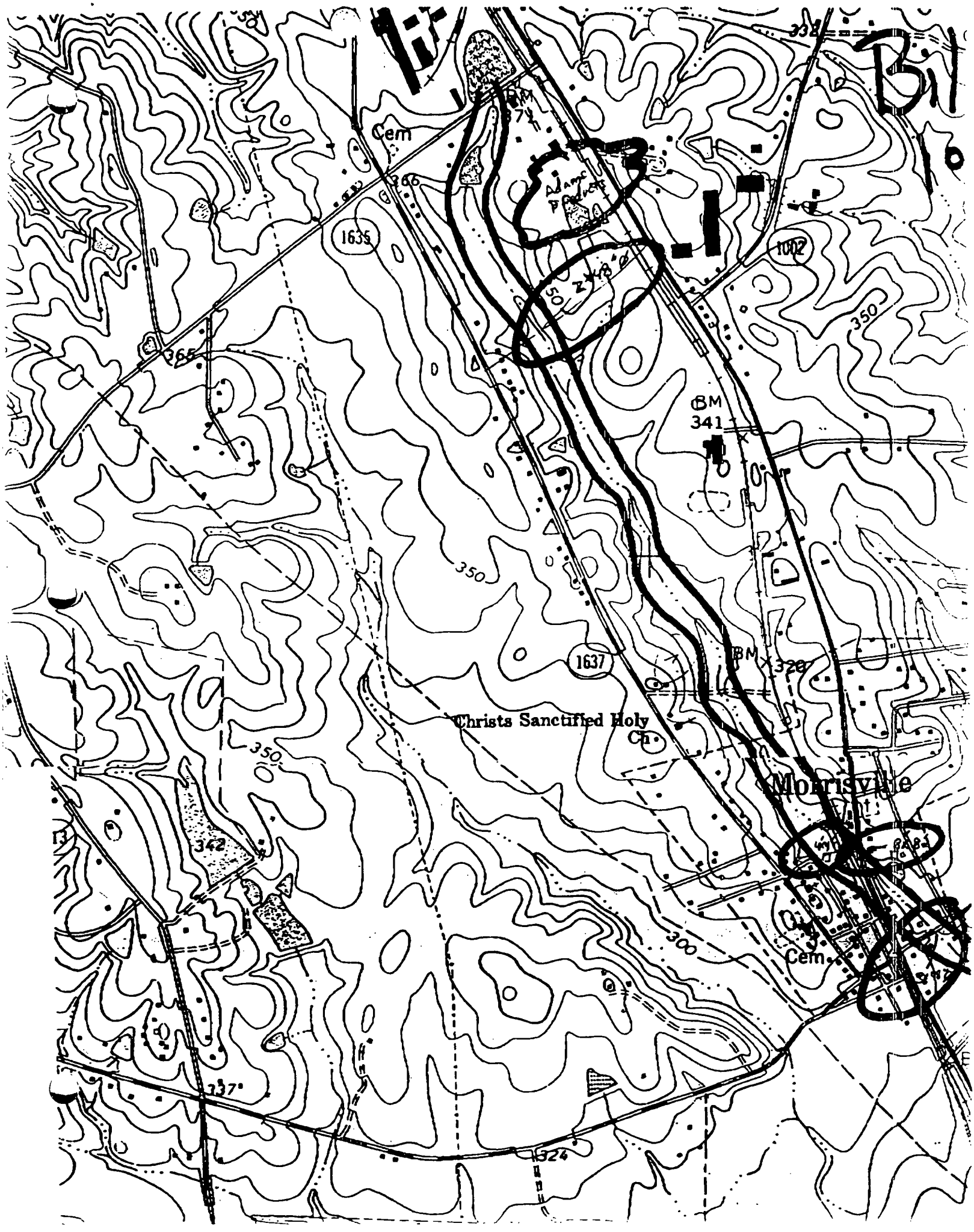
|---|---|
| **Field Representative:** | **Date:** 12/12/95 |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CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 12/13/95 |
| Day of Week | Wednesday |
| No. | 36 |
| Sheet | 1 of 4 |

# FIELD ACITIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Fire Pond Backfilling | |
| **Personnel On Site:** B. Geno/B.Smith | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0800 BG arrives on site. B. Smith has arrived. WATEC is preparing geotextile/geogrid composite for placement in Fire Pond. Sediments in Fire Pond have approximately 1/2-in. frozen layer. Triangle Grading Contractors (TGC) is using Cat D5H XL, D5C, and John Deere 750C to grade fill delivered to area near northwest corner of former Fire Pond.

0900 B. Smith and J. Gunn (WATEC) discuss financials of saving the dam and trees at the southern edge of the former Fire Pond. BG prepares letter to Rust regarding comments on HASP and CQCP.

1200 BG, B. Smith, and J. Gunn leave for lunch

1300 BG, B. Smith, and J. Gunn return from lunch.

1400 TGC is using excavator to move stockpiled cleared material from near northeast corner of former Fire Pond to permit pushing of soil stockpile in the area of proposed groundwater treatment system onto pond as fill over geogrid. BG asks J. Gunn about damage to diversion ditch. J. Gunn indicates that ditch will be graded with dozer to permit drainage and fabric and seed replaced. BG indicates that silt fence placed by WATEC will be destroyed.

1430 BG talks to Tim Johnson (Raleigh district engineer for NCDOT) concerning replacement of culvert beneath McCrimmon Rd. and if Dave Henderson(NCDOT hydraulics group) had mentioned possibility of site visit. T. Johnson indicates that D. Henderson is the person BG really needs to talk to concerning culvert and indicates that D. Henderson has not mentioned the issue to T. Johnson.

1500 TGC begins to push soil stockpile near northeast corner of Fire Pond onto geogrid placed over pond sediments. B. Smith warns J. Gunn that dozers should be careful not to remove soil below existing grade in case soil excavation in lagoon area should grow laterally. B. Smith and BG walk Southern Railroad/Beazer property line to east of pond. B. Smith indicates he is concerned about putting water supply line to groundwater treatment building over the top of sediment due to

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|---|---|
| **Pay Quantities:**<br>WATEC: Joe Gunn (s.m.)<br>John Cutlip (tech.)<br>Terry Hall (tech.)<br>Forrest Hodges (tech.)<br>Don Webster (tech.)<br>Triangle Grading Contractors: (2) dozer operators<br>(4) truck drivers | **Project Changes/Unusual Observations:** |

| | | |
|---|---|---|
| **Weather Conditions:**<br>*a.m.* overcast, high 40's<br>*p.m.* overcast, mid 50's | **Health and Safety PPE:**<br>safety glasses, steel-toed boots, tyvek, nitrile gloves, rubber overbts | **Air Monitoring Results:**<br>Background |
| **Field Representative:** Brian Geno | | **Date:** 12/13/95 |

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 12/13/95 |
| Day of Week | Wednesday |
| No. | 36 |
| Sheet | 2 of 4 |

## FIELD ACITIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Fire Pond Backfilling | |
| **Personnel On Site:** B. Geno/B. Smith | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

settlement and potential stress on water line. B. Smith would rather locate water line slightly to east of Beazer property through trees.

1530 BG and B. Smith talk with J. Gunn and explain need about 0.25 acre-ft of storage to avoid flooding of McCrimmon Rd. for 10-yr, 24-hr storm event, and that maintaining low point of Fire Pond will facilitate alternate grading plans. J. Gunn to speak to Post and Associates to arrange to have dam at southern edge of Fire Pond surveyed on 1 ft. contour intervals on south side of dam 12/14/95. J. Gunn to talk to W. Thompson (TGC) about clearing a portion of the dam at the southern edge of the Fire Pond on the McCrimmon Rd. side. J. Gunn indicates that W. Thompson has stated that fill for access to Medlin and access to Fire Pond near treatment plant has not been counted against fill budget. J. Gunn to take influent surface water sample for analysis.

1600 B. Smith leaves site to travel back to Delaware. BG receives survey data from Post and Associates for pond bottom (attached as sheets 3 and 4).

1615 TGC has mobilized John Deere 650 LGP dozer. Dozer is able to push 2.5 ft lift over geogrid without stability problems. J. Gunn agrees that smaller, low ground pressure is much more effective in keeping lift to Tensar/WATEC design lift of 2.5 ft. over geogrid.

1630 BG and J. Gunn talk with W. Thompson regarding efforts to trap sediment wherever possible and to maintain lift of 2.5 ft wherever truck traffic is not essential. J. Gunn explains to W. Thompson preference for grading designated areas only to receive more fill (spurs) to permit trucks to dump, and not build up entire pond fill area to 4 or more ft to permit trucks to dump. TGC has cut fill stockpile near northeast corner of former Fire Pond and pushed fill to north end of pond, filling in diversion ditch. W. Thompson explains would rather wait to clear out ditch when there is threat of rain rather than building ditch daily. BG agrees. WATEC to place silt fence in diversion ditch to catch sediment.

1645 BG and J. Gunn talk more about maintaining minimum lift of 2.5 ft as desired lift over pond, except where trucks offload. BG and J. Gunn to hold daily meetings with W. Thompson to avoid building entire pond fill depth to <4 ft.

1700 TGC and WATEC leave site (dusk) for the day.

1820 BG leaves site for the day.

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|---|---|
| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

| | | |
|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

| | |
|---|---|
| **Field Representative:** | **Date:** 12/13/95 |

Sheet 3 of 4

PHILIP
POST
&
ASSOCIATES

ENGINEERS
PLANNERS
SURVEYORS

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OUR FAX TELEPHONE #: (919) 493—6548 - CHAPEL HILL
(919) 370—9970 - GREENSBORO

# FAX COVER SHEET

TOTAL NUMBER OF PAGES _____ INCLUDING THIS COVER SHEET

TO: ~~WATEC~~ Bill Smith

YOUR FAX TELEPHONE #: 462-1539

DATE: 12-13-95

REGARDING: KOPPERS JOB #: 75546A

ATTENTION: JOE GUNN

MESSAGE: COORDINATE LIST AND PLOT OF POND SHOTS

PLEAS CALL ME.

FROM: WALTER KECKLEY

12/13/95

Sheet 4 of 4 page 1

KOPPERS STAKING

Project: A553 Wed Dec 6 11:25:16 1995

Point statistics:

Starting point number: 1
Max point number used: 228
Min point number used: 1
Current point number: 86

Current Coordinate Listing by Point Range

| Point | Northing | Easting | Elevation | Description |
|---|---|---|---|---|
| 51 | 2207.5006 | 2287.3709 | . | RR SPIKE |
| 65 | 2946.1915 | 1749.8376 | . | NIR |
| 66 | 2916.7130 | 1742.4593 | . | NIR |
| 67 | 2890.2905 | 1698.2541 | . | NIR |
| 68 | 2255.9185 | 1456.0885 | . | NIR |
| 69 | 2193.4085 | 1619.8385 | 374.56 | EIS |
| 70 | 1905.8609 | 1801.2110 | . | EIS |
| 71 | 1880.4614 | 1817.2319 | . | RR SPIKE |
| 85 | 2700.2300 | 1971.5300 | 368.12 | EX.MON. |
| 201 | 2610.5583 | 1794.3332 | 371.13 | NAIL |
| 202 | 2193.3655 | 1619.8212 | 374.52 | BS |
| 203 | 2249.5418 | 1794.2308 | 364.22 | POND |
| 204 | 2321.5094 | 1793.9780 | 363.87 | POND |
| 205 | 2396.9240 | 1778.9692 | 364.61 | POND |
| 206 | 2414.8147 | 1749.5184 | 364.85 | POND |
| 207 | 2484.7280 | 1774.1763 | 364.67 | POND |
| 208 | 2501.8098 | 1811.9015 | 364.59 | POND |
| 209 | 2601.7861 | 1902.6487 | 365.48 | POND |
| 210 | 2574.7745 | 1983.3948 | 364.41 | POND |
| 211 | 2563.7892 | 2039.0638 | 365.22 | POND |
| 212 | 2445.5056 | 2115.5159 | 364.21 | POND |
| 213 | 2311.6899 | 2196.7863 | 363.33 | POND |
| 214 | 2251.7547 | 2201.5607 | 362.91 | POND |
| 215 | 2181.6773 | 2096.7400 | 360.49 | POND |
| 216 | 2105.3139 | 1983.7991 | 359.19 | POND |
| 217 | 2044.8671 | 1896.3620 | 361.12 | POND |
| 218 | 2006.5921 | 1822.3357 | 363.52 | POND |
| 219 | 2030.4573 | 1788.2202 | 364.01 | POND |
| 220 | 2045.9302 | 1781.7021 | 367.59 | BM STEP |
| 221 | 2105.7366 | 1792.1586 | 363.05 | POND |
| 222 | 2176.1577 | 1803.9730 | 363.12 | POND |
| 223 | 2199.8514 | 1762.8041 | 368.93 | NAIL |
| 224 | 2282.1258 | 2094.4906 | 361.57 | POND |
| 225 | 2402.3456 | 1984.6144 | 362.13 | POND |
| 226 | 2150.9058 | 1950.3232 | 359.98 | POND |
| 227 | 2402.7764 | 1984.5469 | 362.17 | BS |
| 228 | 2151.0442 | 1950.7298 | 359.93 | BS |

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 12/14/95 |
| Day of Week | Thursday |
| No. | 37 |
| Sheet | 1 of 4 |

# FIELD ACITIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Fire Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0800 BG arrives on site. WATEC is rolling and preparing geogrid/geotextile for placement in the Fire Pond. Triangle Grading Contractors (TGC) is delivering trucks of fill to northwest corner area of former Fire Pond. Mudwave from filling in two directions (easterly and southerly) simultaneously has met and is double amplitude, and has pushed up to meet final grade (see photos). The sediment forming the wave is encapsulated with geotextile and geogrid. W. Thompson (TGC) will try to use excavator bucket to push the mudwave down and squeeze the sediment out of the wave toward the pond to enable covering of the wave.

0815 BG and J. Gunn (WATEC) talk regarding fill delivery and filling operations. BG again emphasizes need to maximize fall from north to south across former Fire Pond to achieve positive drainage. BG reiterates B. Smith's contention that mudwave should be pinched off whenever possible to control size of mudwave and to avoid pushing mudwave onto originally non-impacted areas at the end of fill placement. J. Gunn acknowledges that we should not end up with large mudwave at what is now the lowest portion of the pond. J. Gunn indicates that W. Thompson would have to build continous road across east side of former Fire Pond, and then change direction at south end of pond to head west toward low point of pond to minimize filling in of existing low point with mudwave. BG agrees that this is a reasonable approach.

0830 W. Thompson joins conversation with J. Gunn and BG. J. Gunn asks W. Thompson whether it would be feasible to build access road along east side of former Fire Pond for fill delivery from McCrimmon Rd. to make continuous loop for traffic. J. Gunn explains necessity of maintaining existing low point of pond, and necessity of getting fill to low point of pond before it is too late and already filled with sediment. W. Thompson acknowledges that we have discussed this option before, but warns that he will have met TGC bid limit on Fire Pond fill by the end of the day, and he needs authorization for more fill to build such access. J. Gunn proposes using money to be backed out of budget for carbon disposal to pay for fill. BG acknowledges this may be a possibility.

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| **Pay Quantities:**<br>WATEC: Joe Gunn (s.m.)<br>John Cutlip (tech.)<br>Terry Hall (tech.)<br>Forrest Hodges (tech.)<br>Don Webster (tech.)<br>Triangle Grading Contractors: (2) dozer operators<br>(4) truck drivers | **Project Changes/Unusual Observations:** |

| | | |
|---|---|---|
| **Weather Conditions:**<br>*a.m.* overcast, high 40's<br>*p.m.* overcast, mid 50's | **Health and Safety PPE:**<br>safety glasses, steel-toed boots, tyvek, nitrile gloves, rubber overbts | **Air Monitoring Results:**<br>Background |
| **Field Representative:** | | **Date:** 12/14/95 |

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 12/14/95 |
| Day of Week | Thursday |
| No. | 37 |
| Sheet | 2 of 4 |

# FIELD ACITIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Fire Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

J. Gunn also proposes trucks accessing former Fire Pond from top of dam at south end of former pond. W.Thompson explains that he would have to knock down trees along top of dam because otherwise would not have enough room for trucks. W. Thompson indicates he understands changes in filling direction should be implemented immediately, and will begin directing trucks to the east side of pond. Currently, trucks are still dumping fill near northwest corner. W. Thompson indicates he will have to think about road along east side of pond and proposals to get low point of pond covered with geogrid and fill before it is too late and already filled with sediment. J. Gunn indicates that any storm water pumped from Fire Pond will need to be treated as filling proceeds, and therefore need to think about ways to get water to drain to a low point for pumping through treatment system.

0845 Surveyors (Post and Associates) arrive on site to survey south of former Fire Pond and McCrimmon Rd. along dam to obtain 1-ft. contour intervals. Contour information will be used to design alternate grading plan.

0855 BG leaves message with NCDOT hydraulics group for Dave Henderson to return call.

0900 BG talks to B. Smith informing B. Smith that W. Thompson indicated he is nearly at his fill limit. B. Smith indicates that CRC should talk with J. Cook before talking with WATEC concerning financials of delivering more fill to site. BG informs B. Smith that John Deere 650 LGP is being used to place fill over geogrid and sediments and seems to be supported by 2.5 ft lift at north end of former Fire Pond where mudwave had started to form.

0930 WATEC continues to shave area to east of temporary surface water treatment system to drop down to proposed 2.5 ft. lift or as close as possible without getting machines stuck. By running machines back and forth over the fill, TGC is essentially compacting the sediments and forcing the water into the fill, which is what Tensar has warned to avoid. (WATEC are not compaction testing because compaction is not desirable.) W. Thompson tries unsuccessfully to disperse mud wrapped in geogrid that has been pinched together near northwest corner of former Fire Pond. W. Thompson actually sinks excavator trying to disperse the pinched mudwave (see photos).

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|---|---|
| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

| | | |
|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

| | |
|---|---|
| **Field Representative:** | **Date:** 12/14/95 |

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 12/14/95 |
| Day of Week | Thursday |
| No. | 37 |
| Sheet | 3 of 4 |

# FIELD ACITIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Fire Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

1030 BG speaks to J. Cook (Beazer East) to warn J. Cook that WATEC will be approaching Beazer with request for authorization (change order) for more fill. J. Cook to arrive on site 12/15/95 approx. 9:30 a.m. J. Cook authorizes BG to spend $600 to have site flown to take aerial photos of progress. BG to have site flown twice: (1)during progress of Fire Pond backfill, before Medlin dewatered; and (2) after completion of Fire Pond, during progress of Medlin Pond. J. Cook informs BG that it is his position that unless the Fire Pond bottom is deeper than anticipated such that more fill is required to meet design grades, Beazer will not pay for more fill. BG indicates that it is more likely that existing grades are actually higher than anticipated.

1200 J. Gunn indicates that Trigon will be checking fill depths so TGC will know how far to cut fill that has already been placed. J. Gunn also informs BG that Peter Romaki (Tensar) will visit site on 12/18/95 to observe fill operations and offer recommendations.

1230 BG leaves site for lunch.

1330 BG returns to site for lunch.

1540 BG places call to Geoge Peacock of Aerial Services to have aerial photos taken of site.

1600 BG does depth survey of sediments around perimeter of leading edge of placed geogrid/geotextile. Results of survey are attached as sheet 4 of 4.

1715 WATEC and TGC leave site for the day (dusk).

1730 BG leaves site for the day.

| | |
|---|---|
| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

| | | |
|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

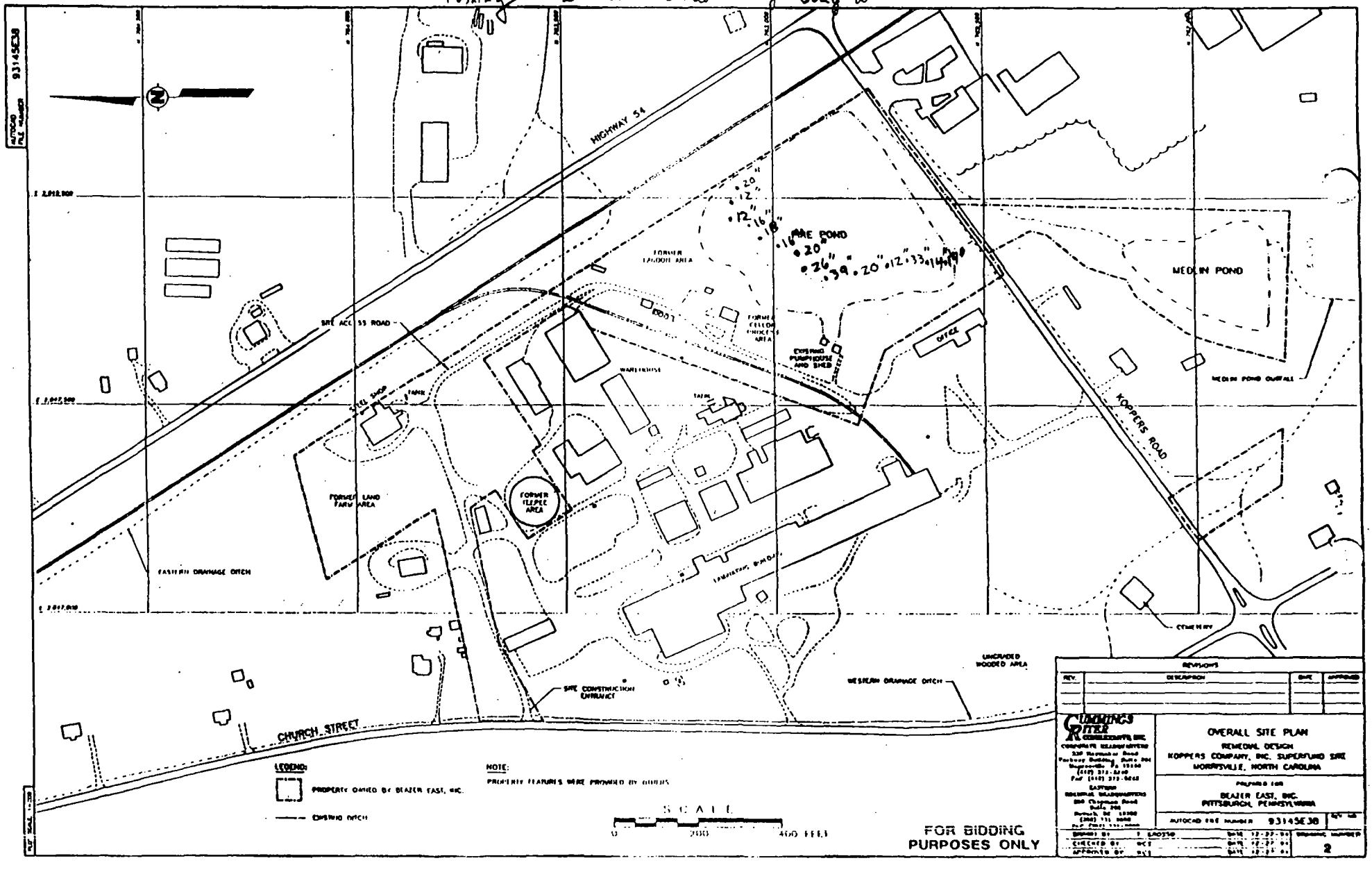
| | |
|---|---|
| **Field Representative:** | **Date:** 12/14/95 |

12/14/95

Pg 4 of 4

Sediment depths

Pushing 1" Ø steel conduit by body wt



CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 12/15/95 |
| Day of Week | Friday |
| No. | 38 |
| Sheet | 1 of 3 |

# FIELD ACITIVITY REPORT

**Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55

**Field Activity:** Surface Water Treatment - Fire Pond Backfilling

**Personnel On Site:** B. Geno | **Subcontractor:** WATEC

**Description of Daily Activities and Events:**

0845 BG speaks to James Cook (Beazer East). J. Cook to arrive on site approx. 0930. BG to meet J. Cook on site.

0910 BG arrives on site. WATEC is unrolling geogrid/geotextile on west portion of former Fire Pond. Triangle Grading Contractors is constructing road along east side of former Fire Pond using Cat D5C to spread fill delivered to east side of pond. WATEC operator is blading fill on west side of pond to approx. 2.5 ft. WATEC/Tensar design thickness. Peter Romaki (Tensar) is on site observing blading operations on west side of Fire Pond. TGC is able to ride on lift of 1.5 to 2 ft. over Fire Pond sediments on north end of Fire Pond with John Deere 650G LGP dozer. TGC is using Cat D5H and J.Deere 650G LGP to grade fill over Fire Pond sediments at north edge of Fire Pond. BG calls to check weight and ground pressure rating of Catapillar D5H XL (total wt. 35,000 lbs., 4.3 PSI) and Catapillar D5C Series 3 (18,100 lbs., 5.1 PSI) The dozer recommended by Tensar, but not yet located is D4C LGP Series 2 (17,500 lbs., 4.3 PSI).

0930 J. Cook arrives on site. BG and J. Cook discuss potential change order request from WATEC for more fill. J. Cook explains that the only way he could justify change order is that if the former Fire Pond were deeper than anticipated and more fill is required to fill the pond to meet final design grades. BG and J. Cook call B. Smith in DE. B. Smith agrees that if pond bottom is deeper than anticipated, WATEC would have legitimate change order request, unless design grade requirements were relaxed and field change notice submitted to USEPA. Alternately, if pond bottom is higher than anticipated, as is suspected, WATEC would not necessarily be held to design grades, but would be held to 2.5 ft. lift or minimum fill thickness required to support machinery (dozers) during placement, while maintaining positive drainage toward existing low point of pond bottom. CRC to compare Post and Associates survey data to anticipated pond bottom elevations indicated on contract drawings.

**Pay Quantities:**

WATEC: Joe Gunn (s.m.)
John Cutlip (tech.)
Terry Hall (tech.)
Forrest Hodges (tech.)
Don Webster (tech.)
Dave Kitchen (tech.)

Triangle Grading Contractors: (2) dozer operators
(2) truck drivers

**Project Changes/Unusual Observations:**

**Weather Conditions:**
*a.m.* sunny, low 50's
*p.m.* sunny, mid 60's

**Health and Safety PPE:**
safety glasses, steel-toed boots, tyvek, nitrile gloves, rubber overbts

**Air Monitoring Results:**
Background

**Field Representative:** [signature] | **Date:** 12/15/95

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 12/15/95 |
| Day of Week | Friday |
| No. | 38 |
| Sheet | 2 of 3 |

# FIELD ACITIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Fire Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

1045 J. Cook and BG talk with J. Gunn (WATEC). concerning fill placement over geogrid. J. Gunn explains that nearly all fill included in bid for Fire Pond has been delivered to site. In order to cut off mudwave developing at the north end of the Fire Pond, Triangle Grading Contractors (TGC) is shaving off fill from the east and west sides of the former Fire Pond down to the WATEC design lift thickness of 2.5 ft. Peter Romocki (Tensar) is offering technical advise to TGC on backfilling over geogrid. J. Gunn explains to J. Cook that more fill may be required to cover pond. J. Cook explains his position that unless the bottom of the pond is lower than anticipated, Beazer will not approve a change order for more fill for the Fire Pond. J. Gunn explains that the bid included approx. 18,000 CY delivered by truck (loose), but due to compaction by dozers and trucks, the actual volume of fill may be greater than WATEC included in the bid. J. Gunn indicates that since Beazer East will be taking on the cost of carbon disposal from temp. surface water treatment system, for which WATEC has alloted $14,000, in keeping with the total contract lump sum amount, WATEC would like to shift the savings relative to carbon disposal to purchase of additional fill, if necessary. J. Cook agrees that as long as WATEC does not exceed lump sum contract amount, costs may be shifted to cover additional fill.

1145 ONSITE Environmental Staffing representatives Will Winn and William Carter arrive on site to discuss thier technical services with J. Cook. J. Cook is interested in O&M of groundwater remediation system by ONSITE. Rust to prepare O&M Manual as part of groundwater treatment system installation contract.

1200 WATEC, J. Cook, Peter Romocki, and ONSITE representatives break for lunch.

1300 BG leaves site to receive immunoassay certification training from Ensys.

1700 BG returns to site. WATEC and TGC have left for the day, BG talks to B. Smith regarding J. Cooks visit and WATEC backfilling progress. BG indicates that WATEC is approximately 30 to 40 percent completed with backfilling of Fire Pond. J. Gunn has indicated that Tensar has recommended cutting off mudwave forming at the north end of the pond, filling toward center by approaching from east and west. J. Gunn has indicated that backfilling operations may

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

| | | |
|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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|---|---|
| **Field Representative:** | **Date:** 12/15/95 |

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 12/15/95 |
| Day of Week | Friday |
| No. | 38 |
| Sheet | 3 of 3 |

# FIELD ACITIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Fire Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

result in a mound in the center of the Fire Pond. BG has indicated to J. Gunn that such a mound is undesirable, but J. Gunn believes based on conversations with Tensar that a mound is unavoidable. B. Smith agrees that mound is undesirable and may result in poor drainage. BG informs B. Smith that WATEC has scheduled Trigon Engineering Consultants to check fill depths over geogrid along west side of former Fire Pond to check against WATEC design of 2.5 ft. maximum fill thickness.

1745 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

| | |
|---|---|
| **Field Representative:** | **Date:** 12/15/95 |

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 12/18/95 |
| Day of Week | Monday |
| No. | 39 |
| Sheet | 1 of 3 |

# FIELD ACITIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Fire Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0845 BG arrives on site. WATEC is unrolling fabric in former Fire Pond and using John Deere 650G LGP dozer to blade fill on west side of former Fire Pond down to approx. 2.5 ft.

0900 Erica Elliot arrives from Trigon Engineering Consultants to check fill depth over geogrid along west side of former Fire Pond.

0930 BG and J. Gunn (WATEC) call B. Smith in DE to discuss soil excavation RFB. J. Gunn inquires about stand-by for field screening results versus stand-by for laboratory verification. Laboratory verification for dioxin will take a minimum of 7 days, whereas field screening will result in 2 or 3 hours of down time at a time. J. Gunn to indicate in bid different stand-by rates for days versus hours. J. Gunn asks what grid system spacing will be. B. Smith does not know off-hand. J. Gunn asks if an epoxy-coated concrete pad is acceptable alternate to steel sheeting for soil staging area. B. Smith indicates that he believes concrete pad would be appropriate as an alternate. B. Smith asks J. Gunn to include any conditions or acceptions which would clarify bid.

0945 BG and B. Smith talk about Air Monitoring Plan preparation. B. Smith asks BG to talk to K. Bird regarding establishment of action levels based on Miniram dust monitor readings. Miniram dust monitor may also be used to obtain real time air monitoring.

1100 Trigon finishes survey of fill depths along west side of Fire Pond (see attached results). WATEC ceases grading of fill in Fire Pond due to rain.

1500 WATEC mobilizes Catapillar D5C LGP to site.

1700 WATEC leaves site for the day.

1730 BG leaves site for the day.

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|---|---|
| **Pay Quantities:**<br>WATEC: Joe Gunn (s.m.)<br>John Cutlip (tech.)<br>Terry Hall (tech.)<br>Don Webster (tech.)<br>Dave Kitchen (tech.) | **Project Changes/Unusual Observations:** |

| | | |
|---|---|---|
| **Weather Conditions:**<br>*a.m.* overcast, high 40's, rain<br>*p.m.* overcast, mid 50's, lgt rain | **Health and Safety PPE:**<br>safety glasses, steel-toed boots, tyvek, nitrile gloves, rubber overbts | **Air Monitoring Results:**<br>Background |

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|---|---|
| **Field Representative:** Bruce Delay | **Date:** 12/18/95 |

Sheet 2 of 3
12/18/95

**TRIGON**
**ENGINEERING CONSULTANTS, INC.**
**700 Blue Ridge Road • Suite 101**
**RALEIGH, NORTH CAROLINA 27606**

| | |
|---|---|
| DATE 12/18/96 | JOB NO 313-95-03 |
| PROJECT ~~[illegible]~~ KOPPERS PROJECT | |
| LOCATION MORRISVILLE, NC | |
| CONTRACTOR WATEC | OWNER BEAZER EAST ~~[illegible]~~ |
| WEATHER RAIN | TEMP 45 °at 9:00 AM °at PM |
| PRESENT AT SITE ERICA ELLIOTT - TRIGON | |
| JOE GUNN - WATEC | |

TO

THE FOLLOWING WAS NOTED

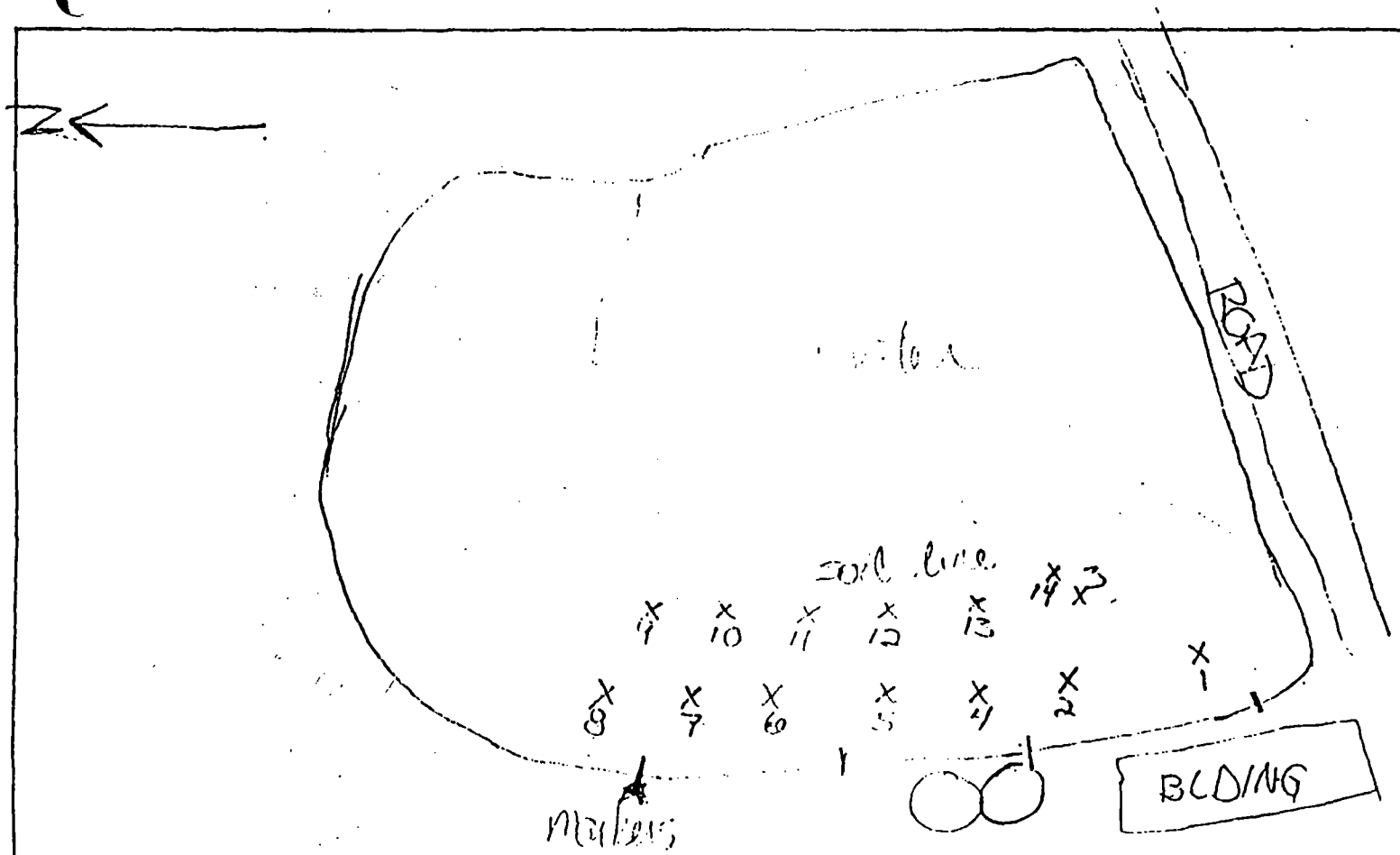
> Arrived on site as requested to perform construction services as follows:
Hand augering ~~[illegible]~~ various places around pond to determine depths of topsoil over geogrid. (see map for augering stations)
Station 1 - 4.0 ft
Station 2 - 4.5 ft
Station 3 - 4.0 ft
> 4 - 4.5 ft
5 - 4.5 ft
6 - 6.5 ft
7 - 4.3 ft
8 - 5.0 ft
9 - 4.5'
10 - 3.10'
11 - 4.0'
12 - 4.5'
13 - 3.5'
14 - 2.5'

* all stations approximately 20 ft from each other

COPIES TO [signature]

**FIELD REPORT**

SIGNED Erica Elliott




Sheet 3 of 3
12/18/95

TRIGON
ENGINEERING CONSULTANTS, INC.

| | |
|---|---|
| DATE: 12/18/95 | SCALE: |
| JOB NO. 873-95-036 | DRAWN BY E. ELLIOTT |

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 12/19/95 |
| Day of Week | Tuesday |
| No. | 40 |
| Sheet | 1 of 2 |

# FIELD ACITIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Fire Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0845 BG arrives on site. WATEC operating 6-in. pump to dewater Fire Pond which has accumulated from precipitation in last 24 hours. Site has received approx. 0.5 in. rain in last 24 hours. WATEC is pumping with valve near pump open to allow some water drawn by pump to flow back into pond to reduce flow to treatment system and allow longer contact time and less bag filter changeout. Pumping rate through treatment system is about 100 gpm.

1200 BG leaves for lunch.

1300 BG returns from lunch.

1430 Tim Johnson and Dave Henderson (NCDOT) arrive on site to discuss alterations to site drainage arising from Fire Pond regrading activities and capacity of 18-in. culvert. Dave Henderson indicates he has reviewed CRC post-construction Fire Pond hydrology calculations. D. Henderson explains that Soil Conservation Service calculation methods used by CRC are inherently conservative. D. Henderson explains that NCDOT hydraulics group uses different methods of calculation which may be less conservative in some respects, but does not account for detention. D. Henderson has reviewed drainage area (about 12 acres). D. Henderson explains it is important to know property use to evaluate runoff and culvert adequacy. BG explains that potential for site development is not great due to gradual consolidation of pond sediments (i.e., no development on pond for at least 10 years). BG explains that final disposition of Fire Pond is unknown, but will likely be a meadow for at least 10 years. Using NCDOT calculation method, D. Henderson arrives at 20 cfs for light residential (urban) development for drainage area of 12 acres and 25-year storm event. CRC calculations in E&S Control Plan(10/20/95) estimate the capacity of the existing culvert is 20 cfs with half of road flooded (i.e., 6-foot depth of water on inlet side of culvert). However, if a groove end with headwall is constructed at the inlet of the culvert, the resulting depth would be about 4.5 ft. at inlet for a flow of 20 cfs. The groove end essentially acts like a funnel at the inlet reducing cavitation and the resulting loss in effective inlet cross-sectional area. The approx. 1.5-ft. difference in water depth at the culvert inlet would be very desirable from

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| **Pay Quantities:**<br>WATEC: John Cutlip (tech.)<br>Terry Hall (tech.)<br>Dave Kitchen (tech.) | **Project Changes/Unusual Observations:** |

| | | |
|---|---|---|
| **Weather Conditions:**<br>*a.m.* overcast, high 40's, rain<br>*p.m.* overcast, mid 50's, lgt rain | **Health and Safety PPE:**<br>safety glasses, steel-toed boots | **Air Monitoring Results:**<br>Background |
| **Field Representative:** [illegible] | | **Date:** 12/19/95 |

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 12/19/95 |
| Day of Week | Tuesday |
| No. | 40 |
| Sheet | 2 of 2 |

# FIELD ACITIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Fire Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

a public concern standpoint. Whether the groove end with headwall would suffice would only be tested with time. NCDOT therefore recommends the construction of a groove end headwall at the inlet to the culvert beneath McCrimmon Rd. D. Henderson explains that NCDOT is a property owner like other property owners, and if liability suit were brought against NCDOT by downstream property owner for review of upstream property owners plans, NCDOT would file suit against upstream property owner who changed the drainage. D. Henderson explains that effects of changes to drainage area mitigate the larger the drainage area, therefore, it is unlikely that changes in drainage would ever be detected south of Adams Products property.

1515 BG, D. Henderson, and T. Johnson inspect culvert beneath McCrimmon Rd. Tim Johnson indicates that WATEC should have had encroachment agreement with NCDOT to place PVC piping through culvert. BG to inform WATEC to be prepared to cut PVC pipe and remove from culvert should the culvert back up. BG indicates that heaviest rain since placing pipe through culvert was 1.2 in. which was readily accomodated by culvert. D. Henderson verifies dimensions of culvert and observes that inlet end of culvert is damaged. Outlet end is in good condition. D. Henderson inspects outlet ditch and agrees that outlet will need riprap apron. D. Henderson indicates that outlet end of culvert has enough grade so that outlet headwall is not necessary. D. Henderson informs BG that he does not believe the culvert is sloped at 4 percent as indicated in CRC culvert capacity calculation, but that slope is not significant factor in culvert capacity. D. Henderson indicates that grading in NCDOT right-of-way is possible if obtain encroachment agreement, however it is more desirable to build up shoulder for traffic safety from NCDOT standpoint than to make the shoulder steeper to create detention. D. Henderson indicates that toe of dam slope is approximately coincident with NCDOT right-of-way. Upon inspection of culvert, D. Henderson recommends replacement of the damaged first section of culvert and construction of a groove end with headwall. D. Henderson to provide construction detail and quantities to BG, along with encroachment agreements necessary before construction of headwall.

1530 D. Henderson and T. Johnson (NCDOT) leave site.

1600 WATEC ceases pumping and leaves site for the day.

1715 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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|---|---|
| **Field Representative:** | **Date:** 12/19/95 |

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 12/20/95 |
| Day of Week | Wednesday |
| No. | 41 |
| Sheet | 1 of 2 |

# FIELD ACITIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Fire Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0830 BG arrives on site. WATEC is pumping from the Fire Pond with 6-in. pump. Bleed valve near pump intake is open to allow some water drawn in by pump to flow back to pond. Approx. flow rate through water treatment system is 90 gpm. WATEC is awaiting delivery of geotextile fabric.

0900 BG talks to B. Smith (CRC) regarding soil excavation bids received 12/19/95. BG to tabulate costs submitted by Rust and WATEC for comparison. BG indicates to B. Smith that NCDOT calculations indicate a lower water level at culvert inlet if groove end with headwall is installed. BG to talk to D. Henderson (NCDOT) to obtain design information for culvert inlet headwall and groove end. BG informs B. Smith that NCDOT may not approve encroachment agreement to grade within the NCDOT right-of-way if the shoulder is steepened by regrading to achieve detention. BG indicates that final grades do not have to achieve detention according to NCDOT, and therefore, there are many options for final grading plan. B. Smith to fax revised grading plan to BG which includes steepening of shoulder along McCrimmon Rd. to achieve detention.

1030 BG calls D. Henderson regarding design information for McCrimmon Rd. culvert capacity. D. Henderson to copy section of NCDOT design manual relevant to small watersheds and mail to BG.

1100 Stan James calls to discuss soil excavation program. BG informs S. James that all soil previously identified as clean will be removed and stockpiled as non-impacted material. Soil previously identified as impacted will automatically be staged for removal and off-site treatment. If post-excavation verification field screening results meet penta action levels, laboratory samples will be collected and analyzed. If post-excavation verification field screening results do not meet penta action levels, more soil will be excavated. Dioxin laboratory analysis to take minimum of 7 days, therefore, excavation will be open for at least 7 days. S. James clarifies equipment identified in bid: no backhoes to be used. Excavation to be performed by track excavator, and loading of long-haul trucks by bucket loader. S. James believes that after a few trucks, the loader operator will be able to judge how much soil to load on a truck before wt. is exceeded.

1350 BG talks to George Peacock of Aerial Services. G. Peacock has taken aerial photos of site and will

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| **Pay Quantities:**<br>WATEC: John Cutlip (tech.)<br>Terry Hall (tech.)<br>Dave Kitchen (tech.) | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.* sunny, low 40's<br>*p.m.* sunny, high 50's | **Health and Safety PPE:**<br>safety glasses, steel-toed boots | **Air Monitoring Results:**<br>Background |

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|---|---|
| **Field Representative:** [illegible] | **Date:** 12/20/95 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 12/20/95 |
| Day of Week | Wednesday |
| No. | 41 |
| Sheet | 2 of 2 |

# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Fire Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

send to site by overnight courier 12/26/95.

1600 WATEC leaves site for the day. Geotextile fabric has not yet arrived.

1730 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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|---|---|
| **Field Representative:** | **Date:** 12/20/95 |

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 12/21/95 |
| Day of Week | Thursday |
| No. | 42 |
| Sheet | 1 of 1 |

# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Fire Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0830 BG arrives on site. John Cutlip (WATEC) is pumping from Fire Pond with 6-in. pump, however pumping rate is very slow, as ice is covering pond and blocking pump intake line. Pumping rate < 100 gpm, with total on totalizer of about 10,950,000 gal.

1000 BG talks to Pat O'Hara (CRC) regarding site visit after 1/1/96.

10450 BG talks to B. Smith regarding clarification of soil excavation bids from WATEC and Rust. BG to clarify personnel protection level assumed by WATEC, and verify that cost of staging area is for concrete. BG to ask Rust to provide cost differential for personnel protection level C (Rust assumed all work to be done in level D for soil excavation bid).

1200 BG leaves site until 12/27/95. WATEC to return 12/26/95.

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| **Pay Quantities:**<br>WATEC: John Cutlip (tech.)<br>Terry Hall (tech.)<br>Dave Kitchen (tech.) | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.* sunny, mid 30's<br>*p.m.* sunny, mid 40's | **Health and Safety PPE:**<br>safety glasses, steel-toed boots | **Air Monitoring Results:** |

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|---|---|
| **Field Representative:** [signature] | **Date:** 12/21/95 |

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 12/27/95 |
| Day of Week | Wednesday |
| No. | 43 |
| Sheet | 1 of 1 |

# FIELD ACITIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Fire Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

1100 BG arrives on site. Call to B. Smith to discuss progress on soil excavation bid evaluations from Rust and WATEC. BG to prepare table of costs submitted with contractor bids for comparison purposes. BG to also begin work on Soil Excavation Operations Plan for submittal to USEPA. WATEC is preparing rolls of geogrid/geotextile for placement in the former Fire Pond. Pump intake line to former Fire Pond is frozen on surface of remaining surface water.

1200 BG and WATEC break for lunch.

1300 BG returns to site.

1600 WATEC leaves for the day.

1700 BG leaves for the day.

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| **Pay Quantities:**<br>WATEC: John Cutlip (s.m.)<br>Joe Gunn (p.m.) | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>***a.m.*** sunny, mid 30's<br>***p.m.*** sunny, mid 40's | **Health and Safety PPE:**<br>safety glasses, steel-toed boots | **Air Monitoring Results:** |

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|---|---|
| **Field Representative:** [illegible] | **Date:** 12/27/95 |

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 12/28/95 |
| Day of Week | Thursday |
| No. | 44 |
| Sheet | 1 of 1 |

# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Fire Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0830 BG arrives on site. John Cutlip (WATEC) is preparing geogrid/geotextile fabric for placement in former Fire Pond. BG resumes work on Soil Excavation Operations Plan. Pump intake line is frozen on surface of water remaining in former Fire Pond. Joe Gunn is in Atlanta office working on monthly invoice to Beazer. J. Gunn indicates that Triangle Grading Contractors (TGC) were to have an operator on site this week to continue shaving fill toward center of former Fire Pond, however, TGC has not been on site this week. J. Gunn preparing additional cost estimate for direct loading of long-haul vehicles for soil excavation program.

1200 BG and WATEC break for lunch.

1300 BG returns to site.

1600 WATEC leaves for the day.

1700 BG leaves for the day

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| **Pay Quantities:**<br>WATEC: John Cutlip (s.m.) | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.* sunny, low 30's<br>*p.m.* sunny, low 40's | **Health and Safety PPE:**<br>safety glasses, steel-toed boots | **Air Monitoring Results:** |
| **Field Representative:** | | **Date:** 12/28/95 |

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 12/29/95 |
| Day of Week | Friday |
| No. | 45 |
| Sheet | 1 of 1 |

# FIELD ACITIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Fire Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0830 BG arrives on site. John Cutlip (WATEC) is preparing geogrid/geotextile fabric for placement in former Fire Pond. BG resumes work on Soil Excavation Operations Plan. Pump intake line remains frozen on surface of water remaining in former Fire Pond. BG inquires about availability of latest treatment system effluent dioxin sample results, and calculations of Toxic Equivalent Concentrations (TEC) for samples results available to date. J. Gunn to call Triangle Laboratory to check on status of analyses and TEC calculations. J. Gunn to work on bid for testing and dismantling of pressure vessels in remaining brick structure.

1200 BG and WATEC break for lunch.

1300 BG returns to site.

1500 WATEC leaves for the day.

1700 BG leaves for the day

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|---|---|
| **Pay Quantities:**<br>WATEC: John Cutlip (s.m.)<br>Joe Gunn (p.m.) | **Project Changes/Unusual Observations:** |

| | | |
|---|---|---|
| **Weather Conditions:**<br>*a.m.* sunny, low 30's<br>*p.m.* sunny, low 40's | **Health and Safety PPE:**<br>safety glasses, steel-toed boots | **Air Monitoring Results:** |

| | |
|---|---|
| **Field Representative:** | **Date:** 12/29/95 |

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 1/2/96 |
| Day of Week | Tuesday |
| No. | 46 |
| Sheet | 1 of 1 |

# FIELD ACITIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Fire Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0830 BG arrives on site. WATEC has designated today as a travel day for employees. J. Gunn is having Triangle Laboratories (TL) prepare a letter explaining inability to perform Toxic Equivalency Calculations for effluent samples. BG to call TL to discuss reporting problems with Mary MacDonald. WATEC to perform maintenance and security for remainder of day. No grading or fill work is planned due to rain. J. Gunn indicates he is awaiting dioxin analytical results for latest effluent sample before pumping water remaining in the Fire Pond. J. Gunn is concerned that carbon may need to be changed out.

0900 BG talks to B. Smith regarding WATEC schedule, regrading next to McCrimmon Rd., revised soil excavation bid from Rust, and groundwater treatment system discharge. B. Smith indicates BG should track days that WATEC could be working and is not, along with precipitation, so that Beazer does not have to pay for treatment of rainwater for a period longer than indicated by WATEC for backfill operations. B. Smith to determine clearance over utilities resulting from latest revised grading plan. B. Smith indicates that although NCDOT calculations for culvert beneath McCrimmon Rd. do not account for detention, detention should be provided by regrading next to McCrimmon Rd. in order to provide for additional factor of safety against flooding of road. BG indicates that he has received encroachment agreement forms from NCDOT, but that NCDOT may not be ammenable to regrading adjacent to McCrimmon Rd if road shoulder is dropped due to traffic safety concerns. B. Smith indicates that flooding of road would be greater safety hazard. B. Smith has talked to John Funk (Rust) to discuss discharge from groundwater treatment plant. Discharge on Beazer property may be desirable given poor drainage of channel on railroad property toward McCrimmon Rd. Discharge to aggregate in underdrain may be desirable.

1200 BG and WATEC break for lunch.

1300 BG returns to site. BG continues work on Soil Excavation Operations Plan.

1500 WATEC leaves for the day.

1700 BG leaves for the day.

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|---|---|
| **Pay Quantities:**<br>WATEC: Joe Gunn (p.m.)<br>John Cutlip (s.m.) | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.* overcast, low 40's, lgt rain<br>*p.m.* overcast, mid 40's, lgt rain | **Health and Safety PPE:**<br>safety glasses, steel-toed boots | **Air Monitoring Results:** |

| | |
|---|---|
| **Field Representative:** | **Date:** 1/2/96 |

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 1/3/96 |
| Day of Week | Wednesday |
| No. | 47 |
| Sheet | 1 of 2 |

# FIELD ACITIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Fire Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0830 BG arrives on site. John Cutlip (WATEC) is on site. J. Cutlip indicates that WATEC will begin pumping remaining water from Fire Pond upon receipt of laboratory results of dioxin analysis.

0900 BG talks to Mary McDonald (Triangle Laboratories, Inc.) to discuss analytical requirments as communicated by WATEC to Triangle Labs. M. McDonald indicates that USEPA Method 8290 was run with only 2,3,7,8-TCDD and total tetra chlorinated dioxins being reported. BG explains that other dioxins and furans with toxicity (as identified by Table B in the method) must be analyzed and reported in terms of Toxic Equivalency. M. McDonald indicates that additional analyses will be required. BG to talk to J. Gunn to resolve analytical requirements for surface water treatment effluent.

0940 J. Gunn arrives on site. BG discusses dioxin/furan analytical requirements per contract. BG explains that laboratory has indicated that USEPA Method 8290 analyses performed to date for effluent samples have included only 2,3,7,8 TCDD and total TCDD and not all dioxin/furans listed in Table B of the method. BG explains that additional analyses may need to be performed to meet contract requirements, if laboratory does not have concentrations of indicated parameters with analyses already performed. J. Gunn indicates that he did not know what dioxin/furan analytical requirements were. J. Gunn to resolve analytical requirements with M. MacDonald. J. Gunn informs BG that WATEC will begin removing fence from Medlin Pond area and improve access.

1000 BG speaks with Jim Cook (Beazer) regarding Monthly Progress Report for December to USEPA, regrading next to McCrimmon Rd., soil excavation bids, discharge of groundwater treatment system, access agreement with railroad. Beazer has not yet obtained encroachment agreement with railroad. J. Cook indicates that encroachment agreement is specific to trench work associated with connection to extraction well. BG to ask John Funk (Rust) about possibility of discharging groundwater treatment system effluent to pond area. BG explains NCDOT recommendation of groove end culvert inlet and basis of assumptions for NCDOT calculations of culvert capacity and discharge to culvert. BG indicates that B. Smith would rather provide detention as an extra factor of safety even though NCDOT calculations do not account for detention. J. Cook indicates that BG

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| **Pay Quantities:**<br>WATEC: Joe Gunn (p.m.)<br>John Cutlip (s.m.)<br>Dan Kitchen (tech.)<br>Dan Wise (tech.) | **Project Changes/Unusual Observations:** |

| | | |
|---|---|---|
| **Weather Conditions:**<br>*a.m.* sunny, mid 40's, breezy<br>*p.m.* ptly cloudy, low 40's | **Health and Safety PPE:**<br>safety glasses, steel-toed boots | **Air Monitoring Results:** |
| **Field Representative:** | | **Date:** 1/3/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 1/3/96 |
| Day of Week | Wednesday |
| No. | 47 |
| Sheet | 2 of 2 |

# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Fire Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

should determine difference, if any, of estimated discharge to culvert assuming industrial versus light residential development, to see if industrial use would require replacement of culvert. BG to ask J. Gunn for updated schedule to submit with Monthly Progress Report.

1100 J. Gunn informs BG that he has checked with the laboratory and additional analyses will be required for additional fee. BG explains that dioxin/furan reporting requirements are quarterly, so that BG needs only one dioxin/furan analysis for last quarter of 1995. BG and J. Gunn agree that the sample collected prior to Christmas break will be analyzed for required parameters.

1330 J. Gunn indicates that WATEC may be changing borrow sources to reject material from quarry (quarry screenings) as a non-cohesive material for pond backfilling which can be placed in inclement weather. BG indicates that geotechnical screening results will be needed ASAP to make determination that material meets specification requirements. BG also indicates that top 6 inches of fill will need to meet topsoil requirements of specifications. J. Gunn indicates that two types of material would be placed (i.e., granular fill and topsoil). BG obtains updated schedule information from J. Gunn. J. Gunn indicates that revised schedule is what he is willing to commit to and that he is confident that he can negotiate with USEPA to extend schedule, as necessary.

1400 Bob Fisher calls to inform BG that Kevin Shumaker of Rollins Environmental is on his way to visit site. Rollins Environmental now owns APTUS and is interested in soil excavation as potential off-site incineration facility.

1430 K. Shumaker arrives on site and speaks with J. Gunn regarding soil excavation program. BG is unaware that K. Shumaker was on site until after his departure.

1600 J. Gunn leaves for the day. J. Gunn and Wayne Thompson (Triangle Grading Contractors) to determine slope needed for drainage on high side of tracks near field trailers to estimate quantity of fill needed. J. Gunn to provide lump sum estimate to BG to implement Bass, Nixon, and Kennedy's storm water grading plan.

1630 WATEC leaves for the day.

1700 BG leaves for the day

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|---|---|
| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

| | |
|---|---|
| **Field Representative:** | **Date:** 1/3/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 1/4/96 |
| Day of Week | Thursday |
| No. | 48 |
| Sheet | 1 of 1 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0830 BG arrives on site. WATEC has 6-in. pump running for Fire Pond, but is discharging from pump back into pond. WATEC continues to remove fencing from eastern side of Medlin Pond and constructing access to Medlin Pond for dewatering and regrading operations in Medlin Pond. Triangle Grading Contractors (TGC) have Caterpillar D5C XL Series II and John Deere 650 G LGP Series IV dozers working to spread aggregate on east side of Medlin Pond for access.

0930 J. Gunn informs BG that he has received message from Triangle Laboratories for surface water treatment effluent sample results for dioxins/furans. According to the message, the only toxic dioxin/furan detected in sample was 2,3,7,8-TCDD, but detected below detection limit specified by NCDEHNR. Consequently, treatment effluent meets NCDEHNR non-detect requirements for dioxins/furans. WATEC to install 2-in. trash pump for intake from the Fire Pond during dewatering of Medlin Pond. Two CD 150 M Godwin pumps will be used in series to dewater Medlin Pond. WATEC begins pumping of water that has accumulated in Fire Pond from rain received 1/1/96 and 1/2/96 using 6-in. pump.

1000 BG informs J. Gunn that Jim Cook (Beazer) was disappointed with WATEC's schedule revisions and consequential forecasted completion date. BG reiterates that WATEC committed to schedule originally submitted to USEPA before the schedule was submitted, and WATEC is responsible for damages/fines levied by USEPA for completion delay. J. Gunn reiterates that he feels confident he can negotiate with USEPA to waive fines, if necessary.

1300 B. Smith calls BG to discuss monthly NPDES monitoring report to NCDEHNR. B. Smith points out that detection limits for pentachlorophenol and phenol have increased since beginning the project and that we should call Triangle Laboratories to determine the reason for the increase.

1400 BG leave message for Mary MacDonald (Triangle Laboratories) to clarify reason for increase in detection levels for penta and phenols analyses.

1700 BG leaves site for the day. WATEC to continue pumping from the Fire Pond with 6-in. pump.

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|---|---|
| **Pay Quantities:**<br>WATEC: Joe Gunn (proj.manager)<br>John Cutlip (s.m.)<br>Dan Kitchen (tech.)<br>Dan Wise (tech.)<br>Terry Hall (foreman) | **Project Changes/Unusual Observations:** |

| | | |
|---|---|---|
| **Weather Conditions:**<br>*a.m.* sunny, mid 40's<br>*p.m.* sunny, high 40's | **Health and Safety PPE:**<br>steel-toed boots, safety glasses, tyvek, nitrile gloves | **Air Monitoring Results:**<br>None |

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|---|---|
| **Field Representative:** Bruce [illegible] | **Date:** 1/4/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 1/5/96 |
| Day of Week | Friday |
| No. | 49 |
| Sheet | 1 of 2 |

# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Fire Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0830 BG arrives on site. WATEC pumped to approx. 18:00 1/4/96 before loosing prime on 6-in. pump due to intake of sediment and sticks. Flow totalizer at 11.128 million gallons. WATEC is preparing 4-in. intake line for Medlin Pond. Triangle Grading Contractors continues to deliver aggregate material to Medlin Pond area for access. Aggregate is being spread using Cat D5C LGP and John Deere 650 G LGP dozers.

0930 J. Gunn informs BG that WATEC will switch to pumping of Medlin Pond so that regrading work may be completed for Medlin Pond and then come back to Fire Pond. BG indicates to J. Gunn that it may not be in Beazer's best interest to begin Medlin Pond dewatering before closure of Fire Pond, as the longer the Fire Pond remains uncapped, the longer storm water falling on and collecting in Fire Pond will have to be pumped and treated. J. Gunn asks BG if BG would like WATEC to stop with plans to dewater Medlin Pond. BG to discuss new option with Jim Cook (Beazer East).

0940 BG talks to B. Smith regarding WATEC plans to dewater Medlin Pond prior to completion of capping of Fire Pond. B. Smith asks BG to clarify reasons for switching focus to Medlin Pond with J. Gunn. BG speaks with J. Gunn to determine reason for switching focus of operations to Medlin Pond. J. Gunn explains that fill being used in Fire Pond is too wet to operate equipment. Fill proposed for Medlin Pond should be able to be worked in inclement weather. J. Gunn indicates that 2 dozers will be designated for Fire Pond shaving/cutting operations and two more dozers will be committed to Medlin Pond operations. Closure of both Fire Pond and Medlin Pond should proceed simultaneously. BG enquires as to WATEC commitment to work overtime/weekends. J. Gunn indicates he has informed TGC that work should proceed on weekends and should only cease on inclement weather days. BG informs J. Gunn that portion of the earth berm at southern edge of Fire Pond will be regraded next to McCrimmon Rd to install new culvert inlet section and headwall. CRC will provide design information to WATEC, but WATEC will be responsible for obtaining encroachment agreement with NCDOT. J. Gunn agrees to work with NCDOT for encroachment agreement.

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|---|---|
| **Pay Quantities:**<br>WATEC: Joe Gunn (p.m.)<br>John Cutlip (s.m.)<br>Dan Kitchen (tech.)<br>Dan Wise (tech.)<br>Terry Hall (foreman) | **Project Changes/Unusual Observations:** |

| | | |
|---|---|---|
| **Weather Conditions:**<br>*a.m.* sunny, mid 40's<br>*p.m.* sunny, high 40's | **Health and Safety PPE:**<br>safety glasses, steel-toed boots | **Air Monitoring Results:** |

| | |
|---|---|
| **Field Representative:** B. Geno | **Date:** 1/5/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 1/5/96 |
| Day of Week | Friday |
| No. | 49 |
| Sheet | 2 of 2 |

# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Fire Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

1000 BG informs B. Smith of J. Gunn's reasoning for dewatering Medlin Pond prior to capping of Fire Pond. B. Smith agrees that operations can proceed simultaneously, but that effort to cap Fire Pond should not let up. BG informs B. Smith that WATEC has indicated willingness to work 7 days/week except for inclement weather days. BG to check depth and location of utilities (gas, phone, and water) on Fire Pond side of McCrimmon Rd. for regrading considerations.

1230 J. Gunn leaves site for the day.

1330 BG talks to Dave Henderson of NCDOT hydraulics group for clarification of detail of culvert inlet which D. Henderson provided to BG. D. Henderson explains that the bell end of the RCP pipe section would be built into the inlet wall to act as a funnel. BG asks D. Henderson to estimate area assumed to be covered with impermeable surface under both residential and industrial/commercial scenarios. D. Henderson indicates that the residential scenario assumes about 40 to 50 percent of ground covered with impermeable surface, while industrial/commercial scenario assumes approx. 80 to 90 percent of ground surface is impermeable. For industrial/commercial scenario, runoff discharge from regraded Fire Pond area would be about 32 cfs, which is about the maximum capacity of 30-in. RCP. D. Henderson indicates that if property were transfered to new owner who changed runoff discharge, it would be the responsibility of the new owner to work with NCDOT to determine drainage structure requirements. D. Henderson to copy section of NCDOT guidance for drainage structures for CRC file.

1400 BG talks to Mary MacDonald of Triangle Labs to clarify reason for increase in detection levels for penta and phenols analyses. M. MacDonald to check lab reports and to provide explanation 1/8/96. TGC begins using John Deere 650 G LGP in Fire Pond area to shave placed fill.

1530 TGC leaves site for the day. TGC to continue to deliver aggregate for Medlin Pond access 1/6/96 to enable WATEC to set pump at south end of Medlin Pond.

1700 WATEC leaves site for the day. WATEC to finish piping for dewatering Medlin Pond and will operate one dozer to continue shaving/ grading in former Fire Pond area 1/6/96.

1800 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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|---|---|
| **Field Representative:** | **Date:** 1/5/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 1/8/96 |
| Day of Week | Monday |
| No. | 50 |
| Sheet | 1 of 1 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0830 BG leaves Pittsburgh for Raleigh, NC

1030 BG arrives in Raleigh, NC at Morrisville site. WATEC is not working today. Site is covered with approximately 5 in. of snow and ice.

1700 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.* overcast, mid 20's<br>*p.m.* sunny, high 20's | **Health and Safety PPE:** | **Air Monitoring Results:** |
| **Field Representative:** Brian Geno | | **Date:** 1/8/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 1/9/96 |
| Day of Week | Tuesday |
| No. | 51 |
| Sheet | 1 of 1 |

# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Fire Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

No work today due to ice/snow cover on site.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.* sunny, mid 20's<br>*p.m.* sunny, low 40's, windy | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 1/9/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 1/10/96 |
| Day of Week | Wednesday |
| No. | 52 |
| Sheet | 1 of 1 |

# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Fire Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

No work today due to ice/snow cover on site.

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|---|---|
| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.* sunny, mid 20's<br>*p.m.* sunny, low 40's, windy | **Health and Safety PPE:** | **Air Monitoring Results:** |
| **Field Representative:** | | **Date:** 1/10/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 1/11/96 |
| Day of Week | Thursday |
| No. | 53 |
| Sheet | 1 of 1 |

# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Fire Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

No work today due to ice/snow cover on site.

| | |
|---|---|
| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.* sunny, mid 20's<br>*p.m.* sunny, low 40's, windy | **Health and Safety PPE:** | **Air Monitoring Results:** |

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|---|---|
| **Field Representative:** B. Geno | **Date:** 1/11/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 1/12/96 |
| Day of Week | Friday |
| No. | 54 |
| Sheet | 1 of 1 |

# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Fire Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

No work today due to ice/snow cover on site and poor weather conditions. BG leaves for vacation 1/12/95 through 1/21/95.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.* overcast, mid 20's, sleet<br>*p.m.* overcast, low 40's,rain | **Health and Safety PPE:** | **Air Monitoring Results:** |

| | |
|---|---|
| **Field Representative:** [signature] | **Date:** 1/12/96 |

CUMMINGS RITER CONSULTANTS, INC.

Date 1/22/96
Day of Week Mon
No. 55
Sheet 1 of 3

# FIELD ACTIVITY REPORT

**Project Name:** Benzex East Inc. - Koppers Superfund Site | **Project No.** 93-145.30

**Field Activity:** Surface Water Treatment

**Personnel On Site:** BG | **Subcontractor:** WATEC

**Description on Daily Activities and Events:**

0800 BG arrives on site. WATEC has replaced 6-in. diesel pump at Fire Pond with 2-in. gasoline pump. Flow through treatment system is approximately 40 gpm. WATEC tried unsuccessfully to operate two pumps in parallel to pump from both Fire Pond and Medlin Pond simultaneously during week of 1/15/96 to 1/20/96. WATEC is currently pumping from Fire Pond only. Totalizer reading as of 8:00 is 11.712 Million gallons. WATEC plans to dewater Fire Pond of storm water and snow/ice melt, and to begin pumping from Medlin Pond this afternoon. Triangle Grading Contractors is to grade access road from Church Street to Fire Pond area to repair soft areas since snowfall.

0930 BG talks to Joe Gunn regarding effluent water quality results. BG indicates that WATEC is far behind on submittal of acceptable dioxin analytical results for effluent samples. J. Gunn indicates that carbon may need to be changed out, as the sample collected 12/18/95 contained levels of dioxins in excess of 30 ppq, which is considered above Non-Detect level for dioxins. BG requests copy of analytical results for effluent sampling.

**Pay Quantities:**

WATEC: Joe Gunn (proj. manager)
John Cutlip (site manager)
Dan Wise (Tech.)

**Project Changes/Unusual Observations:**

Computer stolen from field trailer during week of 1/15/96 to 1/22/96. Filed police report with Morrisville Police Department.

**Weather Conditions:**

a.m. sunny, mid 40's
p.m. sunny, low 60's

**Health & Safety PPE:**

steel-toed boots, safety glasses

**Air Monitoring Results:**

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**Field Representative:** [signature] **Date:** 1/22/96

f40/corp

CUMMINGS RITER CONSULTANTS, INC.

Date 1/22/96
Day of Week Mon
No. 55
Sheet 2 of 3

# FIELD ACTIVITY REPORT

**Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30

**Field Activity:** Surface Water Treatment

**Personnel On Site:** BG | **Subcontractor:** WATEC

**Description on Daily Activities and Events:**

Joe Gunn informs BG that all effluent samples to date were collected from between the first and second carbon vessels to monitor breakthrough of first carbon vessel. BG indicates that WATEC does not have a sample to date which was analyzed for correct parameters which indicates that effluent quality is being achieved in accordance with NPDES requirements. BG indicates he was unaware that samples were collected between first and second stages of carbon treatment. BG indicates that NPDES requirements include reporting of dioxins analysis once per quarter and that dioxin treatment level is 30 ppq TEC 2,3,7,8-TCDD. Joe Gunn asks BG that if WATEC is in violation of treatment, what the fine would be from NCDEHNR. BG indicates that he has no basis for estimating such a fine.

1030 BG talks to Bill Smith (DE) regarding schedule for Medlin Pond dewatering, soil excavation, and effluent monitoring results. B. Smith indicates that Jim Cook (Beazer East) should be notified of effluent sample results. BG to talk to J. Gunn concerning drainage near soil excavation areas. Pooled water at the south edge of proposed excavation Area 1 and Area 2 between the existing grade and the placed fill will need to be drained to prevent flow into excavation and to help prevent

**Pay Quantities:**

**Project Changes/Unusual Observations:**

**Weather Conditions:**
*a.m.*
*p.m.*

**Health & Safety PPE:**

**Air Monitoring Results:**

**Field Representative:** | **Date:**

f40/corp

CUMMINGS RITER CONSULTANTS, INC.

Date 1/22/96
Day of Week Mon
No. 55
Sheet 3 of 3

# FIELD ACTIVITY REPORT

**Project Name:** Beazer East Inc - Koppers Superfund Site | **Project No.** 97-145.70/55

**Field Activity:** Surface Water Treatment

**Personnel On Site:** BG | **Subcontractor:** WATEC

**Description on Daily Activities and Events:**

saturation of soil to be excavated. BG indicates that this area is not draining at the present time due to WATEC's fill placement operations. Fill currently placed next to proposed excavation Area 1 and Area 2 is placed on ground originally covered with water but not sediment - trees were growing in this area initially, which have since been cut. Approximately 3 to 4 feet of fill has been stockpiled in this area. BG indicates that Joe Gunn has discussed with BG management of storm water upgradient of Medlin Pond during draining and backfilling of Medlin Pond. Joe Gunn has proposed blocking of inlet side of McCrimmon Rd culvert and pumping storm water to discharge to other side of Enclosed Structure driveway. J. Gunn indicated that WATEC would handle encroachment agreement with NCDOT for blocking of culvert. BG informs B. Smith that J. Gunn has inquired about amount of potential fines for NPDES violation.

1350 BG leaves site for the day to attain physical. WATEC to switch pumping from Fire Pond to Medlin Pond this p.m. BG has not yet received copy of dioxin sample results for sample collected 12/18/95.

**Pay Quantities:**

**Project Changes/Unusual Observations:**

**Weather Conditions:**
a.m.
p.m.

**Health & Safety PPE:**

**Air Monitoring Results:**

**Field Representative:**

**Date:**

f40/corp

CUMMINGS RITER CONSULTANTS, INC.

Date 1/23/96
Day of Week Tues
No. 56
Sheet 1 of 4

# FIELD ACTIVITY REPORT

**Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 97-145.20.55

**Field Activity:** Surface Water Treatment

**Personnel On Site:** BG | **Subcontractor:** WATEC

**Description on Daily Activities and Events:**

0800 BG arrives on site. WATEC is pumping Medlin Pond through Vessel No. 2 of treatment system. Joe Gunn (WATEC) indicates that WATEC attempted to pump Medlin Pond water through both carbon vessels in series; however, pressure drop across first vessel was 55 lbs. and considered too high to sustain pumping. Laboratory results for sample collected 12/18/95 indicating breakthrough of first vessel coupled with pressures at 400 gpm led WATEC to discontinue use of Vessel No. 1, and pump strictly through Vessel No. 2. WATEC currently pumping at about 400 gpm through Vessel 2 using Godwin CD 100 6-in. non-priming diesel pump. Pump is located at southern end of Medlin Pond. Discharge is piped to southeast corner of Medlin Pond, where it is being discharged through a 4-in. PVC pipe. Discharge water appears somewhat cloudy.

0900 BG talks to Joe Gunn to request effluent sample results for sample collected 12/18/95. Joe Gunn agrees to make copy of lab report for submittal.

0930 BG receives lab report for treatment sample collected 12/18/95 from between carbon vessel #1 and vessel #2. BG checks past sample lab reports to try to determine removal efficiency for 2,3,7,8-TCDD based on comparison of influent

**Pay Quantities:**

WATEC: Joe Gunn (project manager)
John Cutlip (site manager)
Dan Kitchen (tech).
Triangle Grading: Wayne Thompson

**Project Changes/Unusual Observations:**

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**Weather Conditions:**
a.m. sunny, low 30's
p.m. sunny, low 50's

**Health & Safety PPE:**
steel-toed boots, safety glasses

**Air Monitoring Results:**
—

**Field Representative:** Bruce Sen | **Date:** 1/23/96

f40/corp

CUMMINGS RITER CONSULTANTS, INC.

Date 1/23/96
Day of Week Tues
No. 56
Sheet 2 of 4

# FIELD ACTIVITY REPORT

**Project Name:** Beazer East Inc - Koppers Superfund Site | **Project No.** 93-145 70.55

**Field Activity:** Surface Water Treatment

**Personnel On Site:** BG | **Subcontractor:** WATEC

**Description on Daily Activities and Events:**

sample collected 12/14/95 and vessel #1 effluent sample collected 12/1/95,

1330 BG faxes lab report for 12/18/95 sample to B. Smith and calls B. Smith to discuss sample results and sample collection location (i.e., carbon vessel #1 effluent). B. Smith places conference call to Jim Cook (Beazer East) to inform J. Cook of possible NPDES violation of surface water treatment system discharge. B. Smith explains that WATEC has verified breakthrough of first carbon vessel, but breakthrough of second vessel has not yet been determined. Effluent from second vessel was sampled 1/19/96 during dewatering of runoff and snow melt accumulated in Fire Pond. Breakthrough of second carbon vessel will not be ascertained until sample results are available 1/25/96 or 1/23/96. BG informs Jim Cook that Joe Gunn is formulating contingency plans should sample results indicate breakthrough from second carbon vessel, including change out of carbon vessels or reconfiguration of treatment system (i.e., different pre-filters). BG indicates that Joe Gunn has been talking with Bob Fisher (Beazer) to determine Beazer's solid waste handling requirements. Jim Cook invites Bob Fisher to join conference call. Bob Fisher indicates he has been talking with Joe Gunn concerning change out of carbon in one or more vessels. BG indicates to B. Fisher and J. Cook that WATEC has not been responsive to surface water treatment effluent quality reporting requirements, and that is the reason

**Pay Quantities:**

**Project Changes/Unusual Observations:**

**Weather Conditions:**
a.m.
p.m.

**Health & Safety PPE:**

**Air Monitoring Results:**

**Field Representative:** | **Date:**

f40/corp

CUMMINGS RITER CONSULTANTS, INC.

Date 1/23/96
Day of Week Tues
No. 56
Sheet 3 of 4

# FIELD ACTIVITY REPORT

**Project Name:** Beazer East Inc - Koppers Superfund Site | **Project No.** 93-145.30

**Field Activity:** Surface Water Treatment

**Personnel On Site:** RG | **Subcontractor:** WATEC

**Description on Daily Activities and Events:**

WATEC now finds themselves in a situation of potential non-compliance with NPDES discharge requirements. J. Cook indicates he has gotten pressure from Beazer management questioning the effectiveness of oversight engineer, if the contractor ends up in a situation of non-compliance. Bob Fisher and Jim Cook agree that Cummings/Riter should make it very clear to WATEC that WATEC may be discharging water which fails to meet NPDES quality criteria, and that the risk is entirely on WATEC as far as liability for penalties or fines. Bill Smith indicates that Joe Gunn has already asked what fine might be for such a violation. B. Smith asks J. Cook with regard to NPDES quarterly reporting requirement, if quarterly could mean a frequency of once every three months, versus calendar quarter. J. Cook does not know whether NCDEHNR would accept once per 3 months as satisfying quarterly reporting requirement. Bill Smith to place call to Joe Gunn to make sure that WATEC understands WATEC's liability in continuation of pumping. B. Smith to suggest that WATEC cease pumping operations until water quality is better determined. CRC is not in a position to recommend WATEC's operation. ~~Whether~~ or not WATEC ceases pumping until water quality is determined is entirely WATEC's decision. B. Smith indicates that sample collection between vessels #1 and #2 is contradictory to WATEC's Field Operations Plan, which states that samples would be collected after the second vessel.

1430 B. Smith/RG talk to Joe Gunn in conference call. See attached phone memo.

1500 Joe Gunn ordors WATEC technicians to cease Medlin Pond pumping.

**Pay Quantities:**

**Project Changes/Unusual Observations:**

**Weather Conditions:**
a.m.
p.m.

**Health & Safety PPE:**

**Air Monitoring Results:**

**Field Representative:**

**Date:**

FAO/corp

CUMMINGS RITER CONSULTANTS, INC.

Date 1/23/96
Day of Week Tues
No. 56
Sheet 4 of 4

# FIELD ACTIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30 |
| **Field Activity:** Surface Water Treatment | |
| **Personnel On Site:** BG | **Subcontractor:** WATEC |

**Description on Daily Activities and Events:**

1530 BG talks to B. Smith. B. Smith requests that BG assemble specification requirements and requirements presented in Addendum No. 2 regarding dioxin analyses requirements & reporting requirements, and laboratory results submitted for dioxin analyses to date. BG notes to Bill Smith that approximately around 12/11/95 when Joe Gunn and BG were inspecting brick building for sampling requirements, Joe Gunn, indicated that Triangle Grading Contractors is used to moving a lot of dirt quickly in order to make money. Joe states he has tried to convince TGC that this is a finesse job, and he can't approach this job like any other "fill" job. Joe Gunn indicates that if Triangle Grading Contractors (TGC) continues to be bull-headed, he will tell TGC after last load of fill is delivered that TGC is finished with contract, and WATEC operators will continue placing/cutting fill. Joe Gunn indicates WATEC has several competent dozer operators.

1700 WATEC leaves site for day.

1745 BG leaves site for day.

| | |
|---|---|
| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

| | | |
|---|---|---|
| **Weather Conditions:** a.m. | **Health & Safety PPE:** | **Air Monitoring Results:** |

**Field Representative:** **Date:**

f40/corp

**CUMMINGS RITER CONSULTANTS, INC.**

## Meeting/Telephone Memo

**Meeting**

Attendants: _____ of _____
_____ of _____
_____ of _____
_____ of _____
_____ of _____
_____ of _____

**Telephone**

Call By Bill Smith & B. Gross of C/R
Call To Joe Gunn of WATEC
Subject: Exceedance of Dioxin discharge limits

Project Name & No. Beazer East 97-145.30
Phone No. (919) 462-1534
Date: 1/23/96 Time: 3:00 pm

| C/R INITIAL | OTHER INITIAL | CONVERSATION CONTENTS (Summary of Discussions, Decisions, Commitments, Dates) |
|---|---|---|
| BG | | Bill Smith (CR-DE) places call to C/R site trailer in Raleigh to speak w/ Joe Gunn (WATEC) and B. Gross (C/R - RGN). Bill Smith informs Joe Gunn that dioxin/furan results for effluent sample collected 12/18/95 from effluent of first vessel in series of two 20,000 # carbon vessels has raised concern with Beazer & C/R as to possible violation of discharge requirements. 2,3,7,8 TCDD TEC for sample is ~480 ppq vs. 30 ppq requirement. Joe Gunn acknowledges potential problem and has had discussions w/ Atlanta office already. B. Smith indicates that analytical requirements were clearly stated in Addendum 2 of bid and WATEC's failure to comply with contract requirements places them in position of responsibility / liability for any fines levied for violation of NPDES. Bill Smith indicates that because sample was not collected downstream of second carbon vessel in the 2-stage series, WATEC does not know whether effluent exceeds discharge requirements. Bill Smith further indicates that because WATEC has never analyzed effluent for complete 8290 parameter list, WATEC does not know if they ever achieved compliance. Joe Gunn indicates that samples run previous to 12/18/95 for dioxins indicate non-detect for 2,3,7,8-TCDD and total TCDD. Bill Smith indicates this information is not helpful as 2,3,7,8-TCDD is only one of 17 parameters which should have been analyzed per |

CC: B. Smith

F-001.DWG

**Meeting**

Attendants: _____ of _____
_____ of _____
_____ of _____
_____ of _____
_____ of _____
_____ of _____

**CUMMINGS RITER CONSULTANTS, INC.**

Meeting/Telephone Memo
2 of 4

**Telephone**

Call By CRC of _____
Call To WATEC of _____
Subject: _____

Project Name & No. _____
Phone No. 93-145.30
Date: 1/23/96 Time: _____

| C/R INITIAL | OTHER INITIAL | CONVERSATION CONTENTS (Summary of Discussions, Decisions, Commitments, Dates) |
|---|---|---|
| | | contract. Joe Gunn indicates he has two options - (1) to continue pumping until results from sample collected 1/19/96 are available for TEC, taking risk that breakthrough of second vessel in the 2-stage series has not been achieved, or (2) to shut down system until results are received and decide from there whether change-out of carbon is needed. B. Smith indicates that continued pumping is at WATEC's risk. The contract specifications are clear and WATEC has not met contract conditions. Joe Gunn asks Bill Smith what would happen if a sample were collected and results were received 7 days later which indicated NPDES exceedance, after water had been discharged for 7 days. Bill Smith indicates that state would then be in a position to levy fines, but that the sooner the contractor reacted to shut down pumping operations, the better the perception by the NCDEHNR. Bill Smith informs Joe Gunn that we have information which indicates a potential problem, and if WATEC chooses to ignore the information, there is substantial risk involved and it would not look like WATEC were acting responsibly. Joe Gunn asks Bill Smith if B. Smith recommends shutting plant down until results from 1/19/96 sample are available. Bill Smith |

CC: _____

F-001.DWG

**Meeting**

Attendants: _____ of _____
_____ of _____
_____ of _____
_____ of _____
_____ of _____
_____ of _____

**Telephone**

Call By CRC of _____
Call To WATEC of _____
Subject: _____

**CUMMINGS RITER CONSULTANTS, INC.**

Meeting/Telephone Memo



Project Name & No. _____
Phone No. 93-145.30
Date: 1/23/96 Time: _____

| C/R INITIAL | OTHER INITIAL | CONVERSATION CONTENTS (Summary of Discussions, Decisions, Commitments, Dates) |
|---|---|---|
| | | indicates that shutting of pumping operations down until results are received is WATEC's decision, but WATEC may want to do so to avoid risk of discharge of effluent exceeding NPDES standards. J. Gunn acknowledges that WATEC would be responsible for fines levied by state for discharge of water not meeting cleanup standards. Joe Gunn indicates that it may appeare NCDEHNR somewhat to know that only about 1.5 million gallons at most has been discharged since sample was collected, and that the sample collected 12/18/95 was of bottom of Fire Pond water which was exceptionally turbid due to runoff from sediments and inlet hose drawing from near bottom. Additionally, water discharged from Fire Pond was discharged to Medlin Pond, so that dioxins/furans should have ended up in Medlin Pond. Bill Smith indicates that while it is true that treated Fire Pond water was discharged to Medlin Pond, it is not possible to say that dioxins/furans were trapped in Medlin Pond without a sample of Medlin Pond effluent, so the fact that discharge to Medlin Pond not necessarily mitigating environmental impact. J. Gunn agrees that best course of action is to discontinue pumping of Medlin Pond water through single carbon vessel (Vessel #2) until effluent quality of last sample (collected 1/19/96) is determined. Joe Gunn indicates that pumping through vessel #1 was |

J. Gunn agrees that this would probably be NCDEHNR's position.

CC: _____

F-001.DWG

**Meeting**

Attendants: _____ of _____
_____ of _____
_____ of _____
_____ of _____
_____ of _____
_____ of _____

**Telephone**

Call By CRC of _____
Call To WATEC of _____
Subject: _____

**CUMMINGS RITER CONSULTANTS, INC.**

Meeting/Telephone Memo

4 of 4

Project Name & No. _____
Phone No. 93-145.30
Date: 1/23/96 Time: _____

| C/R INITIAL | OTHER INITIAL | CONVERSATION CONTENTS (Summary of Discussions, Decisions, Commitments, Dates) |
|---|---|---|
| | | discontinued as soon as breakthrough was discovered (i.e., 1/21/96)*. Bill Smith indicates that because we do not know how long breakthrough had been occurring from Vessel #1, it is impossible to estimate effluent quality from Vessel #2. Joe Gunn agrees and indicates that WATEC to discontinue pumping of Mellen Pond and asks Bill Smith to inform Beazer East. Bill Smith indicates he will inform Beazer. |
| | | * Switch to Vessel #2 initiated with pumping of Mellen Pond |

CC: _____

F-(101.DWG

CUMMINGS RITER CONSULTANTS, INC.

Date 1/24/96
Day of Week Wed
No. 57
Sheet 1 of 2

# FIELD ACTIVITY REPORT

**Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-149.30

**Field Activity:** Surface Water Treatment

**Personnel On Site:** BG | **Subcontractor:** WATEC

**Description on Daily Activities and Events:**

0800 BG arrives on site. Joe Gunn (WATEC) informs BG that Joe Gunn is planning a conference call with Arnold Oleander and Bill Creedon (WATEC - Atlanta) and BG / Bill Smith of CRC for 14:00. BG to call B. Smith to inform him of conference call. Topics include management of storm water currently flowing to Medlin Pond, WATEC change order to use granular fill in Fire Pond, and most cost effective means of completing project.

0900 J. Gunn informs BG that WATEC to remove carbon from both vessels, and is looking into options for replenishing carbon in either one or both vessels, or possibly using other carbon units to treat remaining Medlin Pond water. J. Gunn would like to reschedule conference call for 14:15. J. Gunn indicates that B. Smith has requested costs for shutting down, remobilizing, and intermittently pumping Fire Pond. J. Gunn indicates that shutting down for 1 to 2 months is not WATEC's preffered option. Joe Gunn expresses concerns as to operational problems of treatment system through winter months, as well as fixed costs of pump, treatment system, site trailers. Joe Gunn indicates that WATEC management in Atlanta has expressed concern as to why treatment not ceased earlier.

1000 J. Gunn asks BG again to explain dioxin analytical requirements, reporting requirements, and detection limits.

1130 BG talks to B. Smith. BG informs B. Smith of plans for conference call with WATEC to discuss options to close Fire Pond through spring 1996. BG has faxed draft of letter to Wilmington addressed to Joe Gunn documenting WATEC's

**Pay Quantities:**

WATEC: Joe Gunn
John Cutlip

**Project Changes/Unusual Observations:**

—

**Weather Conditions:**
a.m. overcast, mid-40's, showers
p.m. overcast, mid-50's

**Health & Safety PPE:**
steel-toed boots, safety glasses

**Air Monitoring Results:**
—

**Field Representative:** [signature] **Date:** 1/24/96

f40/corp

CUMMINGS RITER CONSULTANTS, INC.

Date 1/24/96
Day of Week Wed
No. 57
Sheet 2 of 2

# FIELD ACTIVITY REPORT

**Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30

**Field Activity:** Surface Water Treatment

**Personnel On Site:** BG | **Subcontractor:** WATEC

**Description on Daily Activities and Events:**

failure in compliance with contract requirements.

1415 B. Smith / BG participate in conference call with Bill Creeden, Arnold Oleander, and Joe Gunn of WATEC. See attached phone memo.

15 B. Smith calls BG to discuss Joe Gunn's claim that CRC and Beazer agreed to use cohesive fill material during bid clarification based on cost. According to Joe Gunn, WATEC has presented option of granular fill for Fire Pond, but the option for cohesive material was selected based on cost. BG does not recall WATEC's presentation of this option in the bid clarification, but will obtain documents submitted by WATEC from PGH office.

1645 Joe Gunn leaves site for the day. Joe Gunn to have costs for options discussed during phone conference call ready 1/25/96.

1700 BG leaves site for the day.

**Pay Quantities:**

**Project Changes/Unusual Observations:**

**Weather Conditions:**
a.m.
p.m.

**Health & Safety PPE:**

**Air Monitoring Results:**

**Field Representative:**

**Date:**

f40/corp

~~Meeting~~

Attendants: _____ of _____
Joe Gunn of WATEC
Bill Creeden of WATEC (Atlanta)
Arnold Oleander of WATEC (Atlanta)
_____ of _____
_____ of _____

**CUMMINGS RITER CONSULTANTS, INC.**

Meeting/Telephone Memo

1 of 6

Telephone

Call By _____ of WATEC
Call To BG & Bill Smith of CRC
Subject: Fire Pond closure, potential NPDES violation, storm water to Medlin Pond, scheduling

Project Name & No. Decatur East 97-145.70
Phone No. _____
Date: 1/24/96 Time: 1415

| C/R INITIAL | OTHER INITIAL | CONVERSATION CONTENTS (Summary of Discussions, Decisions, Commitments, Dates) |
|---|---|---|
| | | Joe Gunn (WATEC) arranges conference call with Bill Creeden, Arnold Oleander of WATEC's Atlanta office, and Bill Smith and BGiera of CRC. Joe Gunn begins by explaining purpose of phone call is to discuss options for continued treatment of surface water and decide most cost effective method of closing out Fire Pond - whether to bring in greater fill to close remaining exposed portion of pond, or to wait on better weather. Joe Gunn expresses WATEC's sensitivity to potential NCDEHNR violations. Joe Gunn indicates that since the sample was collected on 12/18/95 (at which time about 10.9 Million gallons had been treated) an additional 1.3 Million gallons has been treated. Joe Gunn is to have carbon in both vessels removed and WATEC is looking into options of replacing carbon in one or both vessels, or demobilizing treatment system and mobilizing different carbon treatment /pre filter treatment system to pump remaining ~ 1 million gallons. |
| | | Bill Creeden explains that the problem with the treatment process as is is that the solids loading is exceeding the filtration capacity of the carbon. The organics loading is not the issue - the system was design with organics loading of approx. 160 days for anticipated organics concentrations (ie, phenol & ponta); however, the solids loading from silty water in pool of storm runoff and from suction near the pond bottom has caused solids loading of carbon in excess of design capacity. One reason WATEC has seen so much solid loading is that WATEC has been |

CC: _____

F-001.DWG

**Meeting**

Attendants: _____ of _____
_____ of _____
_____ of _____
_____ of _____
_____ of _____
_____ of _____

**Telephone**

Call By _____ of _____
Call To _____ of _____
Subject: _____

**CUMMINGS RITER CONSULTANTS, INC.**

Meeting/Telephone Memo



Project Name & No. 97-145-30
Phone No. _____
Date: 1/24/96 Time: _____

| C/R INITIAL | OTHER INITIAL | CONVERSATION CONTENTS (Summary of Discussions, Decisions, Commitments, Dates) |
|---|---|---|

pumping after storm events. Bill Creeden believes that WATEC should only pump the pond when they are ready to backfill, in order to minimize solids loading of system.

Bill Smith offers that the other consideration for pumping after storm events is to keep the water in the bottom of the pond away from the fill that has been placed. Bill Smith indicates that the reason WATEC has pumped after storm events is to keep water away from placed fill.

Bill Creeden asks Joe Gunn if there would be a way to dam in front of placed fill to keep water away from edge of fill.

Joe Gunn answers by indicating that if such a dam were placed, water would accumulate both in front of and behind the dam, so that water would still be in contact with the leading edge of fill.

Bill Smith also indicates that in order to place soil for a dam, it would require getting onto pond sediments, which WATEC has indicated are the problem with backfilling pond at this time due to saturation of fill, and there would be no way to compact fill even if it could be placed.

Joe Gunn agrees that dam idea to protect placed fill would not work.

Bill Creeden offers that it is reasonable for the contractor to have assumed during bid process that stormwater would need

CC: _____

F-001.DWG

**Meeting**

Attendants: _____ of _____
_____ of _____
_____ of _____
_____ of _____
_____ of _____
_____ of _____

**Telephone**

Call By _____ of _____
Call To _____ of _____
Subject: _____

**CUMMINGS RITER CONSULTANTS, INC.**

Meeting/Telephone Memo



Project Name & No. 93-145.30
Phone No. _____
Date: 1/24/96 Time: _____

| C/R INITIAL | OTHER INITIAL | CONVERSATION CONTENTS (Summary of Discussions, Decisions, Commitments, Dates) |
|---|---|---|
| | | to be pumped out a couple of times during backfill operations. |
| | | Bill Smith agrees that this was reasonable assumption. |
| | | Bill Creedon continues saying that it is unreasonable, however, for the contractor to have assumed that the Fire Pond would need to be pumped 4 or 5 times, but that is what WATEC has been stuck with due to weather conditions and inability to work with fill selected during inclement weather. |
| | | Joe Gunn offers that WATEC has submitted a change order request to CRC for granular fill to be used in the Fire Pond which could be used during inclement weather. Joe Gunn asks Bill Smith if he has gotten feedback on proposed change order from Beazer. |
| | | Bill Smith indicates that he has a call in to Jim Cook of Beazer, but has not received reply. |
| | | Bill Creedon asks Bill Smith if Bill Smith has an indication as to Beazer's reception of proposed change order. |
| | | Bill Smith informs WATEC that Jim Cook has made several remarks implying that Beazer will be hard pressed to buy additional fill. |
| | | Bill Smith indicates that Jim Cook might argue that the need for coarse fill is driven more by WATEC's placement methods than by field conditions. Coarse material would have been acceptable in compliance with contract specifications, but WATEC chose to use a finer grained material, and TENSAR had warned that fine-grained material may become too wet to work with and switch to |

CC: _____
_____
_____

F-001.DWG

**Meeting**

Attendants: _____ of _____
_____ of _____
_____ of _____
_____ of _____
_____ of _____
_____ of _____

**Telephone**

Call By _____ of _____
Call To _____ of _____
Subject: _____

**CUMMINGS RITER CONSULTANTS, INC.**

Meeting/Telephone Memo
4 of 6

Project Name & No. 93-145.30
Phone No. _____
Date: 1/24/96 Time: _____

| C/R INITIAL | OTHER INITIAL | CONVERSATION CONTENTS (Summary of Discussions, Decisions, Commitments, Dates) |
|---|---|---|
| | | more coarse material may be necessary |
| | | Joe Gunn indicates that WATEC is unable to work with fill that was selected and that the fill was selected by both CRC and Beazer based on cost before the contract was negotiated, during bid clarification phase, CRC & Beazer selected non-coarse material as was less expensive |
| | | Bill Creedon offers that conditions have changed since beginning of contract. Nobody knew there was 2' of sawdust on bottom of pond, nobody knew that sediments are deeper than 2', nobody knew that Raleigh would get worst storm in 70yrs. Bill Creedon indicates that a change in scope is clearly justified due to change in conditions |
| | | Joe Gunn changes topic to stormwater discharge questioning whether discharge of runoff diverted from upstream of Medlin Pond to go around Medlin Pond can be done without controls or monitoring, even though sample data from RT indicates ditch between McCrimmon Rd and Medlin Pond contains dioxins in sediments. |
| | | Bill Smith indicates that his current understanding is that uncontrolled discharge of diverted stormwater around Medlin Pond is acceptable but will check with Beazer - basis for saying this is acceptable is that after remediation, the discharge from the ditch will be uncontrolled and will flow over backfilled Medlin Pond |

CC: _____

F-001.DWG

**Meeting**

Attendants: _____ of _____
_____ of _____
_____ of _____
_____ of _____
_____ of _____
_____ of _____

**Telephone**

Call By _____ of _____
Call To _____ of _____
Subject: _____

**CUMMINGS RITER CONSULTANTS, INC.**

Meeting/Telephone Memo



Project Name & No. 93-145.70
Phone No. _____
Date: 1/29/96 Time: _____

| C/R INITIAL | OTHER INITIAL | CONVERSATION CONTENTS (Summary of Discussions, Decisions, Commitments, Dates) |
|---|---|---|
| | | Arnold Oleander interjects that he has been listening to both parties at this point and is concerned that CRC is not convinced that there is a change in conditions warranting a change in scope. Arnold asks if Beaver is pleased with work done to this point and that WATEC is proud of quality of work and would personally be upset if client were not pleased with quality of WATEC's work. A. Oleander believes that indications for change in conditions is substantial. |
| | | B. Smith indicates that the impression to date from Jim Cook is that WATEC bid a lump sum amount to clean the ponds and that the scope has not changed - the additional water that was encountered from the beaver was covered under the $0.03/gal treatment cost, and WATEC agreed to place 2.5' fill over pond sediments which is approx. equivalent to design contours. |
| | | |
| | | Joe Gunn changes topic to monitoring requirements for surface water treatment. Joe Gunn asks B. Smith from a quality control and reporting standpoint - if analyses pick up a particular isomer at above the detection limit, but in terms of TEC is not above the 32 ppb total, does WATEC allow the isomer to pass through? |
| | | |
| | | Bill Smith states he does not wish to make an interpretation on Beaver's behalf, but believes that that as long discharge |

CC: _____

F-001.DWG

**Meeting**

Attendants: _____ of _____
_____ of _____
_____ of _____
_____ of _____
_____ of _____
_____ of _____

**Telephone**

Call By _____ of _____
Call To _____ of _____
Subject: _____

CUMMINGS RITER CONSULTANTS, INC.

Meeting/Telephone Memo



Project Name & No. 93-145.30.55
Phone No. _____
Date: 1/24/96 Time: _____

| C/R INITIAL | OTHER INITIAL | CONVERSATION CONTENTS (Summary of Discussions, Decisions, Commitments, Dates) |
|---|---|---|
| | | is below 30 ppq TEC, the effluent will meet NPDES requirements |
| | | Joe Gunn - if fastest lab turnaround time is 7 days, and WATEC is treating on a continuous flow (vs batch) basis, as specified, and discharging what happens if a sample exceeds permissible levels, but pumping continues for the 7 days until results are available |
| | | Bill Smith states that he understands that sampling may lag discharge, but when sample results are available which indicate a problem, WATEC is obligated to stop pumping |

CC: _____

F-001.DWG

CUMMINGS RITER CONSULTANTS, INC.

Date 1/25/96
Day of Week Thurs
No. 58
Sheet 1 of 2

# FIELD ACTIVITY REPORT

**Project Name:** Benzer East - Keppers Superfund Site | **Project No.** 93-145.30

**Field Activity:** Surface Water Treatment

**Personnel On Site:** B. Gene | **Subcontractor:** WATEC

**Description on Daily Activities and Events:**

0800 BG arrives on site. Joe Gunn and John Cutlip (WATEC) are on site. WATEC is using 2-in. trash pump to remove water at north end of Fire Pond between placed fill and proposed soil excavation areas. Joe Gunn to have costs for additional granular fill to close Fire Pond and costs for demob./remob. prepared for submittal to CRC 1/26/96 p.m. Pumping of water from both Medlin Pond and Fire Pond has ceased due to possible breach of carbon.

1000 Joe Gunn asks BG if WATEC should remove first section of culvert to north of CRC field trailer which drains across Fire Pond access road. BG indicates that as observed that culvert is draining (see photo), but Joe Gunn indicates it is backing up and overflowing road near brick structure and draining to Fire Pond perimeter diversion ditch. Where the flow is crossing the road it is soft and by improving drainage of culvert, the flow would not back up across road. BG agrees to let WATEC remove first section of culvert. Joe Gunn indicates he has left a message for Mary McDonald of Triangle Labs to check on availability of lab results for dioxin analyses of sample collected 1/19/96. Joe Gunn indicates that Triangle Laboratories is aware that results high priority.

1200 J. Gunn informs BG that Four Seasons is to evacuate carbon from both vessels, separate carbon and water, put carbon in rolloffs for Beazer disposal, and put

**Pay Quantities:**

WATEC: Joe Gunn (p.m.)
John Cutlip (s.m.)

**Project Changes/Unusual Observations:**

**Weather Conditions:**
a.m. sunny, low 40's
p.m. sunny, low 50's

**Health & Safety PPE:**
steel-toed boots, safety glasses

**Air Monitoring Results:**
—

**Field Representative:** [signature] **Date:** 1/25/96

FAO/corp

CUMMINGS RITER CONSULTANTS, INC.

Date 1/25/96
Day of Week Thurs
No. 58
Sheet 2 of 2

# FIELD ACTIVITY REPORT

**Project Name:** Beazer East - Koppers Superfund Site **Project No.** 93-145.30

**Field Activity:** Surface Water Treatment

**Personnel On Site:** B. Gerns **Subcontractor:** WATEC

**Description on Daily Activities and Events:**

water in fiberglass storage tank next to decon pad. WATEC to schedule for early next week, two day operation (5K). WATEC also to get 10-micron prefilters from Encotech early next week. Bag filters on back order - hopefully WATEC will have them by 2/1/96. WATEC hopes to have treatment system operational 1 week from today. Rolloffs for carbon storage to be delivered 1/26/96.

1500 BG talks to D. Smith regarding WATEC preparation of costs to finish Fire Pond, and discusses CRC approval of WATEC's choice of fill. CRC approved of WATEC fill in early Dec. upon receipt of analytical results. BG prepared letter indicating that analytical testing of stockpiled fill had not been completed, and that material stockpiled on site was done so at WATEC's risk.

1600 Joe Gunn informs BG that John Cutlip will be on site 1/26/96 to accept delivery of rolloffs and to pump additional water from proposed soil excavation areas. Joe Gunn indicates Post & Associates will resurvey excavation areas as a couple of survey stakes have been broken. Joe Gunn also indicates that one of the 55-gallon drums containing diesel from old pump house staged on decon pad is leaking. WATEC to locate a fuels recycling facility to dispose of old diesel.

1700 Joe Gunn leaves site

1845 BG leaves site for the day.

**Pay Quantities:**

**Project Changes/Unusual Observations:**

**Weather Conditions:**
m.
p.m.

**Health & Safety PPE:**

**Air Monitoring Results:**

**Field Representative:** **Date:**

f40/corp

CUMMINGS RITER CONSULTANTS, INC.

Date 1/26/96
Day of Week Friday
No. 59
Sheet 1 of 2

# FIELD ACTIVITY REPORT

**Project Name:** Beazer East - Koppers Superfund Site | **Project No.** 93-145.30

**Field Activity:** Surface Water Treatment

**Personnel On Site:** BG | **Subcontractor:** WATEC

**Description on Daily Activities and Events:**

0830 BG arrives on site. Joe Gunn in Atlanta. John Cutlip (WATEC) is on site excavating for Enwood Structures, Inc. BG works on chronology of events leading to WATEC's indication of inability to perform closure of Fire Pond with present fill material.

1215 John Funk (Rust) arrives on site. J. Funk indicates that area next to proposed soil excavation Area 2 and Area 3 have standing water. John Funk indicates he will inform Bob Fisher (Beazer). J. Funk also notes that clearing debris stockpiles have not been removed and are blocking access to proposed soil excavation areas. J. Funk to inform Bob Fisher that clearing debris has not been moved. BG informs J. Funk that WATEC was supposed to have tub grinder here 1/24/96 or 1/25/96, but has not arrived yet. J. Funk inquires about CRC comments on HASP, FOP, CGCP, and drawings. BG to try to get comments to Rust 1/29/96 or 1/30/96.

1235 John Funk leaves site.

1400 BG observes J. Cutlip of WATEC w/backhoe inside proposed excavation Area 3. BG informs J. Cutlip that the area was supposed to be staked off, and that J. Cutlip is not supposed to be in the area. J. Cutlip acknowledges and exits area.

**Pay Quantities:**
WATEC: John Cutlip (s.m)

**Project Changes/Unusual Observations:**
—

**Weather Conditions:**
a.m. overcast, low 40's
p.m. ptly sunny, mid 50's

**Health & Safety PPE:**
steel-toed boots, safety glasses

**Air Monitoring Results:**
—

**Field Representative:** [signature] **Date:** 1/26/96

f40/corp

CUMMINGS RITER CONSULTANTS, INC.

Date 1/26/96
Day of Week Friday
No. 59
Sheet 2 of 2

# FIELD ACTIVITY REPORT

**Project Name:** Beaver East - Koppers Superfund Site | **Project No.** 93-145.20

**Field Activity:** Surface Water Treatment

**Personnel On Site:** B. Geno | **Subcontractor:** WATEC

**Description on Daily Activities and Events:**

1435 B. Smith to call BG after 1530 to conference call with Pat O'Hara. CRC to then conference call to Jim Cook after 1600.

1630 Bill Smith initiates conference call with B. Geno and Pat O'Hara to discuss potential WATEC direction by CRC. Conclude that CRC did not direct contractors operations, and therefore is not responsible for inability of WATEC to work with selected fill.

1745 BG calls B. Smith. B. Smith to work on review of events, BG to work on chronology of events, BG to look at schedule vs. rain days, and obtain monthly avg. rainfall data.

1800 BG leaves site for the day. John Cutkp to return 1/27/96 to pump water near excavation area 3 to Fire Pond.

**Pay Quantities:**

**Project Changes/Unusual Observations:**

**Weather Conditions:** p.m.

**Health & Safety PPE:**

**Air Monitoring Results:**

**Field Representative:**

**Date:**

f40/corp

CUMMINGS RITER CONSULTANTS, INC.

Date 1/29/96
Day of Week Mon
No. 60
Sheet 1 of

# FIELD ACTIVITY REPORT

**Project Name:** Brazer East Inc - Koppers Superfund Site | **Project No.** 93-145.30

**Field Activity:** Surface Water Treatment

**Personnel On Site:** B. Geno | **Subcontractor:** WATEC

**Description on Daily Activities and Events:**

0800 BG arrives on site. WATEC has mobilized Four Seasons Environmental from Greensboro, NC to evacuate water and activated carbon from ENCOTECH vessels. Four Seasons plans to vacuum liquid phase first and pump liquid into middle fiberglass storage tank near decon pad. WATEC informs BG that carbon removal to take 2 days. Fresh carbon to arrive 1/31/96 from ENCOTECH. WATEC is having 10 micron filter housing (for additional prefiltration) and 1 micron post-carbon polishing filter housing delivered from ENCOTECH. WATEC hopes to have system operational 2/2/96 to resume pumping of Fire Pond.

1000 Joe Gunn arrives on site from Atlanta office. Joe Gunn provides BG with monthly progress schedule and invoice. J. Gunn informs BG that kiln dust was placed in bottom of roll off boxes for carbon disposal. WATEC to place PPE (tyvek, disposable gloves) in same roll off boxes for landfill disposal. BG observes decontamination area is stained (dark coloration) and water remaining in decon pad is dark with fuel smell and noticeable sheen. WATEC is pumping liquid from decon pad into first fiberglass storage tank (nearest transformers). Joe Gunn confirms the 55 gal. drum that had been leaking is being move. BG checks contents by tipping drum and discovers that drum is nearly empty and informs Joe Gunn. J. Gunn indicates there is now free-phase liquid on the top of the storage tank contents, which is not a problem from disposal standpoint. If necessary for disposal purposes J. Gunn indicates WATEC obtain a vertical profile sample for characterization of free-phase and aqueous phase.

**Pay Quantities:**
WATEC: Joe Gunn (p.m.)
John Cutlip (s.m.)
Dan Kitchen (tech.)

**Project Changes/Unusual Observations:**
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**Weather Conditions:**
a.m. overcast, mid 30's, light rain
p.m. overcast, mid 30's, intmt rain

**Health & Safety PPE:**
steel toed boots, tyvek, hd hat, safety glasses

**Air Monitoring Results:**
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**Field Representative:** Bruce Geno | **Date:** 1/29/96

f40/corp

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 1/29/96 |
| Day of Week | Mon |
| No. | 60 |
| Sheet | 2 of |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30 |
| **Field Activity:** Surface Water Treatment | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description on Daily Activities and Events:**

1100 Four Seasons Environmental is unable to offload first load of liquid phase from vacuum truck. Four Seasons to return to Greensboro and return 0700 1/30/96 with compressor for higher pressure to force liquid phase into fiberglass storage tank.

1200 J. Gunn receives copy of dioxin/furan effluent sample taken 1/19/96 after second carbon vessel. Results indicate sample meets requirements of ND for dioxins/furans set at 30 ppq. BG to prepare letter to state to provide NPDES monthly monitoring results. J. Gunn indicates WATEC plans to replenish both vessels with new activated carbon. J. Gunn indicates that WATEC is [illegible] resuming pumping with the intent of backfilling in the winter given the anticipated continued weather delays.

J. Gunn indicates he can drop mob/demob alternative costs for spring remob by approx 50% by demob backhoe, 6-in. pump, and reduced lease from Encotech. WATEC has mobilized a tub-grinder for grinding stockpiles of cleared material.

1300 P. O'Hara calls. Beazer is dissatisfied w/ WATEC performance, especially given high labor multiplier.

1600 WATEC leaves site for the day.

1740 BG leaves site for day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:** 2 p.m. | **Health & Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** |

f40/corp

CUMMINGS RITER CONSULTANTS, INC.

Date 1/30/96
Day of Week Tues
No. 61
Sheet 1 of 3

# FIELD ACTIVITY REPORT

**Project Name:** Beazer East Inc - Koppers Superfund Site | **Project No.** 93-145.30

**Field Activity:** Surface Water Treatment

**Personnel On Site:** B. Gene | **Subcontractor:** WATEC

**Description on Daily Activities and Events:**

0830 BG arrives on site. Four Seasons Environmental (FSE) has arrived on site and is working to clean out vacuum hose and vacuum chamber of liquid and entrained carbon from attempt to vacuum liquid-phase from first carbon vessel. Joe Gunn explains that too much carbon was vacuumed into line and into chamber to force liquid phase under pressure from vacuum chamber. FSE will change method of evacuation so that water will be drained from bottom of carbon vessels into plastic tub set below vessel and water will be vacuumed from tub into vac-truck. The liquid phase will then be removed from the vac-truck by pressurizing the vacuum chamber, forcing the water into the fiberglass storage tank (near transformers). Dewatering of vessels to be done through sample port near bottom. Upon evacuation of water from vessels, carbon to be vacuumed and placed into rolloff boxes. J. Gunn unsure of who is disposing what.

0900 Tub grinder begins to grind cleared trees/stumps stockpiled near northwest corner of Fire Pond (see photo). Triangle Grading Contractors is stockpiling ground material near original cleared material stockpile at NW pond corner. J. Gunn indicates that if Beazer wishes to demob CRC/field engineer trailer to save $750/mo. quoted in C/O #2, that WATEC will demob small WATEC trailer and keep larger trailer for copier, fax, and conference space. J. Gunn indicates BG is welcome to keep current office if confidentiality of phone conversations not a problem.

**Pay Quantities:**

**Project Changes/Unusual Observations:**

**Weather Conditions:**
a.m. overcast, low-40's, light rain
p.m. overcast, mid-40's

**Health & Safety PPE:**
hd hats, tyvek, disposable gloves, rubber overboots, steel-toed boots

**Air Monitoring Results:**
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**Field Representative:** Bruce De | **Date:** 1/30/96

f40/corp

CUMMINGS RITER CONSULTANTS, INC.

Date 1/30/96
Day of Week Tues
No. 61
Sheet 2 of 3

# FIELD ACTIVITY REPORT

**Project Name:** Beazer East Inc - Koppers Superfund Site | **Project No.** 93-145.30

**Field Activity:** Surface Water Treatment

**Personnel On Site:** B. Lane | **Subcontractor:** WATEC

**Description on Daily Activities and Events:**

1000 - 1100 Joe Gunn and BG review demob/remob option costs (400/day; 2,400 demob; 2,600 remob)

1315 Triangle Grading Contractors has finished grinding material at the NW corner of Fire Pond. Triangle moves tub grinder to stockpile near proposed soil excavation areas 1 and 2. TGC has conveyor belt from tub grinder is directed over diversion ditch.

1330 BG asks J. Gunn if he is aware that TGC is filling in diversion ditch with ground mulch. J. Gunn indicates he has asked TGC not to block diversion ditch, and if they choose to do so, they will be required to handle the material again to clear ditch. (J. Gunn indicates W. Thompson of TGC doesn't listen and does what he wants to do).

1470 J. Gunn informs BG that TGC has agreed to repair diversion ditch and remove ground wood from ditch.

1530 TGC has restored diversion ditch and removed ground up wood. Joe Gunn indicates that WATEC will grind logs on Mellin Pond side of Beazer property. J. Gunn explains that after paying someone to haul logs, Beazer would not end up with much as a credit. FSE has nearly emptied carbon from first carbon vessel. New carbon and pre and post filtration equipment have arrived from Encotech. WATEC to begin installing new filters 2/1/96.

1400 BG talks to Ann White (Ensys) to place order for screening kits. BG to get Purchase Order No. before ordering.

**Pay Quantities:**

**Project Changes/Unusual Observations:**

**Weather Conditions:** 2 p.m.

**Health & Safety PPE:**

**Air Monitoring Results:**

**Field Representative:**

**Date:**

f40/corp

CUMMINGS RITER CONSULTANTS, INC.

Date 1/30/96
Day of Week Tues
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Sheet 3 of 3

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beaver East Inc. - Kopper's Superfund Site | **Project No.** 93-145.30 |
| **Field Activity:** Surface Water Treatment | |
| **Personnel On Site:** B. Gero | **Subcontractor:** WATFC |

**Description on Daily Activities and Events:**

1445 DG delivers documentation of Beaver's preferred solution regarding completion of backfill in Fire Pond to Joe Gunn.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health & Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** |

f40/corp

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 1/31/96 |
| Day of Week | Wednesday |
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# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0830 BG arrives on site. WATEC is having Four Seasons Environmental (FSE) continue to evacuate carbon from Vessel 1. FSE has mobilized an additional vacuum truck. Joe Gunn (WATEC) explains that the additional truck is to handle water, and the first truck will handle carbon. Triangle Grading Contractors (TGC) has finished grinding stockpiled wood near the Fire Pond and is moving equipment across the road through Enwood Structures McCrimmon Road entrance to Medlin side of McCrimmon Rd to grind wood stockpiled there.

0930 BG leaves message for Jim Cook (Beazer) that WATEC no longer plans to salvage trees cut from the former Medlin property, but now plans to grind them with the tub grinder instead. BG also indicates in message that TGC has leased property from Enwood Structures for storage of construction equipment and is using Beazer's Church St. entrance for access to storage area.

0950 Stan James, James Anderson, and Richard (site foreman) for INCO (Rust Subcontractor) arrive on site to inspect soil excavation areas. Stan James indicates that purpose of visit is to evaluate surface drainage and access for staging areas and to proposed excavation areas.

1030 Dennis Jones (Rust) arrives on site to use hand auger to collect soil samples from near proposed excavation areas. D. Jones indicates that John Funk (Rust) has directed him to collect soil samples from between proposed excavation areas 1 and 2. BG asks Stan James before leaving if he believes site is too wet to conduct soil excavation. S. James indicates that he believes that the way the areas are currently graded, he doubts that the areas would dry much between now and April. S. James indicates he had proposed to Beazer to construct soil berms and drainage channels to try to help prevent runon and help runoff, but Beazer had responded that WATEC could do this work. S. James, J. Anderson, and foreman leave site.

1040 BG shows D. Jones the area between proposed soil excavation areas 2 and 3. D. Jones locates first boring between areas 2 and 3 and encounters water in a course gravel layer at approx. 3 ft. depth.

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| **Pay Quantities:**<br>WATEC: Joe Gunn (p.m.)<br>John Cutlip (s.m.)<br>Dan Kitchen (tech.)<br><br>Triangle Grading Contractors: (1) excavator operator<br>(1) tub grinder operator | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.* overcast, low 40's, lgt rain<br>*p.m.* overcast, mid 40's | **Health and Safety PPE:**<br>safety glasses, steel-toed boots | **Air Monitoring Results:**<br>Background |
| **Field Representative:** B. Geno | | **Date:** 1/31/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 1/31/96 |
| Day of Week | Wednesday |
| No. | 62 |
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# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Fire Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

BG asks D. Jones to try hand augering adjacent and north of area 3. D. Jones attempts to hand auger at four different locations, but encounters refusal from a coarse aggregate (or weathered concrete) at about 5 inches. BG asks D. Jones to try a location adjacent and south of excavation area 1. The top 1 ft. appears to be a brown silty clay. From 1 to 3.7 ft., a gray silty fine sand was encountered. At 3.7 ft., a brownish-red silty clay is encountered. The sand layer is saturated at about 3.5 ft. depth.

1115 BG talks to John Funk (Rust) and informs John that water was encountered at 3 to 4 ft. below gound surface, that water is probably perched above a clay layer in the vicinity of proposed exc. area 1, and was encountered in a coarse fill between excavation areas 2 and 3. J. Funk requests that BG inform B. Fisher (Beazer) of observations, and let Beazer make decision as to whether conditions are too wet.

1125 J. Gunn informs BG that Enwood Structures is upset that WATEC is using their parking lot to stage rolloffs used for carbon disposal and conduct carbon changeout activities. J. Gunn indicates that apparently someone in Enwood Structures plant notified Enwood's corporate owner (majority stockholder) that WATEC was using the parking lot to store hazardous waste. J. Gunn informs BG that Enwood's corporate owner has complained to Mike Eason (Enwood sales manager) that WATEC is using the area. M. Eason then took photos of area and directed WATEC to move rolloffs back onto Beazer property

1135 B. Smith calls BG who informs BG that Beazer has received call threatening lawsuit from Enwood Structures. Beazer is under the impression that WATEC has spilled material from vacuum trucks and rolloffs, and that rolloffs are leaking free liquid. B. Smith indicates that Beazer is considering close grid sampling, etc. to determine extent of contamination and if lawsuit is brought against Beazer that Beazer will in turn bring lawsuit against WATEC. B. Smith requests that BG assess what happened to upset Enwood Structures and call back

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 1/31/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 1/31/96 |
| Day of Week | Wednesday |
| No. | 62 |
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# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Fire Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

1145 BG obtains photos of area around rolloff boxes used for carbon storage. J. Gunn shows BG property line between Beazer/Enwood. WATEC is moving new carbon (delivered in plastic fiber bags 500 #'s and stacked on pallets) to area next to WATEC storage trailer. J. Gunn indicates Enwood has requested that all materials, including geotextiles and geogrid, be moved off of Enwood Structures property and onto Beazer property. J. Gunn informs BG that WATEC's first priority will be to move rolloffs and earthen ramps constructed to dump into rolloffs, and may not get to move geotextile and geogrid materials stockpiled on Enwood property until 2/1/96. BG observes a small area, approx. 2 inches by 4 ft., next to first rolloff box which has about 1 or 2 cups of carbon spilled on the ground (see photos). BG does not observe evidence of leaking rolloffs or any other areas of stained soil. BG observes that one of three rolloff contains visible free liquids from dumping of first vacuum truck load after it was plugged with carbon while trying to evacuate water from Vessel 1. FSE had tried to get water out ot truck, but plugged drain lines and then dumped all the contents into a rolloff. After the first truck load, FSE changed their strategy of evacuating water by attaching hose to bottom of vessels at sample port fitting. Water was then drained into vacuum truck by hose, so that all water was contained.

1230 WATEC is having TGC move 3 rolloffs to area in front of field trailers with dozer (4 rolloffs total)

1300 BG observes WATEC scraping with backhoe bucket to approx. 2-in. depth and hand shoveling into bucket soil that was stained with carbon. WATEC places soil (approx. 1/2 bucket load) into rolloff with carbon. J. Gunn indicates that an access will be constructed to the carbon vessels which is entirely on Beazer property using geogrid and aggregate. J. Gunn indicates that Enwood was more concerned with earthen material used to construct ramps than material being placed into rolloffs. J. Gunn indicates that ramps were constructed with riprap and aggregate from off site sources and that Enwoods complaint arose from internal politics more than legitimate environmental concerns.

1330 BG calls B. Smith to tell B. Smith that a small area of stained soil was observed next to one of the rolloffs, and that the soil was placed into a rolloff. BG indicates that the soil was removed with a

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 1/31/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 1/31/96 |
| Day of Week | Wednesday |
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# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Fire Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

combination of scraping with a backhoe bucket and hand shoveling. BG to check to see whether WATEC had permission from Enwood to use area to stage rolloffs and conduct carbon changeout

1400 BG asks J. Gunn if WATEC had permission from Enwood Structures to use area to stage rolloffs. J. Gunn indicates that WATEC did not have permission to use the Enwood parking lot for rolloffs and carbon changeout, but WATEC did have permission for truck traffic and geotextile/geogrid. J. Gunn indicates that the call to Enwood's corporate owner was made by someone in Enwood's plant with ties to Bryant (a construction contractor) trying to get even with TGC for leasing property from Enwood and calling attention to Bryant's use of Enwood's property without a lease. BG observes construction of access to carbon units. J. Gunn introduces BG to Mike Eason. BG asks Mike Eason if he is satisfied with the way WATEC has responded to Enwood's request to vacate the property and restore the area. Mike Eason indicates that he is satisfied with WATEC's efforts to restore Enwood's parking area.

1415 BG talks to B. Smith. B. Smith informs BG that Beazer has requested that soil samples be collected from the location where carbon was observed on the ground and removed by WATEC. BG to ge sample bottles from Triangle Labs and provide proper preservation over appropriate holding time for penta, pentachlorophenol, and dioxins. 30 day holding time for dioxin, 14 days for phenol/penta. Refridgeration is the only preservation required.

1430 J. Gunn informs BG that he has left a message with Bob Fisher that WATEC may need additional rolloffs for carbon disposal. J. Gunn has asked Envirochem (rolloff hauler) to come look at rolloffs to determine whether or not the 4 rolloffs can be loaded with more carbon. J. Gunn has also called Encotech for carbon density. BG observes area where stained soil was removed. The area is covered with freshly imported and graded aggregate. TGC is currently importing and grading aggregate over the entire Enwood parking area (at Enwood's request) where rolloffs had been staged. It is impossible to locate area where soil staining was first observed. BG obtains one soil sample from the rolloff box where the stained soil was placed for disposal.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 1/31/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 1/31/96 |
| Day of Week | Wednesday |
| No. | 62 |
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# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Fire Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

1445 BG calls B. Smith and informs B. Smith that BG was unable to determine the location where stained soil was initially observed, and that a stained soil sample was collected from the rolloff. B. Smith indicates that the stained soil will likely contain carbon and the carbon will contain concentrated phenols, penta, and dioxins. Thus, the sample would not be representative of soil adjacent to where carbon-stained soil was removed.

1500 M. Eason speaks with J. Gunn and requests that all vehicular traffic be restricted from Enwood Structures property. J. Gunn to erect traffic barricades to prevent traffic between Enwood and Beazer property. All deliveries are to be made to the site from the Church St. entrance.

1630 WATEC is moving geotextile and geogrid onto Beazer property near brick building.

1700 WATEC leaves site for the day.

1830 B. Fisher calls BG to inform BG that he should have waste manifests ready the week of 2/5/96 for transport of rolloffs to Pinewood. BG discusses findings of soil augering next to proposed soil excavation area. B. Fisher to decide whether to delay soil excavation. BG also informs B. Fisher that WATEC has pumped petroleum product into tank T1 with decon pad water. T2 is being used for temporary storage of carbon vessels. WATEC plans to run water stored in T2 through treatment system.

1845 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 1/31/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 2/1/96 |
| Day of Week | Thursday |
| No. | 63 |
| Sheet | 1 of 3 |

# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0830 BG arrives on site. WATEC is assisting Four Seasons Environmental (FSE) with evacuation of carbon from Vessel 2. Joe Gunn (WATEC) is satisfied that carbon will fit into 3 rolloff boxes without exceeding allowable DOT wt.

0900 BG returns call to Pat O'Hara. BG informs P O'Hara that Bob Fisher will likely postpone soil excavation due to saturated conditions. BG reports findings from Dennis Jones (Rust) hand augering on site 1/31/96. BG informs P. O'Hara that J. Gunn has indicated that the backfill issue (i.e., WATEC request for additional backfill) is above his head and that CRC and Beazer will have to talk to J. Gunn's superiors in WATEC Atlanta office.

0930 BG calls B. Smith. BG to fax B. Smith copy of latest change order record. B. Smith also faxing comments on BG documentation of WATEC problems with Enwood Structures 1/31/96.

1030 B. Smith calls BG. B. Smith indicates that Change Order 1 (for geogrid) and Change Order 2 for (engineer's trailer) were included in negotiated lump sum between Beazer and WATEC and should be removed from C/O record. BG to determine if leaking drum of diesel was a WATEC drum or an old Beazer drum, and determine how much water is in each of Beazer fiberglass storage tanks. BG faxes B. Smith copy of latest WATEC invoice request.

1045 BG determines that middle fiberglass tank (T2) containing water from carbon vessels is about 9/14 full, and that T1 (closest to transformers) containing water/petroleum spill from decon pad is about 5.75/14 full. Bob Fisher (Beazer) has indicated that tanks are 8,400 gal. capacity. Thus, T1 contains about 3,500 gal.s and T2 contains about 5,400 gal.s. Drum which was apparently leaking was a WATEC drum.

1100 John Cutlip (WATEC) indicates that the spill was not diesel, but an overflow of a drum of used motor oil caused by TGC and WATEC overfilling the drum with a funnel. However, J. Gunn disagrees and indicates that the liquid is diesel from a drum which was about 1/2 full and is now about 1/3 full of diesel from the old pump house diesel tank. J. Cutlip states that he believed it

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| **Pay Quantities:**<br>WATEC: Joe Gunn (p. m.)<br>John Cutlip (s.m.)<br>Dan Kitchen (tech.)<br>**Triangle Grading Contractors:** Wayne Thompson<br>(1) exc. operator<br>(1) tub grinder operator | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.* overcast, low 40's<br>*p.m.* overcast, mid 40's | **Health and Safety PPE:**<br>safety glasses, steel-toed boots | **Air Monitoring Results:**<br>None |

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| **Field Representative:** | **Date:** 2/1/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 2/1/96 |
| Day of Week | Thursday |
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| Sheet | 2 of 3 |

# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

would be acceptable to pump diesel spill into T1, as it was his impression that T1 already contained petroleum product. J. Gunn says he had talked to J. Cutlip about moving the drum onto a piece of poly becaused WATEC did not have an extra drum, but that the drum leaked before WATEC had the chance to move the drum.

1150 BG receives fax from B. Smith indicating conference call between WATEC, Beazer, and CRC to be conducted at 14:15 today. BG provides copy of conference call agenda to J. Gunn.

1415 BG, Pat O'Hara, Bill Smith (CRC); J. Gunn, Bill Creedon, Arnold Olender (WATEC), and Jim Cook, Bob Fisher (Beazer) participate in conference call to discuss schedule, change order for coarse backfill, petroleum spill on decontamination pad, WATEC relations with Enwood Structures and handling of incident 1/31/96, and progress of carbon changeout (see phone memo).

1450 Conference call ends.

1500 B. Smith calls BG and requests that BG prepare letter for monthly monitoring results for January to NCDEHNR. B. Smith requests that BG reiterate J. Gunn's statement that coarse fill should be free-draining so that WATEC does not end up with the same placement problems as with current fill.

1600 BG talks to J. Gunn and repeats his contention that material must be free draining in order that the material can be placed in wet weather. J. Gunn agrees and indicates that his basis for acceptance of material from the quarry will be grain size analysis of approx. 50 percent of material which is less than No. 4 sieve, and TGC's agreement that the material can be placed in wet weather. J. Gunn indicates that he is not sure that he will retain TGC if they continue to be uncooperative (i.e., not follow WATEC's direction), but at the same time he is under a time constraint to get the work done. J. Gunn then indicates that because the construction season is slow it may be that a earthwork contractor would be easier to find. With regard to continued monitoring, J. Gunn indicates that he has asked lab to look into charges for extraction and for holding times of sample and of extracted sample. Once pumping resumes, J. Gunn plans to take samples between Vessels 1 and 2 and after Vessel 2, and analyze only the sample drawn from between the vessels. If the

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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|---|---|
| **Field Representative:** | **Date:** 2/1/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 2/1/96 |
| Day of Week | Thursday |
| No. | 63 |
| Sheet | 3 of 3 |

# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

sample collected from between the vessels fails, WATEC will then instruct the lab to analyze the sample collected after Vessel 2. J. Gunn asks BG what WATEC should do if the first sample fails while WATEC is awaiting results for second sample: shut down or take risk and keep pumping, BG indicates he would recommend shutting down as before. J. Gunn states that he has a real problem with that approach. BG states that they can revisit the subject with B. Smith. J. Gunn indicates that TGC has finished grinding operations on Medlin side of McCrimmon Rd. and ended up hauling logs to a mill. J. Gunn indicates that a credit will be going to Beazer for the logs. J. Gunn indicates that the tub grinder did cover the Medlin's lawn and trailer, but the yard was raked, and it did not look as though damage was done to trailer or shed by falling debris. BG requests that penta/phenols data be faxed to BG ASAP for reporting letter to NCDEHNR.

1630 BG receives fax reporting phenol/penta concentration for effluent sample collected 1/19/96 for which dioxin results have already been received.

1645 BG faxes draft monthly reporting letter to B. Smith for review.

1700 WATEC leaves site for the day.

1730 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |
| **Field Representative:** | | **Date:** 2/1/96 |

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 2/2/96 |
| Day of Week | Friday |
| No. | 64 |
| Sheet | 1 of 1 |

# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0830 BG arrives on site. WATEC is not planning to reload carbon into vessels today due to freezing rain. WATEC will concentrate on removing contents of T1 to evacuate the free-phase petroleum that was pumped from the decontamination pad into T1. WATEC plans to drain the contents of T1 into WATEC's HDPE storage tanks until the free phase liquid is the only liquid remaining in the tank. WATEC then plans to perform a confined space entry and clean the bottom of T1 using adsorbent pads. WATEC also plans to use adsorbent pads and detergent to clean petroleum remaining on the decon pad. According to J. Gunn, adsorbent pads will be drummed for landfill disposal. BG prepares letter to NCDEHNR for NPDES monthly monitoring.

0900 B. Smith calls BG to discuss comments on January monthly NPDES monitoring report to NCDEHNR. BG to revise letter and fax to B. Smith and J. Cook.

1100 Site loses power. BG calls B. Smith. BG to fax B. Smith copy of latest change order record. B. Smith also faxing comments on BG documentation of WATEC problems with Enwood Structures 1/31/96.

1200 BG leaves site for the day. WATEC to continue working to evacuate T1.

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| **Pay Quantities:**<br>WATEC: Joe Gunn (p. m.)<br>John Cutlip (s.m.) | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.* overcast, high 20's, rain<br>*p.m.* overcast, high 20's, rain,slt | **Health and Safety PPE:**<br>safety glasses, steel-toed boots | **Air Monitoring Results:**<br>None |
| **Field Representative:** Bruce Geno | | **Date:** 2/2/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 2/5/96 |
| Day of Week | Monday |
| No. | 65 |
| Sheet | 1 of 2 |

# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0830 BG arrives on site. WATEC is not planning to reload carbon into vessels today due to cold weather and snow/ice remaining on top of carbon vessels. WATEC plans to schedule boom truck to load carbon 2/7/96 or 2/8/96 for which weather forecast is warm weather. J. Gunn indicates he has asked Wayne Thompson (Triangle Grading Contractors) to meet with J. Gunn and BG on Wednesday to discuss access off of McCrimmon Rd. to southeast corner of Fire Pond to deliver fill. J. Gunn to try to hold W. Thompson to a performance agreement, to try to put some of the risk on Triangle Grading Contractors. J. Gunn informs BG that W. Thompson has said that it is possible to manage the processed fill by tracking with the dozer before a storm to get the surface to drain. J. Gunn also indicates that W. Thompson has said that the material seals itself off as the surface becomes saturated and the surface can then be bladed off to a more stable subbase. BG asks if the process fill is the same material that was placed at the site entrance from Church St. J. Gunn indicates that the material is the same. BG indicates that he is not convinced that the material is free-draining as indicated in WATEC's change order letter, and is concerned with the fine-grained (less than 200 sieve) fraction. Even though it is reported to be 15 percent, the fraction is still significant. BG indicates that when the material is wet, there are deep ruts and the surface is very slick. J. Gunn agrees that the surface is slick, but offers that the aggregate in the fill may be enough to support the equipment. J. Gunn wants to get reassurance from W. Thompson that the material will work. J. Gunn suggests that J. Gunn, BG and W. Thompson visit the quarry and try to determine if there are locations where the material is more coarse-grained, and have the quarry pull from those locations. BG indicates that he is willing to do so.

1140 B. Smith calls BG to discuss WATEC's schedule to resume surface water treatment operations. B. Smith asks BG to work on list of submittals and description of status of the surface water treatment system and schedule for resumption of operations.

1300 BG talks to Jim Cook (Beazer East). J. Cook is preparing the January monthly progress report to EPA and asks BG to review before J. Cook submits to Beverly Hudson. BG asks J. Cook if he is

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| **Pay Quantities:**<br>WATEC: Joe Gunn (p. m.) | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.* sunny, high 20's<br>*p.m.* overcast, low 30's | **Health and Safety PPE:** | **Air Monitoring Results:**<br>None |

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|---|---|
| **Field Representative:** Bruce Dew | **Date:** 2/5/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 2/5/96 |
| Day of Week | Monday |
| No. | 65 |
| Sheet | 2 of 2 |

# FIELD ACITIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

satisfied with support from Cummings/Riter (CR) in negotiating change order for coarse fill. J. Cook indicates that he will be satisfied if there are no more change orders. J. Cook offers that without construction monitoring there would have been an NPDES violation, so would be unwise to leave contractor unattended. J. Cook indicates that in hindsight, should have had a construction manager, versus construction monitor. Construction manager would have been able to manipulate the operations to force contractor to take action when in mid-December the Fire Pond was supposed to be 50 percent backfilled according to WATEC schedule, but was not. A construction manager could have dictated that the contractor use a coarse fill heading into the winter months.

1230 J. Gunn submits geotechnical and analytical data for granular fill..

1500 J. Gunn leaves site for the day

1600 Bob Fisher (Beazer East) calls BG to discuss transport of carbon in rolloffs to Pinewood. B. Fisher to visit site on 2/7/96 to transfer transport manifest paperwork to BG for rolloffs. B. Fisher indicates that he will be surprised if there is no problem with free liquids in the rolloffs. BG indicates that the rolloff most likely to contain free liquids is the first rolloff containing contents of the first vacuum truck load of carbon which clogged the vac truck during attempted initial carbon vessel dewatering activities. BG explains that he did observe free liquids in the first rolloff, but that WATEC added soil which turned to mud and appeared to eliminate the free liquids. B. Fisher instructs BG to keep a close eye on the rolloffs as they are being loaded to spot leakage. B. Fisher indicates that if there are free liquids, they should be observed during loading. BG to get WATEC to place plastic beneath the trucks as the rolloff are loaded to catch any free liquid before it falls on the ground.

1730 BG leaves site for the day.

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| **Pay Quantities:**<br>WATEC: | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |
| **Field Representative:** | | **Date:** 2/5/96 |

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 2/6/96 |
| Day of Week | Tuesday |
| No. | 66 |
| Sheet | 1 of 3 |

# FIELD ACITIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0830 BG arrives on site. Joe Gunn ( WATEC) has arrived and is working on an updated project schedule. BG prepares a letter to Joe Gunn indicating concerns that the process fill being considered as free-draining coarse material for the Fire Pond may contain too much fines (about 15 percent) to be free draining.

0930 J. Gunn submits attached proposed schedule for project completion. BG informs J. Gunn that the schedule is not consistent with the change order request letter which set a target of 2/29/96 as the date for completion of Fire Pond backfilling. In addition, BG indicates that the schedule shows 4 more weeks for this task to complete the remaining approx. 60 percent of the Fire Pond,vs. the original schedule which indicated 2 weeks for 100 percent of Fire Pond backfilling. J. Gunn indicates that the schedule includes anticipated weather delays and that the limiting factor is delivery of fill. J. Gunn indicates that the quarry is only open 5 days/week. J. Gunn and Triangle Grading Contractors (TGC) are trying to work a deal with the owner of the quarry to gain access to the quarry on Saturdays. J. Gunn mentions the possibility of subcontracting more dump trucks, either directly or indirectly (through TGC) to increase the rate of fill delivery. BG agrees that WATEC should consider more trucks, as long as the dozers can keep pace. J. Gunn indicates that he plans to have at least 2 dozers, one operated by WATEC and the other by TGC (both LGP) BG informs J. Gunn that more trucks may be most beneficial early on at the beginning of delivery operations, when the coarse fill can be placed most rapidly (i.e., the push distance is least). As the push distance is greater, the rate of fill delivery may need to slow, as the dozers have to push the fill over a longer distance. J. Gunn indicates he will present the schedule based on ideal weather conditions and ability to work 5 weekdays/week (while quarry is open). BG reminds J. Gunn that if cohesive material ever gets dry enough before the Fire Pond is backfilled, the cohesive material should be bladed and shaved in preference to delivering more coarse fill. J. Gunn acknowledges that the cohesive material will be used with preference over the granular material, weather permitting and that a credit would be issued to Beazer if WATEC uses less coarse material than indicated in the change order.

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| **Pay Quantities:**<br>WATEC: Joe Gunn (p. m.) | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.* sunny, high 20's<br>*p.m.* overcast, high 30's | **Health and Safety PPE:** | **Air Monitoring Results:**<br>None |
| **Field Representative:** | | **Date:** 2/6/96 |

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 2/6/96 |
| Day of Week | Tuesday |
| No. | 66 |
| Sheet | 2 of 3 |

# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

1230 BG leaves site to receive hearing test.

1400 BG returns to site.

1500 J. Gunn and BG discuss Bob Fisher's arrival, meetings with W. Thompson scheduled 2/7/96, and schedule issues. J. Gunn indicates that WATEC will begin piping in new prefilters and postfilters into surface water treatment system 2/7/96. J. Gunn indicates that it should be warm enough to work with PVC glue. J. Gunn has scheduled a boom truck for 2/9/96 to repack carbon vessels. J. Gunn expects the repacking process to last one day. BG asks if the boom truck could be scheduled earlier. J. Gunn indicates that it would not make a difference in how soon the treatment plant is back up and running, because WATEC still needs to install new filters and piping. J. Gunn to return to 24-hr operation as soon as treatment system working in order to resume backfilling 2/12/96. Once the system is operational, WATEC will use 3-in. pump to keep the flow rate and pressures low across new particulate filters. J. Gunn anticipates a flow rate of 100 to 150 gpm. J. Gunn informs BG that spent bag filters will be containerized in a rolloff, rather than in drums as is currently done, due to anticipated increased numbers of spent filters generated. BG recalls conversation with B. Fisher 2/5/96 and informs J. Gunn that B. Fisher would like WATEC to place plastic beneath the back end of the rolloffs as they are loaded, so that if free-liquid drains from the rolloff it is contained and managed. J. Gunn indicates that it will be difficult to get plastic under the back until the rolloff is completely off the ground. BG agrees, but asks if WATEC could have sufficient manpower to drag the plastic to follow the rolloff as it is loaded. J. Gunn indicates that he can provide manpower, but it may be easier to clean up a spill with the backhoe after it occurs. BG encourages J. Gunn to discuss the options with B. Fisher. J. Gunn informs BG that he has scheduled a vac truck to evacuate T2 of liquid drained from carbon vessels which will then be treated through the system. J. Gunn also plans to drain T1 until the free-phase petroleum is left in the bottom of the tank, at which time WATEC would perform a confined space entry and clean the bottom of the tank with adsorbent pads. The pads would be drummed for disposal per directions

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

| | |
|---|---|
| **Field Representative:** | **Date:** 2/6/96 |

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 2/6/96 |
| Day of Week | Tuesday |
| No. | 66 |
| Sheet | 2 of 3 |

# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

from B. Fisher. J. Gunn proposes to treat contents drained from T1 (decon pad water) through the treatment plant as well. BG to defer to B. Fisher.

1530 J. Gunn leaves site for the day.

1545 BG recieves ammended letter from P. O'Hara regarding CRC concerns with granular fill.

1700 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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|---|---|
| **Field Representative:** | **Date:** 2/6/96 |

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 2/7/96 |
| Day of Week | Wednesday |
| No. | 67 |
| Sheet | 1 of 3 |

# FIELD ACITIVITY REPORT

**Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55

**Field Activity:** Surface Water Treatment

**Personnel On Site:** B. Geno | **Subcontractor:** WATEC

**Description of Daily Activities and Events:**

0830 BG arrives on site. WATEC is cutting trees along east side of Fire Pond.

0915 W. Thompson (Triangle Grading Contractors-TGC) arrives on site to discuss site access from McCrimmon Road to breach dam at the southeast corner of the Fire Pond for fill delivery.

1000 BG provides letter regarding evaluation of geotechnical results for proposed process fill material (see attached). J. Gunn indicates that we are all in a loss prevention mode.

1030 Dave Lown (NCDEHNR) calls site to see if soil excavation is proceeding. BG indicates that soil excavation has been delayed to spring (probably mid-march), and will keep him informed (733-2801, ext. 349).

1040 Bob Fisher (Beazer East) arrives on site. Bob Fisher and J. Gunn discuss letter from CRC evaluating geotechnical results on proposed "free-draining" material. B. Fisher agrees with CRC that "free-draining" is the phrase from WATEC and that the material may not be "free-draining." J. Gunn indicates that gravel or sand is twice as much money ($12 to $14/cy). J. Gunn asks B. Fisher "what should we do?" B. Fisher indicates that from a construction standpoint, given a choice between coarse fill and the processed fill, WATEC would prefer to use the processed fill. J. Gunn indicates that the TENSAR people would want the coarse material because it is truly "free-draining". J. Gunn informs B. Fisher that he believes that although the material is not free-draining, it seals itself off when it gets wet, forming a cap, which can then be shaved off. J. Gunn that he is considering putting his subcontractor under a performance bond. B.Fisher indicates that will never happen. J. Gunn and B. Fisher discuss free-liquids issue in rolloffs containing carbon. B. Fisher indicates that rolloffs should be inspected as they are being loaded for free-liquids, and that the rolloffs should be held at an angle for a couple of minutes as they are loaded. B. Fisher indicates it will be preferable to reload the rolloff contents into another rolloff before the material leaves the site than to take the risk of leakage on public roads if free liquids are observed. B. Fisher indicates that WATEC will share liability of leakage from rolloff with Beazer if such leakage occurs. J. Gunn and B. Fisher discuss filters for surface water treatment system. WATEC

**Pay Quantities:**

WATEC: Joe Gunn (p. m.)
John Cutlip (s.m.)
Dan Kitchen (tech.)
Dan Wise (tech.)

**Project Changes/Unusual Observations:**

**Weather Conditions:**
*a.m.* sunny, high 20's
*p.m.* sunny, mid 30's

**Health and Safety PPE:**
steel-toed boots, safety glasses

**Air Monitoring Results:**
None

**Field Representative:** [signature] | **Date:** 2/7/96

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 2/7/96 |
| Day of Week | Wednesday |
| No. | 67 |
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# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

plans to store filters in rolloff. B. Fisher indicates that landfill cannot, by law, take wet filters, therefore filters will have to be dusted with stabilizer (i.e., lime or portland cement). B. Fisher approves of method of disposing of T1 and T2 contents--pump through treatment system, including free-phase petroleum which spilled on decon pad.

1100 B. Fisher and BG discuss paperwork for transport of rolloffs bound for Pinewood, SC. B. Fisher has completed manifests with the exception of dates, and driver's information. BG to schedule ramp trucks and to inform Pinewood facility of delivery schedule.

1230 B. Fisher, BG, and J. Gunn inspect rolloffs. B. Fisher indicates that the carbon appears to be drained from looking at the top, but will not know if there are free liquids in the bottom of the rolloff until visibly leaking. B. Fisher indicates he would like WATEC to place plastic under rolloffs as they are being loaded. J. Gunn agrees to place plastic under the back end of the rolloffs as they are loaded onto the transport trucks to catch any free liquids that might escape from the rolloffs. B. Fisher indicates that the landfill (Pinewood) will claim that the material has free liquids if they see as much as a thimble-full of water (i.e., condensation on the underside of the tarps). The landfill uses this as an excuse to charge another $500/load for stabilization. B. Fisher indicates that an additional $500/load will not be a big deal--more concerned with leakage from rolloffs during transport. B.Fisher, BG, and J. Gunn inspect carbon vessels. B. Fisher observes an area where carbon has been spilled on ground during carbon removal. J. Gunn agrees to shovel up the soil and put into rolloff. Mike Eason (Enwood Structures) drives up and B. Fisher and M. Eason discuss security of Enwood facility and issue with Enwood/WATEC of 1/31/96. M. Eason indicates he is pleased with WATEC's response to move off Enwood property, and that there are no problems between Beazer and Enwood. M. Eason indicates that Bryant is to vacate Enwood property by 2/12/96, and that Bryant has purchased property bordering Beazer property, but currently has access only by Beazer road. Bryant does not have permission to use Beazer road and has not spoken to Beazer. B. Fisher indicates that Wake county has a law which states that a

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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|---|---|
| **Field Representative:** | **Date:** 2/7/96 |

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 2/7/96 |
| Day of Week | Wednesday |
| No. | 67 |
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# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

property owner cannot be landlocked. M. Eason indicates that Bryant could access from town property or from another property owner, but will use Beazer's road until Beazer says they cannot. B.Fisher asks J. Gunn if WATEC can dispose of (cut up and chip) felled trees near end of rail spur on Beazer property. J. Gunn indicates WATEC will dispose of trees when Fire Pond dam is graded. J. Gunn suggests that Beazer consider scrapping railcar for salvage value. Salvage value may offset disposal costs. J. Gunn indicates that NPDES effluent samples will be collected from both vessels during each sampling event, with the sample from vessel 1 having priority for analytical testing. If the sample from vessel 1 fails effluent criteria, the sample from vessel 2 will be analyzed.

1330 J. Gunn offers to manifest and dispose of diesel from pumphouse tank currently in drums on decon pad for Beazer. B. Fisher indicates that EPA generator no. can be found on manifests given to BG for carbon rolloffs. J. Gunn to provide Beazer with copies of paperwork for diesel disposal.

1400 John Funk (Rust) leaves message that he will be back in Raleigh 2/12/96 and will get revised schedule for groundwater treatment system to CRC that week. J. Funk to talk to INCO to check scheduled delivery date on treatment building and to talk with BG concerning discharge and water line access issues.

1430 B. Fisher leaves site.

1600 BG receives letter from J. Gunn indicating that process material will become saturated and unable to work, and WATEC considering plastic sheeting to cover placed fill in inclement weather (see attached). J. Gunn indicates that TGC and WATEC may split cost of plastic sheeting.

1700 WATEC leaves site for the day.

1715 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |
| **Field Representative:** | | **Date:** 2/7/96 |

CUMMINGS
RITER
CONSULTANTS, INC.

February 7, 1996
Project No. 93145.30/55

Mr. Joseph Gunn
Waste Abatement Technology, L.P.
1300 Williams Drive, Suite B
Marietta, GA 30066

**RE: REVIEW OF GEOTECHNICAL TEST DATA - PROPOSED BACKFILL**
**KOPPERS, INC. SUPERFUND SITE • MORRISVILLE, NORTH CAROLINA**

Dear Mr. Gunn:

We have reviewed your geotechnical test data for the proposed fill material for use as backfill for the Fire Pond and Medlin Pond at the Kopper's NPL site in Morrisville, North Carolina.

The test results are consistent with the project specifications for backfill for the completed project and therefore material of this type may be used should Waste Abatement Technology, L.P. (WATEC) choose to do so. The material does not meet the specification requirements for top soil based on particle size grater than one inch and organic content less than 1 percent.

Please note, however, that WATEC has recently recommended "free draining" material to be used as backfill during the current wet conditions. The geotechnical test data do not confirm that the material is "free draining." In addition, the fines content (approximately 15 percent) may be sufficiently high to cause placement and workability problems and inefficiencies in the anticipated wet conditions.

The possible adverse economic and schedule risks associated with the use of this material in wet conditions would be entirely WATEC's responsibility.

Sincerely,
***Cummings/Riter Consultants, Inc.***

Bruce Geno
**Sr. Project Engineer**

PFO/BG/cmt

pc: Mr. James Cook - Beazer East, Inc.
✓ Mr. Patrick O'Hara - Cummings/Riter
Mr. William Smith - Cummings/Riter

123/145

339 Haymaker Road • Parkway Building • Suite 201 • Monroeville, PA 15146
(412) 373-5240 • FAX (412) 373-5242
Regional Office • 258 Chapman Road • Suite 202 • Newark, DE 19702 • (302) 731-9668 • FAX (302) 731-9609

CUMMINGS
RITER
CONSULTANTS, INC.

February 7, 1996
Project No. 93145.30/55

Mr. Joseph Gunn
Waste Abatement Technology, L.P.
1300 Williams Drive, Suite B
Marietta, GA 30066

**RE: REVIEW OF GEOTECHNICAL TEST DATA - PROPOSED BACKFILL**
**KOPPERS, INC. SUPERFUND SITE - MORRISVILLE, NORTH CAROLINA**

Dear Mr. Gunn:

We have reviewed your geotechnical test data for the proposed fill material for use as backfill for the Fire Pond and Medlin Pond at the Kopper's NPL site in Morrisville, North Carolina.

The test results are consistent with the project specifications for backfill for the completed project and therefore material of this type may be used should Waste Abatement Technology, L.P. (WATEC) choose to do so. The material does not meet the specification requirements for top soil based on particle size grater than one inch and organic content less than 1 percent.

Please note, however, that WATEC has recently recommended "free draining" material to be used as backfill during the current wet conditions. The geotechnical test data do not confirm that the material is "free draining." In addition, the fines content (approximately 15 percent) may be sufficiently high to cause placement and workability problems and inefficiencies in the anticipated wet conditions.

The possible adverse economic and schedule risks associated with the use of this material in wet conditions would be entirely WATEC's responsibility.

Sincerely,
*Cummings/Riter Consultants, Inc.*

Bruce Geno
Sr. Project Engineer

PFO/BG/cmt

pc: Mr. James Cook - Beazer East, Inc.
Mr. Patrick O'Hara - Cummings/Riter
Mr. William Smith - Cummings/Riter

123/145

339 Haymaker Road • Parkway Building • Suite 201 • Monroeville, PA 15146
(412) 373-5240 • FAX (412) 373-5242
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CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 2/8/96 |
| Day of Week | Thursday |
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# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0900 BG arrives on site. WATEC is piping in pre and post bag filter assemblies. A set of 3 parallel 10 micron filters will be added after the existing set of 3 parallel 50 micron filters. In addition, a set of 3 parallel 1 micron filters will be added after the carbon. WATEC will also have to reconnect the piping on the Medlin side of McCrimmon Rd. which was moved for access for the tub grinder.

1000 BG leaves message with Tracy of Envirochem to try to schedule delivery of (4) rolloffs containing spent carbon from the site to Pinewood, SC. BG prepares letter to J. Funk (Rust) addressing comments on Rust's HASP and Construction Operations Plan for soil excavation.

1100 J. Gunn (WATEC) indicates that 3 of the 6-in. ball valves on the treatment system froze and will need to be replaced. New valves will be ordered for delivery 2/9/96.

1500 J. Cook (Beazer) calls BG to ask if there were any ramifications from WATEC over letter sent by CRC on 2/7/96 regarding evaluation of geotechnical results for processed fill. BG indicates that WATEC has responded in a letter faxed to J. Cook 2/7/96 indicating that WATEC is evaluating plastic materials to place over the fill in inclement weather to protect the fill, until the precipitation passes and work can resume. J. Cook indicates that he should make sure the letter for the fill change order drafted 2/2/96 by WATEC is finalized. J. Cook asks if the fill has already been purchased. BG indicates that the fill has not been purchased, but that the subcontracts are lined up for fill delivery beginning 2/12/96. J. Cook indicates he was under the impression that the fill had already been purchased. J. Cook asks about the groundwater monitoring proposal by CRC. BG indicates that B. Smith has mentioned it, but BG indicates he does not know what the status of the proposal is. J. Cook to call B. Smith.

1630 WATEC leaves site for the day.

1700 BG leaves site for the day.

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| **Pay Quantities:**<br>WATEC: Joe Gunn (p. m.)<br>John Cutlip (s.m.)<br>Dan Kitchen (tech.)<br>Terry Hall (foreman)<br>Dan Wise (tech.) | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.* sunny, high 40's<br>*p.m.* sunny, mid 50's | **Health and Safety PPE:**<br>steel-toed boots, safety glasses | **Air Monitoring Results:**<br>None |

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| **Field Representative:** [illegible] | **Date:** 2/8/96 |

CUMMINGS RITER CONSULTANTS, INC.

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| Date | 2/9/96 |
| Day of Week | Friday |
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# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0830 BG arrives on site. WATEC is moving 3-in. pump to the south end of the Fire Pond for treatment system intake. Triangle Grading Contractors (TGC) has mobilized Kimatsu track excavator to breach southeast corner of the Fire Pond for fill delivery from McCrimmon Rd. commencing 2/12/96. Trees removed for access will be temporarily stockpiled on the Fire Pond dam.

0900 BG leaves message with Tracy of Envirochem to call back to schedule pick up of rolloffs for delivery to Pinewood, SC. BG works on compiling analytical results for fill testing.

1000 J. Gunn informs BG that the boom truck to be used to reload the carbon in the carbon vessels is behind schedule and will not arrive on site until early p.m.

1300 J. Gunn informs BG that the boom truck is still behind schedule and should arrive on site at approx. 1500. J. Gunn also informs BG that fittings to repair treatment system will not be delivered until 2/10/96, due to shipper error in zip code. WATEC will restage carbon next to treatment plant in preparation for boom truck. J. Gunn indicates that material encountered while constructing the entrance from McCrimmon Rd. at southeast corner of Fire Pond is clay. J. Gunn indicates WATEC to place grid and cover with No. 67 stone for entrance. J. Gunn indicates it will be very important to have a stable road base for truck traffic. BG asks J. Gunn if WATEC is planning on repairing entrance to site from Church St. The entrance is very muddy with deep ruts and slippery. Delivery drivers have complained. J. Gunn indicates that he has asked TGC to regrade the entrance and bring the surface down to the hard subbase (the original road surface prior to placement of processed fill).

1500 Pat O'Hara calls BG to discuss status of letter between WATEC and Beazer and schedule. BG indicates that WATEC has decided to use the process fill as planned, even though WATEC agrees with CRC as indicated in letter from J. Gunn (2/7/96) that the processed fill is not free draining and therefore does not meet their own requirements. BG explains that J. Gunn has presented costs of pea gravel to B. Fisher (Beazer), which looks to be about twice as expensive as processed fill. WATEC will place plastic on inclement weather days to protect the placed fill from precipitation

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| **Pay Quantities:**<br>WATEC: Joe Gunn (p. m.)<br>John Cutlip (a.m.)<br>Dan Kitchen (tech.)<br>Terry Hall (foreman)<br>Dan Wise (tech.) | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.* sunny, low 50's<br>*p.m.* sunny, mid 60's | **Health and Safety PPE:**<br>steel-toed boots, safety glasses | **Air Monitoring Results:**<br>None |
| **Field Representative:** | | **Date:** 2/9/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 2/9/96 |
| Day of Week | Friday |
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# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

and therefore avoid saturation. P. O'Hara indicates that Beazer is not interested in WATEC costs to purchase plastic and keep the fill covered. If they so choose to incorporate that as a contingency for using non-free draining fill, it's one way to try to manage their risk of using the material. BG points out that this would mean that they cannot work the fill on rainy days. P. O'Hara agrees that the only type of fill which could be used during rain would be a truly free-draining fill. WATEC has accepted the risk of using the processed fill and will therefore have to use more care in procedures used to place the fill. Anyone could fill the pond with pea gravel. Placement procedures would be relatively simple. There is a balance between cost of fill and cost of equipment and labor to place the fill. An expensive material like pea gravel would be easy to place, while a non-free draining material, such as the processed fill, will require more management and care. P. O'Hara believes CRC has taken appropriate steps to protect Beazer's interest. BG to follow up on letter from WATEC to Beazer to see if letter for fill change order has been finalized. BG indicates that WATEC is to begin loading carbon vessels with carbon presently, and hopes to have treatment system operating 2/10/96.

1530 BG observes placement of processed fill material in newly constructed entrance at southeast corner of Fire Pond for fill placement in Fire Pond beginning 2/12/96. J. Cutlip indicates that the boom truck has been delayed twice and is unsure that the vessels will be reloaded today. More likely that the vessels will be reloaded 2/10/96. Boom truck supplier to call 2/10/96 to confirm boom truck schedule.

1430 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 2/9/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 2/12/96 |
| Day of Week | Monday |
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# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0810 BG arrives on site. Triangle Grading Contractors (TGC) is using John Deere 650 G LGP dozer to grade road to remove wet processed fill material from road and smooth out ruts. WATEC is beginning to place grid at the southeast corner of the Fire Pond where access has been constructed from McCrimmon Rd.

0900 BG talks to J. Gunn. J. Gunn indicates that Mike Eason from Enwood Structures may be giving Beazer a call to complain that WATEC has again been on Enwood Structures property. J. Gunn indicates that his men were using a backhoe and the service (pick-up) truck during operations to refill the carbon vessels 2/10/96. M. Eason saw the tracks of the backhoe and truck and came over to site trailer and complained to J. Gunn that he has tried to be cooperative with WATEC, but that WATEC has continued to conduct their operations on Enwood property. According to J. Gunn, M. Eason will be consulting with Enwood's legal staff and samples will be collected by an environmental firm from the parking area to determine if WATEC has impacted Enwood Structures property. J. Gunn indicated to M. Eason that if Enwood were to obtain samples that WATEC would want to split the samples. J. Gunn indicates that M. Eason stated he would be calling Thomas Hewitt (Enwood's corporate owner) for Enwood to construct a fence between Enwood Structures property and Beazer property. J. Gunn indicates that WATEC moved a couple of the barriers to gain access to Enwood's property, but that he was under the understanding that it would be acceptable to Enwood for service trucks (pickups and delivery trucks) to access Enwood property, therefore it would be acceptable for WATEC to use backhoe in the area. J. Gunn indicates that the barriers were put back in place and the caution tape restrung, and all WATEC employees were ordered to stay off Enwood property. J. Gunn indicates that Enwood is also upset with TGC for using water from Enwood's fire protection system to clean trucks on Enwood's property. J. Gunn told M. Eason that that issue is between he and TGC. J. Gunn indicates that afterwards he thought about the fencing that WATEC has removed from the south edge of the Fire Pond which could be erected along the property line by WATEC to save Enwood the expense.

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| **Pay Quantities:**<br>WATEC: Joe Gunn (p. m.)<br>John Cutlip (s.m.)<br>Dan Kitchen (tech.)<br>Scott Embry (tech.)<br>Dan Wise (tech.) | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.* sunny, high 30's<br>*p.m.* sunny, mid 40's | **Health and Safety PPE:**<br>steel-toed boots, safety glasses | **Air Monitoring Results:**<br>None |

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| **Field Representative:** [signature] | **Date:** 2/12/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 2/12/96 |
| Day of Week | Monday |
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# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

J. Gunn indicates that the water treatment plant is not running because several of the fittings scheduled for delivery 2/10/96 did not arrive. J. Gunn indicates that WATEC should be receiving the parts today, and after receipt, will take approx. 4 hours to install. J. Gunn indicates that water in drainline through the culvert may be frozen and need to be replaced. J. Gunn indicates that TGC to begin delivery of fill from Wake Stone quarry at noon. BG asks J. Gunn if stone was placed off of McCrimmon Rd. access area or if fill was placed for entire construction area entrance. J. Gunn indicates that processed fill was placed, but TGC is responsible for keeping road clear of tracked soil. J. Gunn informs BG that he has asked TGC to make sure to keep road surface clean, but that it may be wise to remind him on a daily basis. BG informs J. Gunn that BG will ask WATEC to keep road clean, and will not go to TGC. BG asks J. Gunn to make sure WATEC does not go onto Enwood Structures property.

0915 BG calls B. Smith to inform B. Smith that the treatment system is not yet operational, and that WATEC is waiting on additional PVC fittings. Access to southeast corner of the Fire Pond has been constructed and fill delivery scheduled to begin at noon. BG informs B. Smith that J. Gunn has indicated that Enwood Structures is upset with WATEC again for encroaching on Enwood property. BG indicates that Beazer may be getting call from Enwood's legal counsel and Enwood is considering confirmatory sampling of the area. B. Smith instructs BG to look at the area and survey where the tresspassing occured and the extent of the area tresspassed before calling J. Cook of Beazer to inform him of the situation.

0930 WATEC receives UPS delivery of PVC fittings.

1000 BG calls J. Cook to inform J. Cook that Beazer may be receiving call from Enwood's legal counsel threatening suit against WATEC, the need for confirmatory sampling, and Enwood's consideration of a fence along Beazer/Enwood property line to keep WATEC off the property. J. Cook indicates that the letter for change order for more fill is close to final and should be finalized today. WATEC insisted on removal of the phrase "free-draining" in reference to WATEC's choice of fill and

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 2/12/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 2/12/96 |
| Day of Week | Monday |
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# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

instead described it as granular fill. The letter also makes it impossible for WATEC to claim change order based on weather delays. J. Cook indicates that BG should call J.Cook if TGC and WATEC do not begin fill placement as planned. J. Gunn had indicated to J. Cook 2/8/96 after receipt of letter from CRC that no fill would be placed until J. Gunn had instruction from WATEC to do so. J. Cook talked to B. Creedon of WATEC who indicated that WATEC would begin placing the fill if Beazer would agree that the fill is acceptable. J. Cook reiterated Beazer's position that the fill meets the specifications and is therefore acceptable, but the fill may not be manageable in poor weather conditions, and that WATEC is responsible for any delays in schedule should poor weather conditions occur. WATEC has decided to take that risk.

1130 BG receives call from J. Cook and Beazer who indicate that Beazer has received a call from Enwood Structures indicating that legal action will be taken against WATEC. B. Fisher and J. Cook ask what action J. Gunn has taken to appease Enwood. BG indicates that J. Gunn has replaced the barriers and caution tape, and has instructed all WATEC employees to stay off of Enwood Structure's property. B. Fisher requests that BG locate J. Gunn and call them back.

1140 BG and J.Gunn call B. Fisher and J. Cook. B. Fisher explains that he received a call from M. Eason indicating that he will be informing Mr. Thomas Hewitt, the corporate owner of Enwood, that WATEC has trespassed onto Enwood Structures property after warnings to stay off, and that he will request sampling of parking area to determine if WATEC has impacted the area. B. Fisher asked M. Eason to hold off on phone call until B. Fisher has a chance to speak to J. Gunn, and that that is the purpose of the phone call. B. Fisher asks J. Gunn if there is anything J. Gunn can do to appease M. Eason. J. Gunn indicates that there are two things that he can do: (1) offer to erect chain-link fence (2) offer to collect a couple of samples and split with Enwood and Beazer/CRC to confirm that area has not been impacted. J. Gunn indicates that even if contaminants are detected, that it would be impossible to prove that the contaminants are from WATEC operations. J. Gunn

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 2/12/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 2/12/96 |
| Day of Week | Monday |
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# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

indicates that the little carbon which did spill during carbon change-out activities was not enough to fill a 5-gallon bucket, and was scraped up with the backhoe bucket and put into a rolloff box. The clean-up was witnessed by BG, and then $3,400 worth of stone was placed over Enwood's parking area at M. Eason's direction. B. Fisher indicates that WATEC may have to do that again, but that J. Gunn should do whatever he can to prevent M. Eason from calling T. Hewitt. J. Gunn to talk to M. Eason and call Beazer back.

1200 J. Gunn informs BG that he has tried to locate M. Eason and has left a message with his secretary, and will try again after lunch.

1310 J. Gunn informs BG that he has spoken with M. Eason and M. Eason indicated he would like WATEC to regrade and reseed the approx. 30 ft. by 50 ft. grassed area that was disturbed by WATEC's backhoe. J. Gunn indicated to M. Eason that WATEC promises to restore the area and M. Eason feels better about the situation. M. Eason has indicated that T. Hewitt may be on site 2/13/96 and may have additional requirements. M. Eason will think about other measures WATEC might take to improve the relationship and will let WATEC know if there are any such measures. BG informs J. Gunn that Wake Co. E&S controls require construction access to have 50-ft by 20-ft by 6-in. gravel pad (No. 5 or 57 washed stone). BG provides copy of detail from E&S permit application guidance document for Wake Co. for temp. construction access. J. Gunn indicates he will provide the detail to TGC. BG asks if J. Gunn could ensure that the area adjacent to the soil excavation area drains by constructing a short ditch from excavation area 1 to the diversion ditch. J. Gunn informs BG that that task is low priority at the moment.

1345 TGC begins fill delivery and placement at southeast corner of Fire Pond. WATEC is still connecting prefilters for treatment plant.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 2/12/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 2/12/96 |
| Day of Week | Monday |
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# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

1400 TGC delivers No. 67 stone to southeast corner of Fire Pond for temporary access. Rodney Jones, new WATEC site manager, arrives on site.

1430 BG calls J. Cook to tell him that relations between Enwood Structures and WATEC may have improved somewhat, but that T. Hewitt may visit Enwood Structures tomorrow so that status may change. J. Cook indicates he has not heard from WATEC with regard to Beazer letter for WATEC fill change order. The letter will be from Beazer to WATEC. BG indicates that WATEC is delivering fill to site.

1700 J. Gunn indicates that WATEC to begin pumping 2/13/96 p.m. WATEC has approx. one more hour of work piping in system before doing systems check first thing in 2/13/96 a.m. J. Gunn indicates that WATEC will pump on 24-hour basis. J. Gunn indicates that WATEC would rather not do systems check this evening, as temperatures are projected to fall below freezing. J. Gunn indicates that WATEC has regraded the area on Enwood Structures property which was disturbed by WATEC 2/10/96 with the backhoe while emptying drums of spent filter bags into rolloff. J. Gunn has informed M. Eason that there was no spill of any waste by WATEC on Enwood Structures property. J. Gunn also states that he has informed M Eason that even if there was a spill, there was no hazardous material. J. Gunn indicates that he believes he has appeased M. Eason, and has informed all WATEC employees that the first man to cross the property boundary will be terminated.

1750 BG leaves site for the day.

1800 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 2/12/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 2/13/96 |
| Day of Week | Tuesday |
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# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0815 BG arrives on site. Triangle Grading Contractors (TGC) is delivering processed fill to southeast corner of the Fire Pond and placing with John Deere 650 G LGP dozer. WATEC has two crews, one unrolling and placing geogrid/geotextile in the Fire Pond, and the other working to get the piping completed on the surface water treatment system. TGC is using 4 trucks, 2 tandem and 2 trailer dumps, to deliver fill.

0930 WATEC continues to work on piping of surface water treatment system. TGC continues to grade a strip, about 25 ft. wide, along the eastern side of the Fire Pond, from south to north.

1030 BG talks to J. Gunn and asks for copies of Daily QC Reports which were missing from log book. BG also requests that WATEC unblock the diversion ditch near the surface water treatment plant, install ditch to drain the parking area near proposed Excavation Area 1 and to keep track of next sampling event for geotechnical and analytical laboratory work for processed fill.

1400 WATEC discovers that 3-in. gasoline pump for surface water treatment intake is cracked from freezing. WATEC to have rental company deliver replacement pump.

1430 WATEC uses backhoe to clean diversion ditches of fill placed for access during carbon changeout.

1500 B.Smith calls BG to discuss relations between WATEC and Enwood Structures, groundwater treatment installation schedule with Rust, and WATEC schedule. BG indicates that WATEC still does not have treatment system running. WATEC delivering fill to east side of Fire Pond. BG to call John Funk (Rust) for groundwater treatment installation schedule. BG indicates that J. Gunn has informed both BG and M. Eason that nothing was spilled by WATEC on Enwood Structures property. Enwood Structures has not complained today to WATEC. BG explains that he believes Enwood Structures was dissatisfied with the state of thier grassy area next to parking lot which was disturbed by WATEC backhoe while moving drums of spent filter bags to rolloff staged on Beazer property. The backhoe had torn up the grass, but WATEC has regraded the area to smooth out the ruts.

1530 BG talks to J. Funk to discuss revised groundwater treatment system installation schedule. J. Funk indicates Beazer should be close to agreement with Norfolk Southern Railroad for access, and that

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| **Pay Quantities:**<br>WATEC: Joe Gunn (p. m.)<br>John Cutlip (tech.)<br>Terry Hall (foreman)<br>Scott Embry (tech.)<br>Rodney Jones (s.m..) | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.* sunny, high 30's<br>*p.m.* sunny, mid 40's | **Health and Safety PPE:**<br>steel-toed boots, safety glasses | **Air Monitoring Results:**<br>None |

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| **Field Representative:** Bruce Geno | **Date:** 2/13/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 2/13/96 |
| Day of Week | Tuesday |
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# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

access is needed for installation of the well vault and trench from extraction well to treatment building. BG indicates that treatment system will outlet to Fire Pond, but cannot be constructed until the Fire Pond is completely backfilled. WATEC indicates that Fire Pond backfilling to be completed first week of March. BG indicates that water line will be installed within the area of the former Fire Pond along the eastern side, in the fill placed by WATEC. WATEC is now placing fill along this area and should be done placing the fill along that side week of 2/19/96. J. Funk indicates he will modify CQCP, HASP, and Operations Plan and submit 12 copies to BG of each for distribution. J. Funk to modify schedule for installation of groundwater treatment system based on start date of 2/26/96. BG to fax CRC letter dated approx. 1/29/96 with comments on CQCP, HASP and Operations Plan to J. Funk.

1745 BG leaves site for the day. WATEC has conducted treatment system start-up and detected leaks at several connections. WATEC will try to repair leaks and have system running through the night.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 2/13/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 2/14/96 |
| Day of Week | Wednesday |
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# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0830 BG arrives on site. Wilmington office has faxed letter to BG addressed to John Funk (Rust) with comments on groundwater HASP, CQCP, and Field Operations Plan dated 1/29/96 which may not have been sent to J. Funk. BG faxes letter to J. Funk. Triangle Grading Contractors (TGC) has mobilized Cat D4H XL dozer to site and continues to deliver fill to the southeast corner of Fire Pond from McCrimmon Rd. TGC is using D4H dozer to push fill to smaller John Deere 650 G LGP dozer, which then places fill over geogrid in approx. 2 to 2.5 ft lift. TGC is delivering fill with 1 tandem and 2 trailer dumps. WATEC pumped approx. 150,000 gal. 2/13/96 at rate of approx. 150 gpm. WATEC reports that 50 and 10 micron filters are being changed out almost hourly to maximize flow rate. 50 and 10 micron filter bags on inlet side of carbon appear discolored brown with silt. 1 micron filters on outlet side appear nearly clean.

1000 BG talks to J. Gunn. J. Gunn informs BG that WATEC will cover placed fill with poly sheeting before rain expected tonight. J. Gunn informs BG that TGC may use another tandem dump this afternoon since now have two dozers. J. Gunn states that a fissure developed between the existing grade at east side of the Fire Pond and the placed granular fill indicating that geogrid was pulling away from existing ground surface, so WATEC increased depth of fill in this area. J. Gunn indicates that sediments seem to have gotten firmer than when initially drained, making placement of the geogrid/geotextile easier. J. Gunn indicates that he is pleased with the way the granular fill places. J. Gunn indicates that WATEC would like to bridge the gap between the newly placed process fill and the formerly placed cohesive fill to allow trucks to make continuous loop around east side of Fire Pond, but the cohesive material along east side of Fire Pond is still too wet for trucks. BG indicates the cohesive material along the east side of Fire Pond appears to be drying the slowest. J. Gunn informs BG that water treatment sample will be collected today. .

1030 BG observes treatment system effluent discharging from 4-in. PVC pipe below south end of Medlin Pond is slightly cloudy (see photo).

1300 J. Gunn informs BG that Wake Stone Quarry may discontinue production of the processed fill currently being imported to the Fire Pond. WATEC should know whether production of the

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| **Pay Quantities:**<br>WATEC: Joe Gunn (p. m.)<br>John Cutlip (tech.)<br>Terry Hall (foreman)<br>Scott Embry (tech.)<br>Rodney Jones (s.m..) | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.* overcast, low 40's<br>*p.m.* overcast, mid 50's | **Health and Safety PPE:**<br>steel-toed boots, safety glasses, tyvek, nitrile gloves | **Air Monitoring Results:**<br>None |

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| **Field Representative:** [signature] | **Date:** 2/14/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 2/14/96 |
| Day of Week | Wednesday |
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# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

processed fill will continue within a couple of days. J. Gunn reports that Wake Stone is getting orders for rock (gravel) now that construction season is approaching, and may switch to gravel processing. J. Gunn indicates that if WATEC were to stockpile on site as much of the processed material as TGC can haul before the supply runs out, there would be a $2/cy additional handling fee to handle the material twice. WATEC would request a change order to Beazer for $2/cy in addition to the $60,000 change order recently approved to import the processed fill material. J. Gunn indicates that he would like to place a call to J. Cook with Beazer to let Beazer know that the processed fill source is potentially running out.

1330 J. Gunn and BG conference call to J. Cook. J. Gunn informs J. Cook that the processed fill may be running out, as soon as next week. TGC is doing what they can to make claims on the material that is left in the quarry, but the quarry may stop processing. If the quarry continues to process the fill for another 30 days, which the quarry has indicated is possible, WATEC would probably be able to finish filling of the Fire Pond. TGC has imported about 1500 cy since midday 2/12/96. TGC can import approx. 700 cy/day at the current trucking rate. J. Cook asks if WATEC can push the cohesive material which is already stockpiled, to shave it down and help fill the Fire Pond. J. Gunn indicates that shaving of the material already on site is priority, but at the moment the cohesive material is still too wet. J. Gunn informs J. Cook that if TGC were to stockpile as much of the processed fill as possible, it would require handling the material twice, and would cost $2/cy. J. Gunn informs J. Cook that the $2/cy would be result in a change order to Beazer. J. Cook asks how many additional cy WATEC needs to finish filling Fire Pond to the point where WATEC will no longer have to pump storm water. J. Gunn indicates that he estimates between total cy of about 6,500 to 8,000 to close Fire Pond. J. Gunn to keep J. Cook aprised of fill availability.

1400 BG calls J. Cook to clarify understanding of letter for change order for additional fill which specifies no more change orders for change conditions identified to date. J. Cook indicates that he is sure the way Beazer's contract with WATEC is written that if Beazer had fought, WATEC

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 2/14/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 2/14/96 |
| Day of Week | Wednesday |
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## FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

would be stuck with the lump sum amount and there would be no change order for additional fill. J. Cook indicates that a lump sum is not the same as a time and materials contract, and J. Gunn needs to understand that. J. Cook indicates that the fill cost to WATEC should not necessarily be passed on to Beazer, because if WATEC were to identify a cheaper source, it is very unlikely that WATEC would then credit Beazer. BG indicates that WATEC did identify Wake Stone Quarry as the borrow source for the E&S Plan which was prepared before fill was delivered to site, and before any geotechnical samples were collected. It is not possible, therefore, for WATEC to say that the cohesive material they chose as borrow was the source assumed by WATEC during bid preparation. J. Cook agrees that is the purpose of a lump sum contract, which can benifit either the contractor or Beazer. But J. Cook indicates it would have cost more than $60,000 to fight the issue, so cheaper to pay for additional fill. J. Cook to call Bill Creedon (WATEC) to see if Beazer has agreed to letter from Beazer regarding change order for additional fill and language regarding completion of project. J. Cook indicates that if WATEC asks for change order to stockpile and handle the processed fill material twice, it may be cheaper to pay the $13,000 than to argue. J. Cooks asks about WATEC schedule to finish filling of the Fire Pond. Latest schedule from WATEC shows 3 weeks to finish Fire Pond backfilling, assuming favorable weather conditions. J. Cook recalls that schedule submitted at the end of November indicated 2 weeks to fill Fire Pond. J. Cook asks why original schedule assumed two weeks for 0 to 100 percent backfilling, whereas new schedule shows 3 weeks for 40 to 100 percent Fire Pond backfilling. BG indicates that he has asked J. Gunn the reason for the discrepancy, but did not get an anwer. BG believes the discrepancy is due to a miscalculation on J. Gunn's part. J. Cook recalls that J. Gunn had informed J. Cook that WATEC normally has a rigorous bid review process, but J. Gunn circumvented that process somewhat to get the job because it was in his backyard. J. Cook indicates that the circumvention may have contributed to the scheduling error. BG indicates that Rust is to have groundwater schedule to Beazer by 2/16/96.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 2/14/96 |

CUMMINGS RITER CONSULTANTS, INC.

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| Date | 2/14/96 |
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# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

1445 J. Gunn leaves site for the day. BG places call to Tracy of Envirochem to check on schedule of delivery of rolloffs containing carbon to Pinewood, SC. Tracy indicates that a truck is on its way to pick up first rolloff for delivery to Pinewood 2/15/96. BG indicates that he has work order no.s already on manifests. Tracy indicates he has also obtained Pinewood work order nos., but will use nos. already on manifest.

1515 Envirochem truck arrives on site to take rolloff. BG has driver (Rick Macon) sign manifest. BG informs driver that BG has talked with Tracy, and Tracy agreed to use nos. already on manifest. Driver makes call to Envirochem and indicates he will cross out Pinewood nos. put on manifest by Beazer, and use Pinewood nos. from Tracy.

1610 R. Macon tries to load first of four rolloffs. As R. Macon is loading rolloff, BG notices liquid dripping from the rolloff. BG asks the driver to stop. R. Macon pulls tarp off of rolloff and BG observes free liquid on both sides of plastic liner. Plastic liner is breached. BG has WATEC place railroad tie under back end of box and R. Macon sets rolloff back on ground with rolloff tilted toward front to drain water away from rolloff tailgate.

1645 BG leaves message for Bob Fisher (Beazer) indicating that Envirochem attempted to take one of the rolloffs off site, but that the rolloff contained free liquid. BG explains that water has breached the plastic liner, and visible free liquid observed on both sides of liner.

1650 Envirochem driver leaves site with the understanding that he will return 2/15/96 to lift other rolloffs to see if they also contain free liquid. WATEC to have TGC deliver kiln dust to place in rear of rolloffs to try to prevent leakage during transport.

1700 BG talks to Pat O'Hara to explain problem with leaking rolloff. P. O'Hara suggests placing back end of rolloff onto decon pad and letting free liquid drain onto decon pad. BG to make suggestion to WATEC.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 2/14/96 |

CUMMINGS RITER CONSULTANTS, INC.

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| Date | 2/14/96 |
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# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

1720 BG talks to John Cutlip (WATEC) and explains that as an option to trying to stabilize the carbon in the rolloff or trying to seal the end gate with kiln dust, WATEC may want to consider placing end of rolloff over decon pad to let drain, and pump water from decon pad into tank T1.

1745 BG leaves site for the day. WATEC is placing poly sheeting over processed fill in Fire Pond. WATEC to pump 24-hours.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 2/14/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 2/15/96 |
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# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0800 BG arrives on site. WATEC is pumping water from Fire Pond at approx. 150 gpm. Flow totalizer reading about 12.7 million gallons. Water in Fire Pond has visibly dropped since 2/14/96, exposing approx. 20 feet more of sediment around perimeter of water. Triangle Grading is delivering processed fill to the southeast corner of the Fire Pond. WATEC has an operator on the John Deere 650 G LGP and Triangle Grading has another operator on the Cat D4H XL. The Cat dozer is pushing fill from the trucks to approx. 50 ft. from working face, and John Deere being used to push fill on grid.

0810 BG places call to Bob Fisher (Beazer) to talk about rolloffs. BG acknowledges B. Fisher's phone message from 2/14/96 with concerns regarding inability to stabilize free liquids without repacking carbon into new rolloffs. BG to recommend to WATEC to order 2 more rolloffs for repacking of carbon. Once new rolloffs arrive, BG to make sure they are properly lined and kiln dust or portland cement placed in bottom of rolloff as before. Drained carbon on top of existing carbon can be placed in new rolloffs with backhoe. If free liquid is encountered, pump out to extent possible. Once saturated carbon on bottom of rolloff is encountered, WATEC to use stabilizer to stabilize saturated carbon by mixing stabilizer with backhoe/hand shovel in old rolloff, and transfer stabilized contents to new rolloff. B. Fisher indicates that Beazer will be billed by Envirochem for their efforts to help WATEC and for transportation. WATEC will then credit Beazer for Envirochem's invoice.

0820 BG speaks to Rodney Jones (WATEC) and explains Beazer's recommended and preferred method of handling of rolloffs. Rodney Jones indicates that WATEC would like to do what Beazer has recommended as a last resort, and would like to try to pump out free liquid and stabilized the rolloff contents in the rolloffs without removing the contents. BG indicates that WATEC is paying the bill, and as he understands it, WATEC can try other means to stabilize the rolloff contents. BG indicates that WATEC workers should be wearing overboots and nitrile gloves if they are working near sediment. BG indicates he has observed some workers without full PPE. R. Jones to make sure all workers are wearing proper PPE.

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| **Pay Quantities:**<br>WATEC: Joe Gunn (p. m.)<br>John Cutlip (tech.)<br>Terry Hall (foreman)<br>Scott Embry (tech.)<br>Rodney Jones (s.m.) | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.* sunny, high 40's<br>*p.m.* sunny, mid 70's | **Health and Safety PPE:**<br>steel-toed boots, safety glasses, tyvek, nitrile gloves | **Air Monitoring Results:**<br>None |
| **Field Representative:** | | **Date:** 2/15/96 |

CUMMINGS RITER CONSULTANTS, INC.

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| Date | 2/15/96 |
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# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0830 BG talks to Tracy of Envirochem to check on ramp truck. Tracy indicates truck to arrive within 1/2 hr. Ramp truck to be used to lift other rolloff boxes to determine if they are also leaking free liquids. Tracy indicates that Envirochem has additional rolloffs which could be delivered to Morrisville site.

0850 J. Gunn arrives on site. BG indicates that Envirochem was on site 2/14/96 to try to take rolloff but rolloff was leaking. BG indicates that B. Fisher would like Envirochem to mobilize a couple more rolloffs and WATEC to transfer contents of rolloffs to new rolloffs. J. Gunn indicates that he does not have labor available and would like to consider other options for repacking rolloffs.

0900 Rick Mason (Envirochem) arrives on site with ramp truck. R. Mason indicates that Envirochem has worked on leaking rolloff boxes before and there are at least two options: (1) shovel carbon away from end gate and pack the back end of the rolloff with portland cement to try to seal any free liquids from escaping (2) reload carbon into a new rolloff. R. Mason lifts the rolloff with the fiberglass lid and slight leakage observed. R. Mason indicates that this particular rolloff was designed to take free liquids, however, the tailgate seal has been replaced. J. Gunn to talk to Dave Miller (Envirochem) to schedule crew to stabilize rolloff contents.

1030 Rick Mason leaves site. BG calls John Funk (Rust) to see if J. Funk received letter with comments on HASP, COP, and CQAP. J. Funk indicates that he received comments and will make changes and reproduce 12 copies of each document for distribution by CRC. J. Funk indicates that schedule for groundwater treatment system will be faxed to BG 2/16/96.

1330 BG talks to J. Gunn. J. Gunn indicates that Wake Stone Quarry will be discontinuing process fill production as of 2/21/96. BG to inform Beazer. J. Gunn indicates that WATEC will have one operator working Sunday to work cohesive material placed at north end of Fire Pond, continuing to shave the fill. J. Gunn indicates that he did not collect water treatment sample 2/15/96, but expects to collect sample this p.m. J. Gunn also trying to locate additional dozer, as fill near southeast corner of the Fire Pond is getting too thick. WATEC is unsure how many trucks TGC has running

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 2/15/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 2/15/96 |
| Day of Week | Thursday |
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# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

today, but the dozers are having difficulty keeping up with fill now that working face is farther from dumping area (approx. 75 ft). J. Gunn indicates that WATEC will pump unil 17:00 2/16/96 and then discontinue pumping until week of 2/19/96. Drawdown sufficient to continue backfilling.

1340 BG receives phone call from Tracy with Envirochem concerning billing for rolloff project. BG indicates that Envirochem is to bill Beazer. Tracy indicates that Envirochem will need something in writing from Beazer, as the 3 man crew and backhoe will be add up. BG to call B. Fisher and have B. Fisher call Dave Milner with Envirochem.

1345 BG leaves message for B. Fisher to call.

1350 B. Fisher calls J. Gunn and explains his concern that rolloffs will leak, unless the contents are removed from each rolloff, and repacked into newly delivered rolloffs which are properly lined with plastic and kiln dust. J. Gunn agrees to do it B. Fisher's preferred way.

1430 B. Fisher calls BG to explain that J. Gunn has agreed to repack rolloffs as discussed this a.m. B. Fisher has talked with Dave Milner of Envirochem to explain his concerns, and D. Milner agreed that the risks in liability of a leaking rolloff are not worth taking. Envirochem will repack each rolloff using backhoe and hand shoveling to transfer carbon to new rolloffs. D. Milner to have an additional rolloff delivered today.

1530 Envirochem arrives on site with ramp truck and service truck with pallet of portland cement. Envirochem will prop up back end of two of the rolloffs so that water will run to the front end. Envirochem will then try to pump or bail free liquid from the rolloff. J. Gunn is very upset that Envirochem will be repacking each rolloff, without trying to prevent leakage by packing back of rolloff with portland cement or kiln dust. However, J. Gunn has told B. Fisher that rolloffs will be repacked.

1740 J. Gunn leaves site for the day.

1800 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 2/15/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 2/16/96 |
| Day of Week | Friday |
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# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0815 BG arrives on site. Triangle Grading Contractors and WATEC are not working in the pond due to rain. WATEC is not pumping and treating surface water, and is draining system. Pump totalizer reading 12.927 million gal.s. Bob Fisher (Beazer) has left voice mail for BG and Joe Gunn (WATEC) to conference call B. Fisher this a.m. BG not sure whether WATEC collected surface water treatment sample 2/15/96 as J. Gunn indicated WATEC would.

0830 Envirochem ramp truck arrives on site.

0835 BG leaves message for B. Fisher to call. J. Gunn has not yet arrived.

0840 Bob Fisher returns call. B. Fisher explains that whether or not all ramp trucks are unloaded and repacked will be a field decision based on the quantity of water encountered in the rolloffs. If WATEC and Envirochem believe that the free liquids can be stabilized without emptying the rolloffs, B. Fisher indicates he is not against it. If there is very little free liquid observed in a particular rolloff, it may be possible to shovel the carbon away from the tailgate to expose the tailgate and line the rear of the rolloff with kiln dust or portland cement. If there is abundant free liquid, then the only alternative is to repack the rolloff. BG mentions that Envirochem driver's have indicated that if they haul rolloffs in the rain, leaks would be undetectable. B. Fisher indicates that he is very much against shipping leaking rolloffs, rain or no rain. B. Fisher indicates that he was unaware that WATEC was subcontracting the rolloff work to Envirochem. BG explains that was the reason for the call 2/15/96 from BG to B. Fisher, to determine who was paying Envirochem. B. Fisher explains that he thought the invoice from Envirochem would be just for delivery of additional rolloffs and not repacking of rolloffs. BG explains that is why J. Gunn was very disturbed 2/15/96, because from J. Gunn's perspective, WATEC is getting the bill for work dictated by Beazer to Envirochem. B. Fisher asks BG if Envirochem has given WATEC an estimate to perform the work for WATEC. BG indicates that BG was of the understanding that B. Fisher had obtained a cost estimate from Envirochem for invoicing to Beazer. BG is of understanding that Envirochem has not given WATEC a quote. B. Fisher indicates that he cannot

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| **Pay Quantities:**<br>WATEC: Joe Gunn (p. m.)<br>John Cutlip (tech.)<br>Terry Hall (foreman)<br>Scott Embry (tech.)<br>Rodney Jones (s.m..) | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.* overcast, mid 30's, slt rain<br>*p.m.* overcast, high 30's, snow | **Health and Safety PPE:**<br>steel-toed boots, safety glasses, tyvek, nitrile gloves | **Air Monitoring Results:**<br>None |
| **Field Representative:** [signature] | | **Date:** 2/16/96 |

CUMMINGS RITER CONSULTANTS, INC.

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| Date | 2/16/96 |
| Day of Week | Friday |
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# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

beleive that J. Gunn would subcontract the work to Envirochem without a cost esimate from Envirochem. J. Gunn to call B. Fisher.

0845 Additional Envirochem operator arrives on site. J. Gunn arrives on site. J. Gunn places call to B. Fisher.

0900 Envirochem workers place call to Dave Miller (Envirochem) to discuss weather impact on rolloff repacking. BG agrees that weather is not appropriate for dewatering, as there is periodic sleet, rain, and snow. Envirochem workers to return 2/17/96 a.m. to begin repacking rolloffs. BG to call Dave Miller today to check with Envirochem schedule.

0910 J. Gunn speaks to Envirochem workers to explain that he is against draining water from the back of the rolloffs by opening the rolloff tailgate. BG asks Envirochem how they will get any free liquid which has accumulated in the front of the rolloffs out of the rolloff. Envirochem indicates that they will use a cyclone vacuum. BG asks J. Gunn if Envirochem should dump the free liquid onto the decon pad. J. Gunn agrees that contents of cyclone vacuum can be dumped onto decon pad, and will then be put into tank T1. J. Gunn asks BG if WATEC can use tank T3, as tank T1 is getting full. BG indicates he has no idea what was in tank T3, and that J. Gunn should ask Beazer. J. Gunn indicates that tank T3 has liquid in the bottom of the tank.

1300 BG asks Rodney Jones (WATEC) if surface water effluent sample was collected 2/15/96. R. Jones indicates that sample was not collected. R. Jones indicates that sample will be collected when pumping resumes.

1330 BG leaves site for the day. J. Gunn and R. Jones remain on site. BG to return 2/17/96 to observe rolloff repacking.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 2/16/96 |

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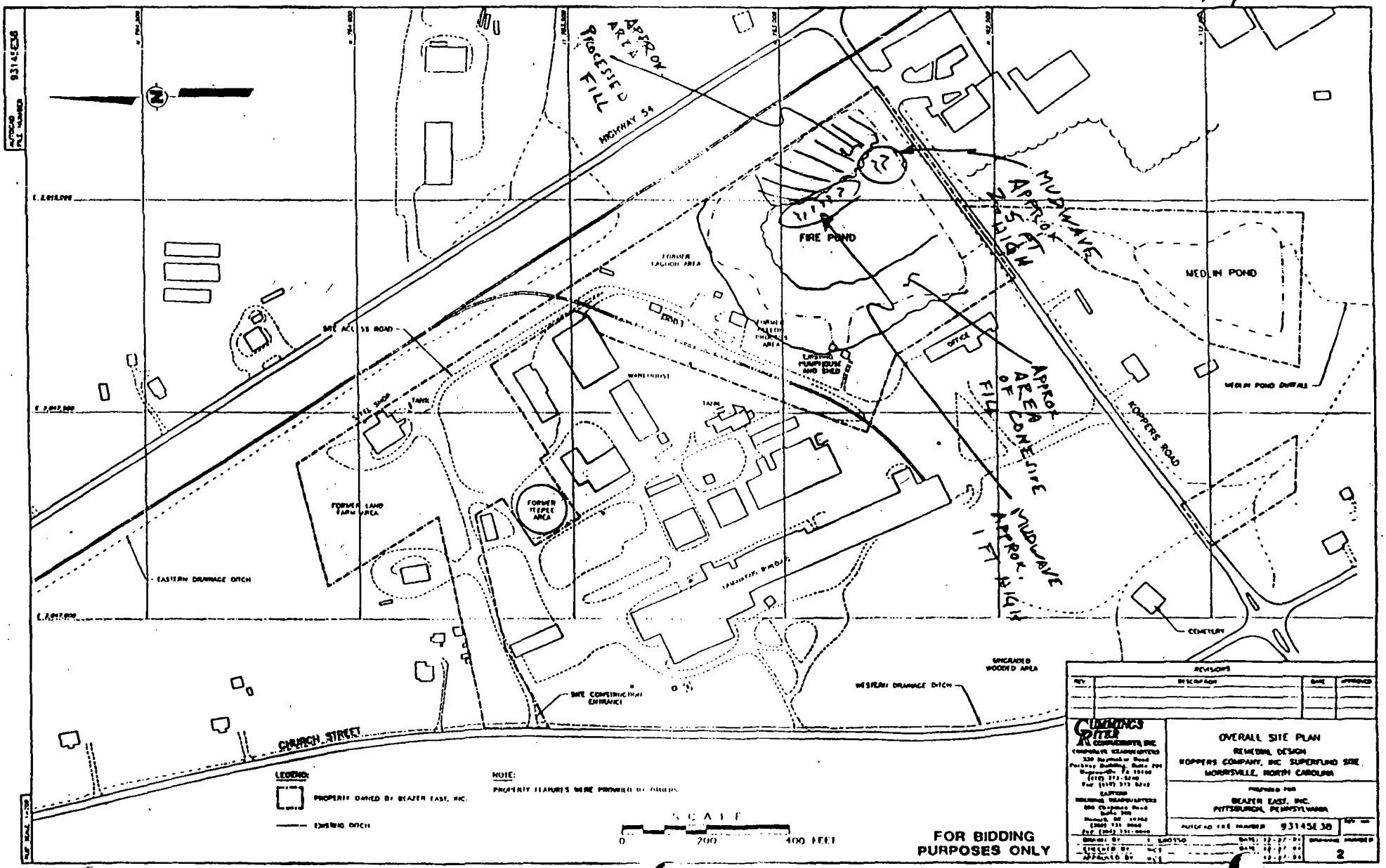
2/16/96



CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 2/19/96 |
| Day of Week | Monday |
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# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0815 BG arrives on site. WATEC is uncovering processed fill material covered with poly sheeting placed in Fire Pond.

0845 First Triangle Grading Contractors (TGC) truck delivery of processed fill arrives. TGC is using John Deere 650 G LGP dozer to place fill in Fire Pond. WATEC has pulled Terry Hall (WATEC) off of John Deere dozer, as WATEC is being charged for placement of material in Fire Pond by TGC. TGC has not provided operator to replace Terry Hall to keep two dozers (Cat D4H XL and John Deere 650 G LGP) operating. Terry Hall and Rodney Jones (WATEC) are preparing geotextile/geogrid composite. Dan Kitchen and John Cutlip (WATEC) are placing geotextile/geogrid in Fire Pond. BG talks to J. Gunn to clarify discrepancy between schedule submitted 11/28/95 and schedule submitted 2/6/96 for pond backfilling. J. Gunn prepares attached letter. J. Gunn indicates that WATEC to cover fill this evening as rain expected late tonight and all day 2/20/96.

0920 BG places call to B. Smith. BG to look into E&S controls for proposed regrading plan on McCrimmon Road side of Fire Pond dam. BG to approach B. Fisher about placing a geotextile separator and clean fill material over proposed soil excavation area 3 to promote drainage from the area until soil excavation operations begin. BG to be more stern with J. Gunn in enforcing agreement between Beazer and WATEC stipulating no more change orders. B. Smith concerned that WATEC may ask Beazer for more money if processed fill material runs out, which is contradictory to conditions documented in letter from Beazer to WATEC.

0945 TGC provides additional dozer operator to replace Terry Hall and is now operating Cat D4H XL dozer. J. Gunn indicates that B. Creedon (WATEC) will visit site 12/20/96 from Atlanta.

1100 Three Envrirochem workers arrive on site to begin repacking rolloffs. Workers have mobilized an additional pallet of portland cement, a compressor, an air-driven vacuum, a service truck, and backhoe. Envirochem has brought approx. 4,500 lbs. portland cement.

1200 Envirochem has removed 1-2/3 55-gallon drums of liquid from first rolloff using vacuum. Drums are moved by backhoe to decon pad.

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| **Pay Quantities:**<br>WATEC: Joe Gunn (p. m.)<br>John Cutlip (tech.)<br>Terry Hall (foreman)<br>Dan Kitchen (tech.)<br>Rodney Jones (s.m.) | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.* sunny, high 30's<br>*p.m.* overcast, low 50's | **Health and Safety PPE:**<br>steel-toed boots, safety glasses, tyvek, nitrile gloves | **Air Monitoring Results:**<br>None |

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| **Field Representative:** Bruce Geno | **Date:** 2/19/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 2/19/96 |
| Day of Week | Monday |
| No. | 75 |
| Sheet | 2 of 2 |

# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

1300 Envirochem has first of four rolloffs transferred. Used 500 lbs. portland cement to stabilize material near front of rolloff. Envirochem hopes to have all four rolloffs truckable today. J. Gunn instructs Envirochem not to rapack/transfer contents of rolloff with the fiberglass lid, but instead pump the water from near the front, push the carbon away from the tailgate, and place portland cement around the tailgate to seal the rolloff from leaking. J. Gunn believes this procedure may be sufficient for the rolloff staged along the access road which was the first rolloff from which free liquid was observed.

1300 Envirochem breaks for lunch.

1400 Envirochem returns from lunch.

1410 Envirochem begins to transfer contents of second rolloff into emptied rolloff.

1500 J. Gunn leaves site for the day. W. Thompson begins to shave cohesive fill material at northeast portion of pond using Cat D4H XL dozer.

1530 W. Thompson gets D4H dozer stuck at north end of Fire Pond while shaving cohesive material. W. Thompson may have been trying to move too much material with one pass of dozer.

1540 Envirochem completes transfer of contents of second rolloff. Envirochem used 10 bags portland cement to stabilize contents of second rolloff. Tailgate seams were lined with expanding foam, and portland cement placed around seams.

1545 Envirochem begins double lining of emptied rolloff and is awaiting welder to weld patch on side of rolloff where dozer blade cut a hole in the rolloff when moved from Enwood Structures property.

1600 Envirochem digs out front of one of the remaining rolloffs to allow water to drain to the cleared end of the rolloff for subsequent pumping.

1700 Envirochem leaves site for the day. Envirochem to pick up first rolloff 2/20/96 approx. 0700 a.m.

1710 WATEC finishes covering processed fill with poly sheeting and leaves site for the day.

1740 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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|---|---|
| **Field Representative:** | **Date:** 2/19/96 |

WATEC

**Waste Abatement Technology, L.P.**

1300 Williams Drive, Suite B
Marietta, Georgia 30066
(404) 427-1947, FAX (404) 427-1907

To: Bruce Geno
Oversight Engineer

From: Joe Gunn
Project Manager

Date: February 19, 1996

Subject: Fire Pond Backfill Schedule

Our original schedule presented shows the backfill operation for the Fire Pond to be completed in two weeks. This task has taken longer than two weeks for the following reasons:

- Under estimation of time to complete against available resources to perform the work (i.e. manpower, equipment availability, number of trucks hauling, etc...)

- Weather related problems which caused schedule delays in placement and movement of the fill on-site.

- The placement of fill material exceeds the two foot design in most areas; depth variances are attributable to pond sediment conditions and equipment access points. Final grading will cut high areas and maintain slope conditions for drainage off-site of storm water.

- Conditions in the pond bottom which required additional labor and materials to roll and place geogrids/felt over the pond bottom.

- Daily production is driven by the amount of fill hauled per day and the ability to place the fill per day. As we advance into the pond, it is requiring more time than anticipated to push fill material across the pond; WATEC had anticipated backing trucks over filled areas to reduce the amount of time required to place the material. WATEC also calculated the placement of fill at 1000cy per day in the original schedule.

Operations are proceeding on the Fire Pond. Process fill availability is being monitored at the quarry. Should this fill source become unavailable, WATEC will advise you of this change, and possible alternatives to complete the pond.

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 2/20/96 |
| Day of Week | Tuesday |
| No. | 76 |
| Sheet | 1 of 2 |

# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0830 BG arrives on site. Joe Gunn, Rodney Jones, and Bill Creedon (WATEC) are on site. J. Gunn indicates that Envirochem hauled away first of four rolloffs at approximately 0730. WATEC is not placing fill today due to rain. J. Gunn indicates that WATEC may resume pumping 2/21/96. Bill Creedon will be discussing project issues with J. Gunn and R. Jones.

1300 B. Creedon leaves site.

1430 BG talks to J. Gunn regarding project progress. Backfilling to resume 2/21/96. Triangle Grading Contractors has delivered approx. 3,000 of approx. 9,000 cy of processed fill planned for the Fire Pond. J. Gunn reports that quarry has indicated that production of processed fill material will cease 3/4/96. Presently, the quarry has stockpiled approx. 60,000 cy of processed fill material, and is processing 30 to 40 tons per hour on 24-hr basis. Quarry reports that as much as 10,000 tons per day are being removed from the quarry. J. Gunn indicates that if the processed fill material runs out before backfilling is complete, WATEC may be able to transition back to native fill if a dry source can be found. According to J. Gunn, stockpiled native borrow sources are available, just a matter of how wet the material is. J. Gunn to have Trigon provide depth of fill for newly place processed fill material. J. Gunn indicates that fill has been placed thicker than design of 2 ft. over geogrid. BG and J. Gunn agree that since the pond has been drained, sediments are much stronger, and mud wave problem is significantly reduced. J. Gunn also believes that the sediment depth was greatest at the north end of the pond and near the channel dredged for the pumphouse, and that may be another reason that the mudwave has diminished. Mudwave near newly placed processed fill material is approximately 1 ft. high. J. Gunn indicates that W. Thompson (Triangle Grading Contractors) seems to be more cooperative in agreeing to place specified 2 ft. fill lift thickness over sediments. J. Gunn indicates that WATEC to resume pumping 2/21/96 for collection of weekly effluent sample. J. Gunn indicates that a sample was collected one week ago, but the sample was left overnight in the refridgerator, froze and broke. J. Gunn indicates that WATEC does not believe that pumping of the depression near proposed soil excavation area 3 is WATEC's responsibility, especially since the soil excavation program will not commence until

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| **Pay Quantities:**<br>WATEC: Joe Gunn (p. m.)<br>Rodney Jones (s.m..)<br>Bill Creedon (op.manager) | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.* overcast, high 40's, lgt rain<br>*p.m.* overcast, low 50's, lgt rain | **Health and Safety PPE:** | **Air Monitoring Results:**<br>None |
| **Field Representative:** Bruce Geno | | **Date:** 2/20/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 2/20/96 |
| Day of Week | Tuesday |
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# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

later this spring. BG to discuss option of placing clean fill over the excavation area with a layer of geotextile separator fabric. J. Gunn indicates that he is concerned with storm water management on the former Medlin property. J. Gunn indicates that he is not convinced that blocking of WATEC's culvert on the upstream side of the Medlin Pond access road and pumping the water to the downstream side of the Medlin Pond will be sufficient to keep up with the flow. J. Gunn is concerned that the runoff from Adams Products and from the upstream side of the Norfolk Southern Railroad spur on Beazer property is a significant flow. J. Gunn indicates that WATEC may want to consider trenching around the Medlin Pond until regrading complete. BG to verify that water flowing off Enwood Structures property and through culvert on upstream side of Norfolk Southern Railroad spur actually flows to Medlin. J. Gunn also concerned that the existing grade of sediments in the Fire Pond is very shallow, and that it may be difficult to establish drainage without placing more fill than design thickness of 2 ft. around the perimeter of the Fire Pond. Without drainage, the Fire Pond may return to a seasonal wetlands. J. Gunn requests copy of drawing with regrade contours for McCrimmon Rd. side of Fire Pond dam as soon as possible. J. Gunn indicates that the clay encountered during construction of access to southeast corner of Fire Pond would be very hard to place. J. Gunn indicates that TGC had suggested using motor grader for final grade, however fill may be too soft to support rubber tired machinery. J. Gunn indicates that money allocated in lump sum for seeding may be put into escrow until the fill is dry enough to support equipment.

1500 BG leaves site for the day. J. Gunn to leave site today and return early March. Rodney Jones to head field operations for WATEC.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |
| **Field Representative:** | | **Date:** 2/20/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 2/21/96 |
| Day of Week | Wednesday |
| No. | 76 |
| Sheet | 1 of 3 |

# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0730 BG arrives on site. WATEC is conducting daily site meeting. Envirochem has one worker awaiting arrival of welder to repair emptied rolloff which was damaged by dozer blade during movement from Enwood Structures property. Triangle Grading Contractors has one dozer operator awaiting arrival of processed fill.

0745 WATEC begins removal of poly sheeting from placed process fill material.

0815 First delivery of processed fill material arrives.

0820 Welder arrives to repair Envirochem rolloff. Two additional Envirochem workers arrive. Envirochem reports that the rolloff to Pinewood, S.C. delivered 2/20/96 weighed in at 81,000 lbs. Loaded truck was supposed to weigh no more than 79,200 lbs. Envirochem will remove some of the carbon from remaining repacked rolloff and place in repaired rolloff to avoid wt. problem.

0930 Envirochem has placed 500 lbs. portland cement in rolloff with fiberglass top to stabilize moist carbon observed near front of rolloff. Envirochem did not attempt to vacuum water from fiberglass-topped rolloff as the free liquid did not really separate well from carbon. Envirochem to transfer contents of remaining open topped rolloff into repaired rolloff.

1030 Envirochem finishes transfer of carbon from remaining open-topped rolloff. Ricky Macon (Envirochem) indicates that Envirochem may have to use additional rolloff if there is too much carbon for four rolloffs. R. Macon is concerned with rolloff repacked 2/19/96 and fiberglass-topped rolloff. BG informs Rodney Jones (WATEC) that Envirochem is concerned with weight and that an additional rolloff may be needed. R. Jones speaks to R. Macon and indicates that WATEC prefers that Envirochem weigh the boxes as they are to determine if material can be shifted between the boxes so that each box contains approx. 34,000 lbs. of material. Envirochem had planned to haul one rolloff today, but will wait until 2/22/96 after boxes have been weighed and carbon redistributed, as needed. With regard to repacking of rolloffs, R. Macon indicates that the rolloff was inspected at the Pinewood facility, and that an EPA representative took pictures of the carbon as it was being offloaded, but that no free liquid was observed. R. Macon indicates that if free liquids are observed, there is an automatic $500 fee and may be additional treatment fees.

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| **Pay Quantities:**<br>WATEC: Rodney Jones (s.m.)<br>John Cutlip (tech.)<br>Terry Hall (foreman)<br>Dan Kitchen (tech.)<br>Dan Wise (tech.) | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.* overcast, mid 40's<br>*p.m.* overcast, low 50's | **Health and Safety PPE:**<br>steel-toed boots, safety glasses, tyvek, nitrile gloves | **Air Monitoring Results:**<br>None |
| **Field Representative:** | | **Date:** 2/21/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 2/21/96 |
| Day of Week | Wednesday |
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# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

WATEC was of the understanding that the $500 included treatment if free liquids were observed.

1100 BG places call to Laidlaw's Pinewood facility. Laidlaw indicates that if any free liquids are observed, the waste then classifies as a liquid waste, and must be stabilized. Stabilization fees are typically $180 to $240/ton of waste. The $500 is a fee to schedule the load for treatment. BG informs R. Jones that the $500 fee does not include stabilization treatment fees. R. Jones informs R. Macon that it will be Envirochem's responsibility to make sure that the rolloffs do not contain free liquids. R. Macon disagrees, indicating that his instructions from Joe Gunn (WATEC) were to make sure that the rolloffs did not leak. R. Macon informs R. Jones that Envirochem is taking precautions necessary to ensure that the boxes do not leak, but makes no guarantee that all free liquids are stabilized. R. Macon indicates that Envirochem is applying procedures done other jobs, but cannot guarantee there will be no free liquids. R. Jones informs R. Macon that WATEC does not want Envirochem to haul any load that Envirochem is uncomfortable with. R. Jones later indicates to BG that his intent was to put responsiblity of free liquids onto Envirochem, by implying that if there are free liquids, Envirochem would not be comfortable hauling the load.

1200 BG informs R. Jones that BG to discuss placing goetextile over soil excavation area 3 and placing fill over geotextile barrier layer to facilitate drainage of soil excavation area 3 with Bob Fisher of Beazer. R. Jones asks if placing material over the soil excavation would be part of the pond. BG indicates that the area around the pond must drain, so that the regrading would be part of the pond work.

1300 Envirochem begins placing portland cement at the rear end around the tailgate of the fiberglass-topped rolloff box. Envirochem will not transfer the contents of the fiberglass-topped rolloff, but will instead use the portland cement around the tailgate. No free liquids were observed in the fiberglass-topped rolloff while redistributing carbon away from the tailgate. Jack Lafoon (Envirochem) arrives on site. J. Lafoon expresses interest in bidding on O&M of groundwater treatment system.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 2/21/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 2/21/96 |
| Day of Week | Wednesday |
| No. | 76 |
| Sheet | 3 of 3 |

# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

1400 Envirochem completes stabilization of last rolloff. R. Macon collects paperwork/manifest forms for next rolloff to Pinewood, S.C. R. Macon leaves with rolloff to weigh on Adams Products truck scales. If rolloff wt. is acceptable, R. Macon will park rolloff in Envirochem yard tonight and leave for Pinewood 2/22/96. J. Cook calls BG to discuss schedule. BG indicates that WATEC has reported that Wake Stone Quarry may have sufficient processed fill to complete Fire Pond backfilling, and will stop processing of the fill 3/4/96. J. Gunn has indicated that WATEC may be able to use a native fill if the processed fill runs out. BG to check with John Funk to see if delay in obtaining agreement between Beazer and Norfolk Southern Railroad would result in equal delay in groundwater treatment construction schedule.

1430 R. Macon leaves Adams Products to return to Envirochem, indicating that the rolloff wt. is acceptable.

1500 Envirochem completes decon of backhoe bucket and demobs from site.

1600 BG asks R. Jones if WATEC has collected the next borrow sample for TAL/TCL analysis. If about 9,000 cy are to be hauled from Wake Stone Quarry, a borrow sample would need to be collected about every 1,800 cy. R. Jones is unsure if borrow sample was collected. BG leaves message for J. Gunn in Atlanta to check to see that sample was collected.

1610 BG talks to John Funk (Rust). J. Funk indicates that INCO (Rust's subcontractor) would like to have at least one week notice prior to mobilization, so that if agreement between railroad and Beazer is delayed by a week, then Rust schedule would also slide a week.

1700 J. Gunn indicates that the sample was collected for TAL/TCL for the next batch of borrow material. J. Gunn indicates that an additional sample may be collected for material delivered next week. BG observes water being siphoned onto decon pad through sump pump. BG resets breaker so that sump pump resumes drainage of decon pad into tank T2. WATEC reports problem with 3-in. pump. Sunbelt to deliver replacement this p.m.

1730 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 2/21/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 2/22/96 |
| Day of Week | Thursday |
| No. | 77 |
| Sheet | 1 of 4 |

# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0830 BG arrives on site. WATEC has temporary workers preparing geogrid/geotextile rolls for installation in Fire Pond. Triangle Grading Contractors (TGC) has 2 dozers (J.D. 650 G LGP and Cat D4H XL) operating in Fire Pond and trucks delivering fill. TGC is placing fill at the north end of the pond to the leading edge of the cohesive material placed in December, 1995. BG observes water seeping from the area north of the Fire Pond near the diversion ditch and west of remaining concrete slab. Water is draining to depression next to proposed excavation area 3, filling depression, then draining to Fire Pond, next to roll of geogrid-contained sediment which mounded up during placement of cohesive material in December. The area next to the remaining concrete slab to the north of the pond is nearly flat and poorly draining. TGC's placement of fill has ascerbated drainage problems by creating mounds of material down slope of this area. Area at northwest corner of Fire Pond is very poor draining. Cohesive fill is saturated and cannot support construction equipment. TGC is placing processed fill over mounded sediment in this area.

1100 BG leaves message for Bob Fisher (Beazer) to call regarding possible placement of clean fill in excavation area 3 to promote drainage from this area. Clean fill could possibly be placed over a geotextile separator fabric.

1130 BG observes WATEC attempt to "pinch-off" sediment near north end of Fire Pond (see sheet 4 of 4). WATEC had instructed TGC to push fill from east to west downslope of the leading edge of the previously placed cohesive material in a dozer-width path, sealing off an approximately 50 ft. by 50 ft. section of exposed geogrid in a horse-shoe pattern, with the closed end of the horseshoe pointing north. TGC then pushed process fill from the north and east direction toward the east-west path of placed process fill. The mudwave at the north end of the Fire Pond was pushed south and west toward the southwest corner of the sealed portion of geogrid, creating a mound of geogrid-encapsulated sediment, measuring approx. 2 ft. high and 15 ft. diameter.

1300 BG and R. Jones walk pond area near demolished pumphouse. BG indicates that the area is draining poorly, and that scraping excess fill from this area to promote drainage should be a priority once the material is dry enough to support a dozer. BG indicates that because the area is

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| **Pay Quantities:**<br>WATEC: Rodney Jones (s.m..)<br>John Cutlip (tech.)<br>Dan Kitchen (tech.)<br>Dan Wise (tech.)<br>2 temp.s | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.* overcast, high 40's<br>*p.m.* overcast, low 50's | **Health and Safety PPE:**<br>steel-toed boots, safety glasses, tyvek, nitrile gloves | **Air Monitoring Results:**<br>None |
| **Field Representative:** [signature] | | **Date:** 2/22/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 2/22/96 |
| Day of Week | Thursday |
| No. | 77 |
| Sheet | 2 of 4 |

# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

poorly draining, it will always take longer to dry, so once it does dry, WATEC should shave the high spots to promote drainage.

1330 W. Thompson (TGC) asks R. Jones and BG what to do about mud mound. R. Jones indicates that mound should be covered with a minimum of 1 ft. of fill, and over time, the sediments should consolidate enough to be able to increase the depth of fill. W. Thompson indicates that he warned WATEC about trying to seal off the mud wave. W. Thomspson states that TGC will place the fill any way that WATEC wants, but WATEC had tried to seal off the mudwave before, and it did not work. W. Thompson warns R. Jones about trying to use dozer over top of mound to try to compress the sediment. W. Thompson indicates that method only makes the sediment break through the surface of the fill. W. Thompson indicates that the mud wave should be moved in the same direction across the pond in order to have one mound of mud, rather than "pimples" across surface of regraded pond. W. Thompson asks BG about how to grade near Fire Pond dam and break through dam with oval shaped mound of mud with the long axis of the oval oriented parallel to slope. BG indicates that the pond dam will only be cut in one location. W. Thompson indicates that he understands that. BG also indicates that drainage will be the most important criteria. W. Thompson indicates that TGC will ensure that the regraded pond drains.

1400 BG speaks to J. Gunn. J. Gunn indicates that he talked to J. Cook about moving BG to Beazer's field trailer to avoid costs to Beazer of engineer's trailer over contract term of 4 months. J. Gunn had earlier indicated no move would be necessary, as WATEC did not need to have two trailers, and would use other end of engineer's trailer. BG indicates to J. Gunn that Beazer may not have gotten $3,000 worth of space for the four month period, but that is what they paid. BG indicates that there are items required in the specifications for the field trailer which were not provided, such as hot running water and cleaning services. J. Gunn indicates he doesn't want to get into a pissing match with Beazer. BG informs J. Gunn that there is a mound of mud near the north end of the Fire Pond created by trying to seal off the mud wave. J. Gunn indicates that there will be mounds in the final grading plan, but that overall drainage should be obtainable.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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|---|---|
| **Field Representative:** | **Date:** 2/22/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 2/22/96 |
| Day of Week | Thursday |
| No. | 77 |
| Sheet | 3 of 4 |

# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

1530 BG talks to B. Smith regarding mud mound issue and use of access off of Church Street by Bryant. BG to emphasize to WATEC importance of trying to seal or pinch off mudwave, but enclose smaller blocks with processed fill to limit the size of the mudwave. BG to inform WATEC that if there are areas which have less than 1 ft. of fill, WATEC should survey them for final drawings. B. Smith to talk to J. Cook regarding use of Beazer's road by others, and resolve Beazer's questions regarding groundwater monitoring/sampling proposal.

1545 BG informs R. Jones that if there are areas which have less than one foot of fill, WATEC should survey these areas for as-built drawings. R. Jones indicates that fill depth will be surveyed on a grid pattern at the end of the project with a hand auger to check thickness. BG indicates that if there are areas which we know are less than 1 ft. we should survey them. R. Jones indicates that the mound of sediment will be staked off for future survey. BG indicates that WATEC is using right approach in trying to seal off the mudwave, but that the area should be smaller. R. Jones agrees with approach to try to seal off mudwave. BG explains to R. Jones that unless mudwave is pinched off in small increments, the wave will grow and result in a big mound in the end, making it very difficult to ensure drainage. R. Jones agrees that WATEC does not want a large mound of mud at the end of backfilling.

1630 R. Jones indicates that the processed fill placed in the pond will not be covered, as only a 20 percent chance of rain. W. Thompson indicates that it will be a long time before he can get back onto the fill if it gets wet, and will pull his equipment off of the job if that happens. R. Jones asks TGC if they will help cover the processed fill. TGC and WATEC cover approx. 30 percent of processed fill with poly sheeting.

1700 BG reiterates to R. Jones that BG believes that WATEC had the right approach in trying to pinch off the mudwave, but that the area that WATEC tried to seal off was too large and WATEC should try to seal off smaller areas to minimize mudwave problem. R. Jones indicates that he is willing to talk 2/23/96 in the morning to try to get consensus between CRC, WATEC, and TGC as to how to backfill pond trying to minimize mudwave formation.

1800 BG leaves site for the day. R. Jones indicates that he has collected surface water effluent sample.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 2/22/96 |

2/22/96

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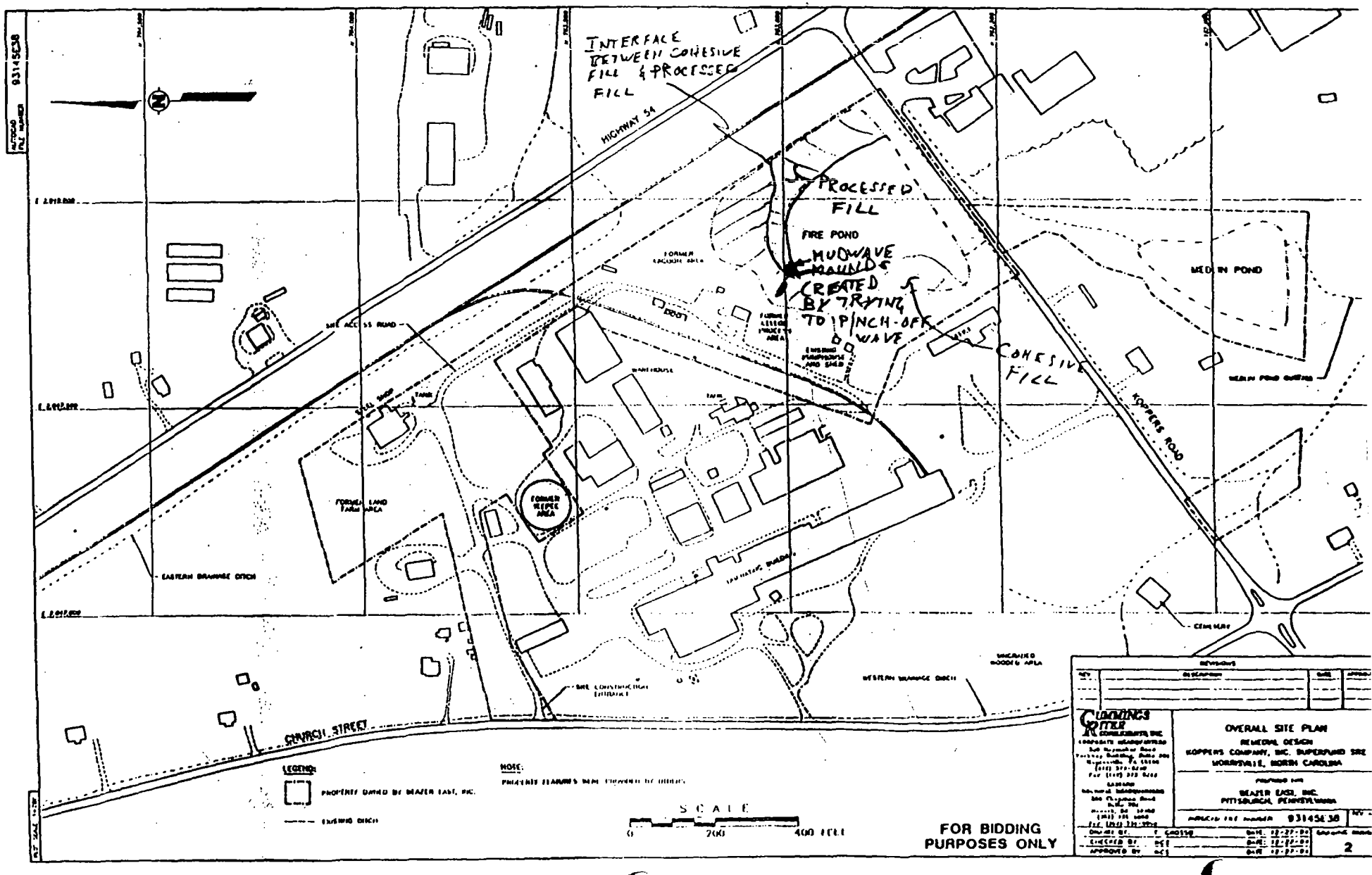

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 2/23/96 |
| Day of Week | Friday |
| No. | 78 |
| Sheet | 1 of 4 |

# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0740 BG arrives on site. WATEC is removing polyethylene sheeting covering processed fill material placed in Fire Pond. Two temp. WATEC workers are preparing rolls of geogrid/geotextile for installation in Fire Pond.

0800 Triangle Grading Contractors (TGC) first dump truck of fill arrives. TGC has three trucks running today delivering processed fill from Wake Stone Quarry. TGC has two dozers operating in the Fire Pond: J.D. 650 G LGP and Cat D4H XL. J.D. is being used to cascade the fill over exposed geogrid at the working face. Cat dozer is being used to disperse the fill off-loaded from the dump trucks. BG observes mud wave formation in the Fire Pond as fill face approaches the softer sediments near the water line which were submerged longest and therefore consolidated least. BG talks to WATEC tech.s directing TGC dozers as fill is placed over the geogrid. WATEC indicates that W. Thompson (TGC) has directed the dozer operators to place fill in a westerly direction across pond, making no attempt to seal off or pinch off the mud wave created as fill is pushed. BG reiterates to Rodney Jones (R. Jones) that the objective is to ensure drainage, and that a mound of mud at the end of backfilling is what WATEC needs to avoid. R. Jones agrees that WATEC needs to take precautions, which may have to adapt to field conditions (i.e., softer or deeper areas of sediment) to minimize size of mudwave. R. Jones indicates that the dozer operators have been successful to this point in trapping the mudwave by throwing fill out over the leading edge. BG asks how is the fill thrown? R. Jones indicates that the dozer drivers are pretty amazing and can retain a half a blade full of dirt on the dozer blade and thow it out over the leading edge. BG expresses BG not convinced, but will observe placement operations. R. Jones indicates that BG and R. Jones should meet at 10:00 to discuss fill placement progress.

1030 BG has observed placement of fill over sediment. TGC has continued to push fill in a westerly direction across pond, and size of mudwave is growing. BG speaks to R. Jones indicating that if WATEC can not meet final design grade of a 2 ft. lift over the pond sediments, this is a design change, and that BG wishes to have CRC and Beazer agree to this change before we end up with a

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| **Pay Quantities:**<br>WATEC: Rodney Jones (s.m.)<br>Terry Hall (foreman)<br>John Cutlip (asst. s.m.)<br>Dan Kitchen (tech.)<br>Dan Wise (tech.)<br>2 temp.s | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.* overcast, low 50's<br>*p.m.* ptly cloudy, low 70's | **Health and Safety PPE:**<br>steel-toed boots, safety glasses, tyvek, nitrile gloves | **Air Monitoring Results:**<br>None |
| **Field Representative:** Brian Geno | | **Date:** 2/23/96 |

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| Date | 2/23/96 |
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# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

mound of mud. BG indicates that he cannot say that WATEC has made every effort to try to minimize size of mudwave, such as reducing amount of fill on the dozer blade to about 1/2 blade full as the dozer approaches the leading edge, in accordance with Tensar recommendations. In addition, WATEC should try to pinch off the mudwave by approaching from different directions. BG indicates that these methods may not work, but that WATEC should try them before WATEC concludes that a sizable mudwave is unavoidable. R. Jones agrees that a good faith effort should be made by WATEC before a field design change is made. R. Jones agrees to speak to TGC dozer operators and WATEC personnel to try to emphasize measures to minimize mudwave. R. Jones agrees that operations should be varied as conditions change across pond to control mudwave formation. R. Jones indicates that prefers to talk to WATEC personnel and TGC without BG present.

1100 BG talks to R. Jones and J. Cutlip. BG explains to J. Cutlip (WATEC) that BG had to talk to R. Jones to keep the chain of command. R. Jones indicates that TGC dozer operators requested that R. Jones talk to W. Thompson so that W. Thompson would understand purpose of changing directions on the fill placement (to try to capture mudwave). R. Jones indicates that W. Thompson abdicated responsibility for any bubbles to WATEC, since WATEC is changing instructions given to TGC dozer operators. R. Jones indicates to BG that WATEC is ultimately responsible for the job, so W. Thompson is trying to find excuses to keep WATEC from slowing down dozers. BG indicates to R. Jones that BG has observed dozers being idle at times between trucks, so that dozers should be able to finesse and experiment with placement between truck deliveries of fill.

1400 BG observes WATEC attempt to capture and seal off mudwave by enclosing an approx. 15 ft. by 10 ft. rectangular shaped area. Dozer operator is being directed by WATEC tech. (Dan Kitchen) to approach enclosed area from two perpendicular directions. Dozer operator encloses the area using approx. 2 to 2.5 ft. lift of processed fill. D. Kitchen is confident the mudwave is small enough that it can be sealed off. BG observes geogrid straining and busting along seams where copper "bull-

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 2/23/96 |

CUMMINGS RITER CONSULTANTS, INC.

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| Date | 2/23/96 |
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# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

ties" used to tie grid together. After bridging of soil from two different directions, the dozer operator begins on the most downhill side of the enclosed area to fill in the exposed geogrid. It becomes evident after two passes of the dozer that the mud inside the enclosed area is sqeezing out from beneath the placed fill and will rise as high as the surface of the fill lift being placed. WATEC directs dozer operator to stop filling of exposed area.

1500 BG and R. Jones talks about mudwave problem. R. Jones asks BG if BG believes that WATEC has made a good faith effort to try to trap the mud problem today. BG agrees that WATEC has followed Tensar's recommendations in controlling dozer speed and fill quantity being pushed with each pass, and that WATEC has made a good faith effort. R. Jones indicates that he is not convinced that W. Thompson is right in thinking that the way to fill the pond is to keep pushing fill from one side to the other without making attempts to trap mud.

1530 BG calls B. Smith to inform B. Smith that WATEC has made efforts to contain mudwave, but so far has been unsuccessful. BG explains that the sediment is very soft as fill is placed near center of pond, and that WATEC tried to enclose and seal off an area measuring approximately 15 ft by 10 ft, but that the mud swelled inside the area and WATEC was unable to cover the enclosed sediment. B. Smith to call BG back.

1610 B. Smith and Bradley Bundy call BG. BG explains that WATEC is now trying to backfill over sediment which is still saturated which was covered with water the longest, being near the center of the pond. BG indicates that unless the wave is cut off, the wave will continue to grow and will be pushed onto fill already placed. B. Bundy asks if WATEC is using free draining material. BG indicates that the material is not free draining but is granular. BG indicates that there is a distinct color difference in the fill near the interface of the fill over the geogrid, indicating that water is being drawn from the sediment up into the fill. B. Bundy suggests using a stabilizer such as kiln dust or portland cement to draw water up from sediment and help provide a stable base for filling. B. Bundy suggests using the stabilizing agent in the areas which have bulged up. B. Bundy also

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 2/23/96 |

CUMMINGS RITER CONSULTANTS, INC.

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# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

suggests using a granular fill such as pea gravel to try to control mudwave. BG explains that WATEC has included use of stabilizing agent in the bid, but the bid is not specific as to quantity of stabilizer included in the bid. B. Smith indicates that WATEC has to try alternatives to meet design of 2 ft. lift over geogrid, to promote drainage, without having bubbles or mounds of sediment scattered over the surface. B. Smith indicates that WATEC has bid a lump sum to place a 2 ft. lift of soil over the pond, and that it is up to WATEC to live up to that bid. B. Smith and B. Bundy agree that implementation of the contract requires more or less material, or different type of materials, that is not justification for a change order. BG to notify Bryant not to use Beazer's road.

1645 BG talks to R. Jones concerning attempts to trap mudwave. R. Jones indicates his willingness to try new ideas. R. Jones indicates that he will have to talk to J. Gunn concerning use of stabilizing agent to try to stabilize sediments sufficiently to fill over mudwave and areas of mounded sediment. R. Jones agrees that WATEC should try alternatives to control mudwave, and he believes that TGC is being more cooperative in controlling lift thickness and dozer speed. R. Jones does not believe the mudwave is an insurmountable problem. R. Jones is skeptical as to whether stabilizer could physically be placed in the pond, or whether the stabilizer would draw water away from the underlyig sediments. BG esxplains that WATEC bid the job to place a 2 ft. lift over the pond, and if WATEC cannot implement the design, that is not the job that was bid.

1745 BG leaves site for the day. WATEC has covered placed process fill with poly sheeting.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 2/23/96 |

CUMMINGS RITER CONSULTANTS, INC.

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| Date | 2/26/96 |
| Day of Week | Monday |
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# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0800 BG arrives on site. WATEC is removing polyethylene sheeting covering processed fill material placed in Fire Pond. Triangle Grading Contractors (TGC) have 3 trucks delivering processed fill. TGC has been delivering approximately 700 cy per day with three trucks.

0810 Triangle Grading Contractors (TGC) first dump truck of fill arrives. TGC has two dozers operating in the Fire Pond: J.D. 650 G LGP and Cat D4H XL. J.D. is being used to cascade the fill over exposed geogrid at the working face. Cat dozer is being used to disperse the fill off-loaded from the dump trucks. WATEC will attempt to cover mud bubble which was created 2/23/96 slightly east of the center of the Fire Pond. WATEC uses an excavator to remove fill between the bubble and exposed geogrid to the west of the bubble. WATEC then directs TGC to approach the bubble from the east, trying to push the sediment trapped in the bubble into the uncovered portion of the pond. The bubble does not move. TGC continues to place fill over the bubble with the J.D. 650 G LGP dozer.

0900 BG calls Dwight Mariner of Bryant Construction concerning use of Beazer's access road by Bryant's trucks. BG indicates that it is BG's understanding that Bryant is using the road without Beazer's permission. D. Mariner indicates that the property would be landlocked without use of Beazer's access road.

0930 BG talks to Bob Fisher and Jim Cook. Concerning the use of Beazer access off of Church St. by Bryant, B. Fisher indicates that the access agreement between Florence Leasing and Beazer was written such that access was not automatically granted to the new owner of the property (Bryant). Beazer is currently having outside counsel prepare agreement between Bryant and Beazer. J. Cook indicates that the agreement may stipulate that Bryant maintain the access road between Church St. and Bryant property. B. Fisher indicates that it is appropriate to fill the depression adjacent to proposed soil excavation area 3 with soil to get the area to drain. A geotextile fabric will be placed before placing clean material within the proposed excavation area to act as a visual barrier. B. Fisher indicates that Joe Gunn (WATEC) is resisting disposal of PVC pipe as a listed hazardous waste. BG to look into weight of PVC on site destined for disposal and determine if disposal as

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| **Pay Quantities:**<br>WATEC: Rodney Jones (s.m.)<br>Terry Hall (foreman)<br>John Cutlip (asst. s.m.))<br>Dan Kitchen (tech.)<br>Dan Wise (tech.) | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.* sunny, low 50's<br>*p.m.* sunny, low 80's | **Health and Safety PPE:**<br>steel-toed boots, safety glasses, tyvek, nitrile gloves | **Air Monitoring Results:**<br>None |
| **Field Representative:** [signature] | | **Date:** 2/26/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 2/26/96 |
| Day of Week | Monday |
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# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

hazardous waste without sampling is less than disposal of PVC as a non-hazardous waste with sampling. BG should inform J. Gunn that hazardous waste disposed of in other states requires notification of the EPA appropriate state agencies in the state of disposal, in accordance with the unilateral order. Beazer to inform EPA and state agencies regarding carbon disposal. BG informs B. Fisher that two of the four rolloffs have left for Pinewood, S.C.

1030 Rick Macon (Envirochem) arrives on site to pick up third of four rolloffs containing carbon for delivery to Pinewood, S.C. R. Macon indicates that rolloffs are typically rented on a monthly basis. R. Macon to deliver third rolloff today, and be back for fourth rolloff 2/27/96.

1100 BG observes WATEC attempt to cover sediment bubble near the north end of the Fire Pond at junction of placement of processed fill and previously placed (12/95) cohesive fill. WATEC removes fill confining the bubble to the south of the bubble and directs the dozer to approach from the north to try to squeeze sediment from the bubble back into the pond. The geogrid breaks along the seams where tied and geotextile rips, allowing sediment to flow onto placed fill material. BG informs Rodney Jones (WATEC) that WATEC will need to ensure that a minimum of 1 ft. of fill must be placed over sediment, and that areas with less than 2 ft. of fill over sediment must be surveyed for the as-built drawings. R. Jones indicates that the bubble near the north end of the Fire Pond will be covered with at least 2 ft. of fill. R. Jones agrees that areas with less than 1 ft. of cover will be surveyed for final drawings. BG requests that WATEC place geotextile fabric in depression near excavation area 3 and over excavation area 3 and place fill in depression such that the area will drain. BG indicates that water will have to be pumped from the depression before it is filled. R. Jones indicates that WATEC was to have pump returned to rental agency, but will have to delay return until the depression is filled and graded.

1130 John Funk (Rust) calls BG with question on revision to groundwater HASP. J. Funk indicates that plans should be ready for submittal to B. Smith later this week. BG informs J. Funk that the

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 2/26/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 2/23/96 |
| Day of Week | Monday |
| No. | 80 |
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# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

railroad encroachment agreement has been signed by Beazer and is now in the hands of Norfolk Southern's legal counsel. Beazer hopes to have the agreement in the next couple of days.

1530 BG talks to B. Smith. B. Smith to visit site 2/27/96. BG informs B. Smith that BG is not convinced that kiln dust or other stabilizing agent would work to prevent mudwave formation. BG indicates that the failure is occuring below the top 2 to 3 inches within the sediments, and that kiln dust would soak up water rising to surface, but would not increase sediment strength at depth. BG indicates that the only way to increase the strength of the sediment mass would be to add aggregate such as brick. BG prepared letter to J. Gunn (attached) with proposed final regrading plan for Fire Pond next to McCrimmon Rd.

1600 BG asks R. Jones if WATEC is planning on blending in wood chips from cleared and grubbed material into processed fill placement. R. Jones indicates that TGC has indicated they will begin placing wood chips with processed fill. BG indicates that perhaps a backhoe bucket-full of wood chips could be placed in front of a truck load of fill and worked with dozer as it places the processed fill. R. Jones agrees this is a good approach. WATEC to begin blending of wood material 2/27/96.

1700 BG and R. Jones observe depression next to proposed soil excavation area 3. BG indicates that geotextile fabric should be placed on the bottom of the depression before fill is placed. Fill should be placed in the depression and sloped to grade. BG indicates that the depression should be dewatered before fabric and fill is placed.

1725 BG leaves site for the day. BG sends letter of transmittal to J. Gunn with revised grading plan for area next to McCrimmon Rd. and NCDOT encroachment agreement to be completed by WATEC.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |
| **Field Representative:** | | **Date:** 2/23/96 |

CUMMINGS RITER CONSULTANTS, INC.

February 26, 1996
Project No. 93-145.30/55

Mr. Joseph F. Gunn
Waste Abatement Technology, L.P.
1300 Williams Drive Suite B
Marietta, Georgia 30066

**RE: DISPOSAL DOCUMENTATION AND FINAL GRADING DESIGN**
**KOPPERS COMPANY, INC. SUPERFUND SITE**
**MORRISVILLE, NORTH CAROLINA**

Dear Joe:

Enclosed is the final grading design for the Fire Pond dam area adjacent to McCrimmon Road. The final grades do not show the filter berm basin; however, the filter berm will be required as shown on Drawing Number 8 of the contract documents. I have also enclosed a State of North Carolina Right of Way Encroachment Agreement which WATEC and Triangle Grading Contractors will need to complete before regrading is initiated in the McCrimmon Road right of way. Please note the two vertical drops in elevation to the west of the culvert. I am currently looking into gabions, reno mattresses, or other earth-retaining structures for these areas.

Also enclosed is a detail for the culvert inlet structure. The bell end of the pipe section will be oriented toward the inlet to act as a funnel. The headwall will be cast-in-place.

If you have any questions or comments, Mr. William Smith and I will be glad to discuss them with you.

Sincerely,
*Cummings/Riter Consultants, Inc.*

Bruce Geno
Sr. Project Engineer

Enclosures

BG/WCS/bg

339 Haymaker Road • Parkway Building • Suite 201 • Monroeville, PA 15146
(412) 373-5240 • FAX (412) 373-5242
Regional Office • 258 Chapman Road • Suite 202 • Newark, DE 19702 • (302) 731-9668 • FAX (302) 731-9609

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 2/27/96 |
| Day of Week | Tuesday |
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# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0830 BG arrives on site. WATEC is placing geogrid/geotextile in pond and directing placement of processed fill near the eastern central portion of the Fire Pond. Triangle Grading Contractors (TGC) is using three trucks to deliver fill. According to Rodney Jones (WATEC), TGC has delivered approx. 6,500 cy of fill. BG asks R. Jones if WATEC is planning to blend in wood chips from cleared trees with processed fill. R. Jones indicates that WATEC will spread wood chips in a thin lift over the processed fill and place topsoil above wood chips. WATEC continues to pump Fire Pond.

1030 B. Smith arrives on site. BG and B. Smith walk site. B. Smith and BG talk to W. Thompson. W. Thompson indicates that he was asked to bid job by WATEC at 13,500 cy fill and 5,000 cy topsoil. W. Thompson indicates hard to maintain grade because the surface is unstable. W. Thompson indicates a dark patch of placed processed fill at the eastern side of Fire Pond. W. Thompson indicates the patch has been growing in extent as water wicks up through the fill to the surface. W. Thompson indicates that the dark area is too soft to support dozer. BG and B. Smith observe John Deere 650 G LGP almost get stuck in the wet area. W. Thompson indicates that the cohesive fill at the north and west sides of the Fire Pond is still too wet to support a dozer. W. Thompson indicates almost got dozer stuck at north end 2/26/96. BG receives attached letter from J. Gunn requesting revised regrading plan for area next to McCrimmon Rd. Letter also indicates that storm water controls for Medlin Pond are not planned, but can be implemented if so desired.

1210 BG and B. Smith leave for lunch. WATEC has ceased pumping of Fire Pond.

1330 BG and B. Smith return from lunch. BG receives letter from J. Gunn indicating that access agreements are to be secured by Beazer. B. Smith to check with Ken Bird to determine if CRC can sign NCDOT encroachment agreement. BG calls Tim Johnson of NCDOT to ask who usually signs the encroachment agreement. T. Johnson indicates that the owner or developer signs the encroachment agreement.

1400 BG and B. Smith work on revised grading plan for Fire Pond area adjacent to Fire Pond.

1430 BG and B. Smith talk to R. Jones to discuss storm water management for Medlin Pond, completion

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| **Pay Quantities:**<br>WATEC: Rodney Jones (s.m.)<br>Terry Hall (foreman)<br>John Cutlip (asst. s.m.))<br>Dan Kitchen (tech.)<br>Dan Wise (tech.) | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.* sunny, low 50's<br>*p.m.* sunny, low 80's | **Health and Safety PPE:**<br>steel-toed boots, safety glasses, tyvek, nitrile gloves | **Air Monitoring Results:**<br>None |
| **Field Representative:** Brian Geno | | **Date:** 2/27/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 2/27/96 |
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# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

of Fire Pond backfilling and remaining work. R. Jones indicates that he would like to have Fire Pond completely covered with process fill by 3/15/96, with approx. 1 more week to fine grade and seed. B. Smith indicates that as soon as sediments in Fire Pond are covered, WATEC should be have E&S controls in place next to McCrimmon Road to breach dam and allow storm water to flow from Fire Pond area in order to discontinue treatment of Fire Pond water. B. Smith indicates that CRC is working on revised grading plan, including ditch lining, etc. B. Smith indicates to R. Jones that final as-built drawings should include areas with less than 2 ft. of cover over sediments. B. Smith indicates that in no event shall depth of sediments be less than 1 ft. R. Jones indicates that WATEC will probably provide an isopach map indicating depth of fill. B. Smith agrees that WATEC should provide isopachs. R. Jones indicates that damaged trees will be painted with tree patch in order to prevent removal of damaged trees. BG agrees that if efforts are taken now to try to save damaged trees, closer to the end of project activities a final decision can be made as to which trees are not going to survive and will have to be removed. B. Smith indicates that WATEC may want to have area east of Medlin Pond surveyed for possible diversion ditch construction.. BG indicates that diversion ditch through this area will require removal of additional trees next to Peggy Medlin property, and that elevation drop is 0.5 %. B. Smith agrees that diversion ditch may not be best option. BG indicates that even if 3-in. pump were unable to keep up with storm water flow, it would likely save 150 to 250 gpm from treatment. R. Jones to discuss storm water control options with J. Gunn. J. Gunn to present costs to CRC for review. R. Jones indicates that wood chips will be placed beneath the top 6 inches of topsoil placed in Fire Pond. B. Smith agrees that wood chips should not be placed in top 6 inches. R. Jones indicates that efforts to minimize mudwave will continue, and that final grading plan should not have mounds which obstruct drainage. BG indicates that WATEC may want to place an east-west strip of fill, approx. 2 dozer blades wide, along north side of Fire Pond dam to prevent sediments from ending up on dam which

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 2/27/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 2/27/96 |
| Day of Week | Tuesday |
| No. | 81 |
| Sheet | 3 of 3 |

# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

will then have to be excavated to construct outfall from Fire Pond area through dam (i.e., dam breach). R. Jones indicates that WATEC will evaluate mudwave problem closer to pond backfill completion to determine if such measures are necessary. R. Jones indicates that sediments may be sufficiently hard so that mudwave is not created next to dam.

1540 B. Smith leaves site for the day.

1630 BG begins to move to Beazer field trailer. Phones to be transfered by WATEC 2/29/96.

1730 BG leaves site for the day. WATEC is covering site with poly sheeting in anticipation of precipitation 2/28/96.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |
| **Field Representative:** | | **Date:** 2/27/96 |

WATEC

**Waste Abatement Technology, L.P.**
1300 Williams Drive, Suite B
Marietta, Georgia 30066
(404) 427-1947. FAX (404) 427-1907

February 27, 1996

Mr. Bruce Geno
Oversight Engineer
Cummings/Riter Consultants, Inc.
c/o Koppers Company Site, Inc.
908 Church Street
Morrisville, North Carolina 27560

Reference: Surface Water Remediation Contract
Koppers Company, Inc. Site
Morrisville, North Carolina

Dear Bruce:

As we approach final stages of backfill and capping of the Fire Pond, WATEC needs to receive information from Cummings/Riter on the proposed design layout for the storm water features planned for the Fire Pond. Please forward the revised drawings and specifications for review against original contract drawings. WATEC will evaluate any changes, and forward a revised cost, if applicable, to install the features desired.

For the Medlin Pond, WATEC proposed dewatering this pond without storm water controls due to the estimated 640,000 gallon capacity, and the ability to dewater this volume in about 30 hours. The bid design drawings had no diversion dams or ditches as part of the closure for the Medlin Pond. WATEC will proceed with dewatering the Medlin Pond as planned unless Cummings/Riter recommends storm water management system(s) during this phase of work. WATEC will evaluate if additional work will be required to manage storm water at the Medlin Site.

Thank you for your time and attention to these two contract items. Please forward the necessary information to me at your earliest convenience.

Sincerely,

Waste Abatement Technology, L.P.

Joseph F. Gunn
Project Manager

WATEC

**Waste Abatement Technology, L.P.**
1300 Williams Drive, Suite B
Marietta, Georgia 30066
(404) 427-1947, FAX (404) 427-1907

February 27, 1996

Mr. Bruce Geno
Cummings/Riter Consultants, Inc.
c/o Koppers Company Site, Inc.
908 Church Street
Morrisville, North Carolina 27560

Reference: Surface Water Remediation Contract
Fire Pond Final Grading Plan
Right-of-Way Encroachment Agreement

Dear Bruce:

WATEC, as the Contractor performing services on the Koppers Company Site, Inc. is not responsible for easements, encroachments, or right-of-way agreements on behalf of Beazer East, Inc. (Owner) to facilitate construction on this project. All property easements required to install designed features of this contract should be under the Owner.

Please make all necessary arrangements to submit for approval with the North Carolina Department of Transportation (NCDOT) this property access agreement. WATEC will perform all construction services per the plans, specifications and guidelines set forth by NCDOT once this agreement is in-place. Also, please finalize your design plans with appropriate materials and specifications for us to calculate the required cost adjustments.

Should access agreements be required on property down gradient of the Medlin Pond, please make all necessary arrangements for this property access agreement as well.

Thank you.

Sincerely,

***Waste Abatement Technology, L.P.***

Joseph F. Gunn
Project Manager

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 2/28/96 |
| Day of Week | Wednesday |
| No. | 82 |
| Sheet | 1 of 3 |

# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0830 BG arrives on site. WATEC is placing geogrid in Fire Pond. Triangle Grading Contractors (TGC) is using 3 trucks to deliver fill to site (about 700 cy/dy). TGC is placing fill using John Deer 650 G LGP.

0900 BG calls J. Cook to explain that encroachment agreement with NCDOT needed for regrading next to McCrimmon Rd. BG indicates that WATEC believes it is Beazer's responsibility to provide easements and access agreements. J. Cook agrees that Beazer should take care of encroachment agreement with NCDOT. BG explains that the regrading will provide detention for storm water, even though NCDOT estimates of discharge do not account for detention. BG explains that WATEC is to have utilities located and determine need for utility relocation. BG discusses J. Gunn's cost estimate for storm water runoff control at Medlin Pond. WATEC's costs based on earth berm at north end of Medlin Pond to hold back runoff from entering pond, and pumping water to south side of Medlin Pond. J. Cook suggests WATEC look into a pipe which could be connected to the outlet side of the 15-in. temporary corrugated culvert under Medlin Pond access road, and run along west side of Medlin Pond to low spot behind Medlin Pond dam.

1030 Ricky Macon (Envirochem) arrives for fourth of four rolloffs with carbon to be delivered to Laidlaw in Pinewood, S.C. R. Macon indicates that first three rolloffs did not contain free liquid and therefore did not have to be treated in Pinewood. BG provides manifests to R. Macon for transport of carbon.

1100 BG calls Laura Faulconer with Wake Co. Community Services Div. of Env. Health to discuss ditch lining requirements for channels near inlet of McCrimmon Rd. culvert. L. Faulconer indicates that as long as sediment control devices are in place, ditches can be seeded and left for vegetation to stabilize the channels. With velocities of less than 2.5 fps, no erosion mat required. For 2.5<v<4 fps, erosion control matting with vegetation is sufficient. For v> 4 fps, ditches need to be armored. BG indicates that WATEC is about 2 weeks away from breaking through the Fire Pond dam.

1300 R. Jones asks BG if BG has observed mudwave today. R. Jones indicates that mudwave is less and has been covered over in many places. BG observes mudwave along leading edge of processed fill. BG agrees that approximately 50 percent of the area where mudwaves were previously observed at

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| **Pay Quantities:**<br>WATEC: Rodney Jones (s.m.)<br>Terry Hall (foreman)<br>John Cutlip (asst. s.m.)<br>Dan Kitchen (tech.) | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.* overcast, low 50's<br>*p.m.* sunny, low 80's | **Health and Safety PPE:**<br>steel-toed boots, safety glasses, tyvek, nitrile gloves | **Air Monitoring Results:**<br>None |

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| **Field Representative:** [signature] | **Date:** 2/28/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 2/28/96 |
| Day of Week | Wednesday |
| No. | 82 |
| Sheet | 2 of 3 |

# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

working face of processed fill have less mudwave than before.

1400 J. Gunn calls BG to discuss WATEC invoice for February 1996. BG indicates that he would like to see at least 20 % remaining in pond backfill budget since Medlin Pond has not received any fill. J. Gunn indicates that he will have money left in the budget to purchase fill for Medlin Pond and is not willing to reduce invoice amount for pond backfilling task. J. Gunn indicates that Medlin regrading will include grading to proposed wetlands topography (i.e., will include earth berms for detention). BG also has discrepancies with seeding invoice amount and change order for process fill invoice amounts. J. Gunn to send BG project forecast to verify that enough money will be left in contract to finish.

1430 R. Jones indicates that by the end of the day, TGC will have delivered 8,500 cy of processed fill which is full amount budgeted against change order. WATEC to have survey crew (Post and Associates) survey the original water line as shown on CRC dwgs. to find perimeter of the Fire Pond. Perimeter of Fire Pond information will be used to determine where fill can be cut. WATEC believes that much of the placed fill is too thick, and can be graded into the Fire Pond. WATEC to wait until survey crew has results of original pond perimeter to continue shaving of processed fill and cohesive fill. BG asks R. Jones to have survey crew locate the high spots where mud bubbles were a problem, and to replace missing stakes around soil excavation areas (one stake missing from each of area 2 and area 3). R. Jones indicates that WATEC will have only two workers on site 2/29/96 (J. Cutlip and R. Jones).

1500 BG calls B. Smith on B. Smith's mobile phone. BG indicates that he has talked with J. Gunn concerning invoice review and that invoice amounts for backfilling and change order for process fill seem too high. B. Smith also indicates that Measurement and Payment section of spec.s for seeding do not include topsoil, therefore, J. Gunn cannot invoice Beazer for seeding as no seeding has been done. BG to prepare letter to J. Gunn indicating discrepancies between CRC and WATEC on WATEC's invoice for February.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 2/28/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 2/28/96 |
| Day of Week | Wednesday |
| No. | 82 |
| Sheet | 3 of 3 |

# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

1700 BG faxes letter prepared for J. Gunn to B. Smith for review. B. Smith agrees that WATEC invoice is too high when compared to work actually completed. B. Smith indicates that revenue spent on a given task does not indicate how much of that task is complete. BG informs B. Smith that WATEC will not be grading fill until survey results available. BG to inform WATEC that WATEC is loosing good weather, and longer the Fire Pond remains open, more chance of additional surface water treatment, which is not in Beazer's best interest.. BG to fax letter to J. Gunn regarding results of invoice review.

1930 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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|---|---|
| **Field Representative:** | **Date:** 2/28/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 2/29/96 |
| Day of Week | Thursday |
| No. | 83 |
| Sheet | 1 of 2 |

# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0800 BG arrives on site. WATEC is meeting with Post and Associates to discuss survey of perimeter of Fire Pond survey of elevations from temporary Medlin Pond access road culvert to ditch on southwest side of Medlin Pond for storm water control. Post and Associates to use perimeter of pond contour line shown on contract drawings to survey points along pond perimeter. WATEC to use the survey points to determine where the 2 ft. lift over geogrid and pond sediments should begin. BG indicates to R. Jones that each of proposed soil excavation areas 2 and 3 is missing one survey stake. R. Jones to have Post and Associates resurvey the missing stakes in these areas.

0900 Post and Associates leave site to return to office to use AutoCADD to determine coordinates of points at approximately 50 ft spacing around Fire Pond perimeter. Coordinate points will then be surveyed in and staked.

1030 Post and Associates returns to site to begin surveying Fire Pond perimeter.

1130 BG talks with R. Jones. BG indicates that WATEC should be moving fill due to good weather, especially since forecast is for rain. BG informs R. Jones that BG is tracking good weather days when WATEC is not working, which Beazer may use to recoup costs of extra surface water treatment due to Fire Pond sediments remaining uncovered. R. Jones indicates that WATEC needed to shut site work down and discontinue grading so that WATEC could have the pond surveyed to determine where there is extra fill. BG indicates that the survey could have been conducted days ago, so as not to delay the grading and shaving of placed fill. R. Jones disagrees that surveyors could have worked around the dozers and trucks, as the construction vehicles would have gotten in line of site and hindered survey. BG indicates that if WATEC is planning to shave and move the cohesive fill that is already on site, that WATEC should consider covering the material with the remaining 44,000 sq.ft. of plastic sheeting to keep the material dry. Otherwise, the cohesive material will be impossible to move, because it will not support dozers. R. Jones indicates that it was never WATEC's intention to cover the cohesive fill with plastic. R. Jones indicates that there is not enough plastic to cover the cohesive fill even if WATEC wanted to. R. Jones indicates that it was not in specifications to keep the fill covered with plastic. BG indicates that the point is to keep the job flowing smoothly, and complete the Fire Pond backfilling.

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| **Pay Quantities:**<br>WATEC: Rodney Jones (s.m.)<br>John Cutlip (asst. s.m.)) | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.* sunny, high 40's<br>*p.m.* sunny, low 60's | **Health and Safety PPE:**<br>steel-toed boots, safety glasses | **Air Monitoring Results:**<br>None |

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| **Field Representative:** Bruce Geno | **Date:** 2/29/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 2/29/96 |
| Day of Week | Thursday |
| No. | 83 |
| Sheet | 2 of 2 |

# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

1530 BG talks to Jim Cook (Beazer). BG explains that WATEC is not working today, and will not be working to place fill until 3/4/96. BG indicates that WATEC is surveying site to determine where excess fill can be shaved and moved to be used as fill. J. Cook indicates that BG should inform WATEC that days when WATEC is not moving fill to cover Fire Pond should be made up for on weekends. J. Cook is very concerned that WATEC will not be able to meet 3/25/96 deadline for Medlin wetlands planting. J. Cook has informed EAP that the wetlands will be finish graded by 3/25/96 per the WATEC schedule of 2/6/96. BG indicates that WATEC still has about 25 percent of the Fire Pond to cover. BG indicates that J. Gunn has implied that because not all of fill for Medlin Pond will be cut from the Fire Pond dam, additional change order will be needed for Medlin Pond fill. BG indicates that costs provided by J. Gunn indicate a potential net savings by saving the Fire Pond dam. BG has indicated to J. Gunn that if it costs more to save the dam than to take it out, Beazer will hold WATEC to the original grading plan. BG has indicated to J. Gunn that BG cannot understand why it would be more expensive to save the Fire Pond dam.

1600 BG calls B. Smith to inform B. Smith that BG would like to have a conference call with J. Gunn 3/1/96 to discuss scheduling and wetlands seeding deadline. BG informs B. Smith that J. Cook is aware of site shutdown and is very concerned that WATEC will not meet window for wetlands planting this spring.

1630 BG leaves site for the day to travel to PGH. R. Jones to leave for Atlanta this p.m.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 2/29/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 3/4/96 |
| Day of Week | Monday |
| No. | 84 |
| Sheet | 1 of 2 |

# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

1400 BG arrives on site from Pittsburgh. WATEC is using backhoe to excavate through placed cohesive fill and processed fill at select locations in Fire Pond to determine thickness of fill lift. Test pit locations are then being surveyed by Post and Associates. Post and Associates has replaced missing survey stakes in proposed soil excavation areas 2 and 3. R. Jones informs BG that TGC will be moving fill 3/5/96 with two dozers and is considering getting 3rd dozer to expedite fill movement. R. Jones indicates that WATEC needs to resolve how Beazer wishes to handle storm water during pumping of Medlin Pond. WATEC is considering beginning of Medlin Pond pumping 3/5/96. R. Jones indicates that rain is forecast for 3/6/96. BG to determine availability of 12-in. corrugated plastic pipe, and compare with estimated cost of maintaining 3-in. pump to pump storm water during rain events. R. Jones indicates that if Beazer prefers to delay beginning of pumping until 3/8/96 after rain has stopped, WATEC will work with Beazer. R. Jones indicates that if the pump method were chosen (i.e., block upstream side of Medlin Pond access road culvert and pump to downstream of Medlin Pond) Beazer would incur the cost of two technicians per rain event, plus pump rental for period of Medlin Pond work until backfilling complete. WATEC estimates approx. 1 million gal.s in Medlin Pond and plans to run treatment system about 10 hrs. per day at about 250 gpm.

1420 BG talks to B.Maurer (CRC). BG to check with NCDOT to see if wingwalls larger than shown in NCDOT standard details are acceptable. BG also informs B. Maurer that new headwall location should be some increment of 4 ft. from existing culvert inlet, since pipe sections come in 4 ft. or 8 ft. lengths. BG indicates that CRC should have existing culvert inlet survey information from Post and Associates. B. Maurer indicates that new headwall will be located at existing inlet, and that new headwall will be 3 ft high.

1430 BG talks to Dave Henderson of NCDOT hydraulics dept. (919-250-4100). D. Henderson proposes culvert inlet headwall to eliminate need for wingwall. D. Henderson to fax BG sketch of proposed inlet headwall (see attached).

1630 Post and Associates leaves site for the day. R. Jones uses test pit survey data to determine thickness of fill. Post and Associates has surveyed top of geogrid in test pits. R. Jones uses

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| **Pay Quantities:**<br>WATEC: Rodney Jones (s.m.)<br>John Cutlip (asst. s.m.))<br>Dan Wise (tech.) | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.* sunny, high 30's<br>*p.m.* sunny, mid 50's | **Health and Safety PPE:**<br>steel-toed boots, safety glasses | **Air Monitoring Results:**<br>None |

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| **Field Representative:** [illegible] | **Date:** 3/4/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 3/4/96 |
| Day of Week | Monday |
| No. | 84 |
| Sheet | 2 of 2 |

# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

surveyed test pit surface elevations to determine thickness of fill at test pit locations.

1700 BG calls Carolina Plastics Supply for price of 15-in. plastic corr. pipe to connect to Medlin Pond access road culvert and divert storm water to south side of Medlin Pond. Need approx. 460 ft.

1710 BG informs R. Jones that 15-in. corr. pipe is 4.00/ft. and that Carolina Plastics Supply can have the pipe delivered with 2-day lag. Soonest pipe would be here would be 3/7/96. J. Cutlip indicates that the culvert is actually 12-in. BG to get price on 12-in. plastic pipe. WATEC to prepare costs to purchase and install pipe. BG to get approval from Beazer once cost estimate is available.

1730 WATEC leaves site for the day.

1800 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 3/4/96 |

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

HYDRAULICS UNIT

FACSIMILIE TRANSMITTAL COVER SHEET

DATE: 4 March 96

Please deliver the following pages to:

Name: ~~Bruce~~ Bryan

This facsimilie is being sent by:

Name: Dave

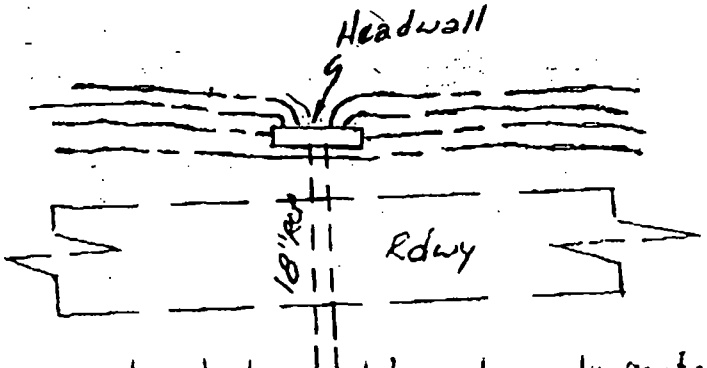
Phone Number: _____ Fax Number Called: 462-1539

IF YOU DO NOT RECIEVE ALL PAGES CLEARLY, CALL BACK AS SOON AS POSSIBLE

Our Telephone Number is: (919) 250 - 4100 Our FAX No. is: (919) 250 - 4108

PLEASE COUNT PAGES, (INCLUDING COVER SHEET) TOTAL NUMBER / PAGES

REMARKS:




Bryan, it looks like he eliminated wing wall. Need room for 4' el. drop. Need surveyed location of existing culvert inlet

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 3/5/96 |
| Day of Week | Tuesday |
| No. | 85 |
| Sheet | 1 of 3 |

# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0830 BG arrives on site. WATEC is placing geogrid/geotextile in Fire Pond. Triangle Grading Contractors (TGC) has two dozers (John Deere 650 G LGP and Cat D4H XL) scraping and blading cohesive fill material near northeast corner of Fire Pond.

0900 BG calls Carolina Plastics Supply for price of 12-in. plastic corr. pipe ($2.75/ft). R. Jones indicates that WATEC plans to start pumping today or tomorrow, so WATEC needs to know how to handle storm water runoff during dewatering of Medlin Pond. BG informs R. Jones of price of plastic pipe. R. Jones to provide costs to purchase and install pipe.

1040 R. Jones provides cost estimate done by J. Gunn for purchase and installation of 12-in. corrugated plastic pipe for storm water control. BG faxes copy of estimate to J. Cook. BG talks to J. Cook (Beazer East, Inc.). J. Cook approves change order request submitted by WATEC to place plastic pipe on end of Medlin Pond access road culvert (approx. $2,400). BG indicates that J. Gunn is suggesting that WATEC will need more money to purchase fill if 3,500 cy is not cut from Fire Pond dam as shown in original bid package. BG recieves letter from J. Gunn indicating that CRC should provide estimates of cut for new grading plan so that WATEC can estimate shortfall against original 3,500 cy planned to be taken from Fire Pond dam. BG faxes letter to J. Cook. BG explains to J. Cook that J. Gunn had provided documentation in December 1995 indicating it would cost $4.80/cy to cut the Fire Pond dam, not including placement costs. J. Cook indicates that NCDOT encroachment agreement has been signed by Beazer, but needs corporate seal. J. Cook to try to complete encroachment form today.

1100 R. Jones provides attached schedule to BG. BG indicates that the critical date for wetlands planting is to have the Medlin Pond regraded to the wetlands topography by 3/25/96 which is the date shown in WATEC's schedule of 2/6/96. R. Jones indicates that WATEC's schedule is agressive, but the Medlin Pond regrading completion date should be close to 3/25/96. BG faxes schedule to J. Cook. BG asks R. Jones if WATEC were to delay Medlin Pumping, if WATEC would be working Saturday and Sunday. R. Jones indicates that WATEC will plan to work Saturday regardless of when pumping is started. BG asks R. Jones if WATEC could pump at rate higher than 250 gpm. R. Jones indicates that WATEC will pump at optimum rate, but may slow

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| **Pay Quantities:**<br>WATEC: Rodney Jones (s.m.)<br>John Cutlip (asst. s.m.)<br>Dan Wise (tech.)<br>Dan Kitchen (tech.) | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.* sunny, high 40's<br>*p.m.* sunny, mid 60's | **Health and Safety PPE:**<br>steel-toed boots, safety glasses, tyvek, nitrile gloves | **Air Monitoring Results:**<br>None |

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| **Field Representative:** [signature] | **Date:** 3/5/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 3/5/96 |
| Day of Week | Tuesday |
| No. | 85 |
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# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

down if water becomes silty due to storm runoff, or as water is drawn from near bottom of Medlin Pond.

1200 BG leaves message for J. Cook for update on encroachment agreement with Southern Norfolk Railroad. BG to update John Funk of Rust.

1300 R. Jones uses Cat excavator to move cohesive fill near the northeast corner of the Fire Pond placed beyond the surveyed perimeter of Fire Pond.

1310 J. Cook leaves message for BG that the encroachment agreement has been signed by Beazer, and the agreement has been submitted to the railroad. Beazer to give the railroad a couple more days to respond before following up. J. Cook indicates Beazer should have an agreement by the end of the week. J. Cook indicates that Rust should plan schedule accordingly. J. Cook indicates that if J. Funk does not feel comfortable with risk, that J. Funk should call J. Cook.

1330 BG leaves message for J. Funk that Beazer should have encroachment agreement by the end of the week, provided railroad accepts the agreement posed by Beazer. BG indicates that J. Funk should call J. Cook with questions.

1430 B. Fisher arrives on site to deliver manifests for second batch of rolloffs for carbon, bag filters, and PVC pipe. BG to look into calculation of weight and volume of PVC pipe being used for temp. surface water treatment system.

1500 BG and B. Fisher walk site near north end of Fire Pond. B. Fisher asks BG to make sure that the tires being used to secure plastic sheeting are removed by WATEC at project completion. BG observes a survey stake placed to mark proposed soil excavation area 2 which is closer to pond than stakes previously placed to mark the excavation area, such that the proposed excavation area now is delineated to extend to where TGC has placed 1 to 2 ft. of cohesive fill. B. Fisher is concerned that TGC has placed cohesive fill in Excavation Area 2. R. Jones indicates that the Post and Associates surveyors informed him that Area 2 was previously mislocated, and that the new stake should have been put in before. W. Thompson and R. Jones indicate that the surveyors must have made an error and remove stake. TGC uses excavator to scrape cohesive fill from this area down

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 3/5/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 3/5/96 |
| Day of Week | Tuesday |
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# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

to about 6-in. above original grade. B. Fisher observes demolition debris and roughly graded area to south and west of remaining brick building. B. Fisher directs BG to make sure the large concrete fragments are placed beyond the treeline on Beazer property. B. Fisher instructs BG to make sure the site grades to drain beyond the perimeter of the original Fire Pond, as marked by WATEC's survey stakes, toward a central point. BG informs B. Fisher that BG has informed WATEC that the site must drain, and that pools or depressions which did not exist before regrading was started are not acceptable. BG indicates that the diversion ditch will be regraded to blend in with the surrounding topography. B. Fisher indicates that BG should obtain estimate of change order to abandon well next to proposed Excavation Area 3. BG indicates that WATEC will be abandoning a well in the middle of the Fire Pond dam for which a change order has been negotiated, and will be abandoning a well damaged by TGC at WATEC's expense. BG indicates that the fence along the eastern side of the property damaged by WATEC will need to be repaired by WATEC before project completion. BG indicates that the mulch piles are to be blended in with the processed fill as it is placed. B. Fisher asks W. Thompson what will happen with felled trees on former Medlin property. W. Thompson indicates there are not many left (approx. 20 or 30), and that they can be given away. B. Fisher indicates that they will have to be removed or chipped and put in one of the ponds. B. Fisher observes live wire on ground near transformers by tank T1 which is servicing Beazer field tailer. B. Fisher indicates that the wire should be put in conduit. BG to get estimate from WATEC's electrical contractor to put wire in conduit.

1700 R. Jones leaves site for the day. J. Cutlip informs BG that Joe Gunn (WATEC) will be arriving in Raleigh this evening, and will be on site tomorrow (3/6/96). J. Cutlip indicates that WATEC will not be covering site this evening, as the forecast is clear for tomorrow. BG indicates that the forecast BG heard calls for 30 percent chance of rain. J. Cutlip indicates that the plastic sheeting is tangled up with itself and the tires placed to hold it due to high winds at the site on 3/2/96.

1740 B. Fisher leaves site for the day. B. Fisher has talked with W. Thompson (TGC) regarding WATEC's with-holding of payment from TGC and possible threat by TGC to walk off job.

1800 BG leaves site for day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 3/5/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 3/6/96 |
| Day of Week | Wednesday |
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# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0800 BG arrives on site. Triangle Grading Contractors (TGC) is using Cat 315 L excavator near northwest corner of Fire Pond to scrape cohesive fill that was placed beyond the original limits of the Fire Pond. TGC is using John Deere 650 G LGP and Cat D4H XL dozers to move material being scraped toward center of Fire Pond. WATEC technicians are moving geogrid/geotextile to the center of the Fire Pond.

0900 J. Gunn arrives on site. BG receives call from B. Maurer indicating that the drawing was sent out without B. Smith's comments. B. Smith's comments were primarily inconsequential. B. Maurer to ship revised drawings 3/6/96 for receipt by WATEC 3/7/96.

0930 BG talks to J. Gunn and R. Jones. BG explains that lab data received 3/5/96 for surface water monitoring sample and fill samples are incomplete. BG has not received metals and SVOCs data for fill, and has not received 8290 (dioxin) results for surface water sample. Also, the VOC data for fill indicates that the samples were aqueous and not soil. J. Gunn indicates he has additional data for submittal in Atlanta, and will clarify what is apparently laboratory error concerning labelling of soil VOC results as aqueous sample results. J. Gunn indicates that BG and J. Gunn should review requirements of new grading plan this p.m. J. Gunn indicates that he has spoken with Bob Fisher (Beazer) concerning disposal of 6-in. and 4-in. PVC treatment pipe. J. Gunn indicates that B. Fisher agrees with J. Gunn's method of cleaning and analyzing treatment system pipe with intention of disposal in solid waste (non-hazardous waste) landfill. J. Gunn to document disposal procedures in letter to Beazer. R. Jones asks BG if B. Fisher had items which should be addressed by WATEC. BG indicates that most of the items were related to final condition of site before WATEC demobs (i.e., cleanup), keeping debris and fill out of soil excavation areas, and availability of fill needed to close Fire Pond. BG returns submittal of VOC lab package for fill samples to WATEC siting laboratory error. J. Gunn asks if R. Jones will be pumping Medlin Pond 24 hrs. R. Jones indicates that he plans to pump 12 hrs/day. BG asks if WATEC plans to work weekends, especially given loss of rain days this week. J. Gunn indicates to R. Jones that Arnold Olender (WATEC V.P.) has given direction for WATEC to work whenever weather permits.

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| **Pay Quantities:**<br>WATEC: Joe Gunn (p.m.)<br>Rodney Jones (s.m.)<br>John Cutlip (asst. s.m.)<br>Dan Wise (tech.)<br>Dan Kitchen (tech.) | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.* overcast, high 40's, shwrs<br>*p.m.* overcast, mid 60's, drizzle | **Health and Safety PPE:**<br>steel-toed boots, safety glasses, tyvek, nitrile gloves | **Air Monitoring Results:**<br>None |
| **Field Representative:** Bruce Geno | | **Date:** 3/6/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 3/6/96 |
| Day of Week | Wednesday |
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# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

1000 TGC ceases earth-moving operations, as fill is becoming saturated, and difficult to move. BG leaves message for Laura Faulconer (Wake Co. Engineering Dept.) to provide guidance on permanent erosion control matting. TGC operators and WATEC tech.s leave for the day.

1200 J. Gunn and BG discuss revised grading plan for Fire Pond dam area next to McCrimmon Road. BG explains that the bell end normally points downslope, but in the revised plan, the first section of 18-in. RCP will be replaced and the bell end will face toward the inlet. BG also indicates that the male-to-male connection will require a coupling, per NCDOT standard details. BG indicates that if a precast inlet headwall can be purchased with dimensions close to the cast-in-place inlet headwall shown on the drawing, then CRC will consider substitution. J. Gunn and BG agree that it may be possible to work around existing phone box and fire hydrant. J. Gunn indicates that it will be critical to support the utilities which are presently located over the existing culvert. J. Gunn indicates that WATEC will use hand shovel to locate utilities over the culvert. BG to provide direction to WATEC as to what types of temp. and permanent erosion control matting materials are acceptable. BG indicates that the filter berm basin will need to be installed before the Fire Pond dam is breached. BG indicates that sod will not be needed. J. Gunn indicates that he will try to recover money from the sod company which was to supply sod for ditches. J. Gunn indicates that WATEC will subcontract cast-in-place headwall and culvert replacement. BG indicates that the change order previously negotiated with WATEC by BG should be redone to reflect changes of revised grading plan. Filter berm costs should stay the same.

1330 BG, R. Jones, and J. Gunn talk about wetlands schedule and well abandonment. BG indicates that B. Fisher would like cost estimate from WATEC for abandonment of one well near proposed soil excavation area 3. BG indicates that WATEC will also have to abandon well damaged by TGC. J. Gunn indicates he will prepare a change order to abandon 3 wells. BG indicates that the change order should be for 2 wells, one in the middle of the Fire Pond dam and one near proposed soil excavation area 3. BG indicates that the damaged well will have to be abandoned at WATEC's expense. J. Gunn indicates that he will argue against abandonment of damaged well. J. Gunn

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 3/6/96 |

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|---|---|
| Date | 3/6/96 |
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# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

indicates that the damaged well was not shown on the contract documents, and there is no evidence that the well is actually damaged. BG indicates that the riser and protective casing have been pulled out of the ground, which means that damage was definately done to well. J. Gunn indicates that WATEC will take backhoe bucket and push the well riser and protective casing back into the ground. BG indicates that the well will have to be abandoned according to NC regulations. BG to try to locate monitoring well installation logs for two additional wells to be abandoned. J. Gunn indicates he has misplaced agronomic results for the cohesive fill. BG provides copy to J. Gunn. J. Gunn indicates that the low pH of the soil will lock up nutrients from grass for possibly a few years until lime neutralizes the soil, and that Beazer may want to consider annual pH checks of soil and addition of lime accordingly. BG to pass along information to Beazer.

1430 J. Gunn leaves site for the day. J. Gunn to return to Atlanta this p.m.

1530 R. Jones leaves site for the day.

1700 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 3/7/96 |
| Day of Week | Thursday |
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# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0830 BG arrives on site. Triangle Grading Contractors (TGC) is not working today due to rain. WATEC technicians are pumping from the Fire Pond using 3-in. gasoline trash pump to pump surface water through treatment system.

0900 BG leaves message for J. Funk to hold off on completion of the Soil Excavation Health and Safety Plan until BG can determine if dust levels for monitoring of airborne concentrations of dioxins which are protective of on-site workers have previously been established from other site work related to BCD or to excavation. B. Smith has indicated that dust must be monitored during excavation with a threshold level which is indicative of an airborne dioxin concentration.

1000 BG and R. Jones discuss issue of Fire Pond dam soil to be cut for regrading and schedule for Medlin Pond work. R. Jones indicates that the 12-in. plastic pipe should arrive this a.m. for installation this p.m. to handle storm runoff from Medlin Pond access road culvert. WATEC intends to pump beginning 3/8/96 and continue 10 hrs/day through the weekend. R. Jones indicates that he would rather not pump 24 hrs/day out of safety concerns for WATEC workers. R. Jones indicates that he will shoot for 3/25/96 to have the Medlin Pond regraded. R. Jones indicates that WATEC will have to have at least 4 days dry weather before trying to resume moving fill on the Fire Pond. R. Jones asks BG what is BG opinion of ability to use material cut from Fire Pond dam. BG provides boring log to R. Jones. R. Jones indicates that WATEC will try to place cut material from dam in the Fire Pond and asks BG what happens if WATEC cannot work with this material. BG indicates that the proposal did not indicate that WATEC was counting on using the cut material as fill in the ponds, and that BG provided a boring log for the well in the middle of the Fire Pond dam to be abandon by WATEC before regrading the dam. The log was provided to WATEC in early Nov 1995 (change order dated 11/7/95). BG indicates that if the material cannot be used, then Beazer has indicated tough luck. BG indicates that geotechnical and analytical testing of the cut material not required as it is not an off-site borrow source. If WATEC wants to do geotechnical testing to determine if they can handle the material, that is WATEC's option. BG indicates that if WATEC can find a precast inlet wall structure, that CRC will consider substitution.

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| **Pay Quantities:**<br>WATEC: Rodney Jones (s.m.)<br>John Cutlip (asst. s.m.)<br>Dan Wise (tech.)<br>Dan Kitchen (tech.) | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.* overcast, low 50's, shwrs<br>*p.m.* overcast, low 60's, shwrs | **Health and Safety PPE:**<br>steel-toed boots, safety glasses | **Air Monitoring Results:**<br>None |

**Field Representative:** [signature] **Date:** 3/7/96

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 3/7/96 |
| Day of Week | Thursday |
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# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

1045 J. Cook calls to inform BG that Beazer has obtained access agreement with Norfolk Southern Railroad. J. Cook indicates that BG should submit to J. Cook documentation of what Beazer might be willing to pay should WATEC ask for change order for more fill due to reduced volume of material being cut from Fire Pond dam as a result of revised grading plan. J. Cook indicates that he has been informed by B. Fisher that WATEC will need more fill to cover Fire Pond sediments. J. Cook indicates that Beazer may consider disposal of site-generated wastes (excluding carbon) if WATEC does not ask for any more change orders. B. Fisher is still convinced that it will be cheaper in the long run to dispose of the PVC treatment system pipe as a hazardous waste in a Subtitle C landfill. Beazer has received call from Wayne Thompson (TGC) that TGC will threaten WATEC to walk off job unless TGC receives payment.

1100 BG calls J. Funk to inform J. Funk that Beazer has obtained access agreement with the Norfolk Southern Railroad for installation of the groundwater treatment system. J. Funk indicates that the Health and Safety Plans for groundwater treatment system installation and soil excavation have been combined, and that a dust concentration of 5 ug/cu.m. has been selected based on pentachlorophenol. BG indicates that such a level should be acceptable to EPA. J. Funk to fax J. Cook and BG revised schedule for groundwater system installation.

1400 BG receives call from J. Cook . J. Cook informs BG that Beazer has received attached letter requesting change order for about $40,000 for approx. 5,300 cy additional fill to close Fire Pond. R. Jones leaves site for the day.

1540 J. Cook and B. Fisher (Beazer) call BG to discuss change order request and identification of monitoring wells to be abandoned. B. Fisher indicates that he spoke with J. Gunn this a.m. regarding disposal of PVC pipe as hazardous waste vs. cleaning pipe and procuring analytical work. B. Fisher mentioned that WATEC is going to need more fill to close Fire Pond. J. Gunn indicated that he would estimate quantity of additional fill needed and send letter of estimate to B. Fisher/J. Cook. BG to fax B. Fisher plan view of site with approx. locations of two monitoring wells to be abandoned (one near excavation area 3 and one damaged by TGC. J. Cook indicates

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 3/7/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 3/7/96 |
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# FIELD ACITIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

that BG should tell WATEC they owe Beazer for 1 week of oversight due to delay from not moving fill in good weather. J. Cook indicates that Beazer will not be paying for more fill. B. Fisher indicates that he received a call from Mike Eason (Enwood Structures). M. Eason was told by W. Thompson that W. Thompson was officially pulling off the job for lack of payment from WATEC. M. Eason indicates that he is holding pictures of WATEC's carbon changeout operation showing carbon all over the ground, and showing water from the carbon vessels being discharged on the ground. B. Fisher indicates that he should send copy of photos to WATEC indicating that Beazer is now facing a $3M lawsuit because of WATEC.

1630 BG talks to B. Smith regarding letter received by Beazer from WATEC requesting additional change order for fill. B. Smith indicates that CRC needs to review survey data and compare against anticipated pond bottom elevations and regrade contours shown in contract drawings. BG to organize documentation provided by WATEC regarding Fire Pond dam volume of cut and costs of regrading the Fire Pond dam area.

1730 WATEC leaves site for the day. J. Cutlip indicates that plastic flex pipe has been installed from the Medlin Pond access road to control storm water to Medlin Pond.

1800 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 3/7/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 3/8/96 |
| Day of Week | Friday |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0830 BG arrives on site. Triangle Grading Contractors (TGC) is not working today due to wet surface. WATEC technicians are pumping from the Fire Pond using 3-in. gasoline trash pump to pump surface water through treatment system. WATEC reports pumping about 70,000 gals. 3/7/96 and expects to pump about another 200,000 gal.s from the Fire Pond due to last storm event. WATEC to work 24 hrs through 3/10/96 to dewater Fire Pond and begin pumping Medlin Pond hopefully 3/10/96. R. Jones indicates that WATEC will need a few days of good weather before resuming fill operations in the Fire Pond.

0930 BG calls Post and Associates to have most recent survey information modemed to Tom McKee (CRC) in PGH. Survey information includes perimeter of Fire Pond locations/elevations, and elevations of top and bottom of fill in select Fire Pond locations. Post and Associates to modem information this p.m.

1015 BG receives call from B. Fisher regarding locations/identification of monitoring wells to be abandoned by WATEC. One well near Beazer field trailer was damaged by WATEC, and the other is next to excavation area 3. B. Fisher to try to locate more accurate and clearer figure to try to identify wells.

0945 BG talks to B. Smith regarding WATEC request for additional fill. BG has faxed B. Smith survey information showing fill elevations prior to shaving operations conducted 3/5/96, and memo concerning Fire Pond dam costs and cut estimates. B. Smith and BG review survey information to determine approximate grades of fill. Design grades were about 2%, yet current grades on processed fill and cohesive fill which has not been shaved are less in some areas. BG confirms that WATEC has been aware all along of the necessity to maintain positive drainage, as well as provide design lift of 2 ft over sediments. BG informs B. Smith that J. Cook has talked about throwing WATEC off job and finishing with performance bond.

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| **Pay Quantities:**<br>WATEC: Rodney Jones (s.m.)<br>John Cutlip (asst. s.m.)<br>Dan Wise (tech.) | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.* sunny, low 30's, windy<br>*p.m.* sunny, high 30's, windy | **Health and Safety PPE:**<br>steel-toed boots, safety glasses | **Air Monitoring Results:**<br>None |
| **Field Representative:** [signature] | | **Date:** 3/8/96 |

CUMMINGS RITER CONSULTANTS, INC.

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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

1215 B. Fisher calls BG to inform BG that he was unable to locate a figure showing well locations, and asks BG to call John Mitsak with Groundwater Technology, who should have a better figure which can be used to identify the wells. B. Fisher indicates that J. Cook has sent John Mitsak RFP to sample wells M-4, C-10B, C-11B, C-14A, C-14B, C-27B, C-28B, C29B, and PW-1. The well damaged by WATEC may be M-4, and therefore may have to be replaced. B. Fisher indicates that Wayne Thompson (TGC) has informed him that W. Thompson has been promised a check from WATEC so W. Thompson is not pulling off job.

1400 R. Jones provides attached letter from J. Gunn indicating that the surface water treatment sample collected from vessel 1 while pumping from the Fire Pond on 2/22/96 exceeds effluent requirements (306 ppq vs. 30 ppq). WATEC to have lab run analysis on effluent sample downstream of 1 micron bag filter. WATEC to discontinue pumping from the Fire Pond until WATEC can determine how to upgrade filtration capacity of surface water treatment system. WATEC to switch to pumping from Medlin Pond with the idea that the Medlin Pond water contains much less suspended solids that Fire Pond storm runoff. BG indicates to R. Jones that the decision to continue pumping is at WATEC's risk. R. Jones indicates that shutdown would delay schedule. WATEC to pump through the weekend, and possibly 24 hrs/day if freezing weather is forecast to avoid damage to treatment system during shutdown.

1500 B. Smith calls BG indicating that J. Cook will not agree to paying WATEC more money for additional fill. J. Cook has indicated that as a minimum, WATEC has to cover sediments with 2 ft. of fill per the terms of the original contract. In addition, WATEC has acknowledged their responsibility to make the Fire Pond drain. B. Smith to conference call with J. Gunn and BG.

1515 B. Smith and BG conference call J. Gunn. B. Smith indicates that the call is in response to the letter of March 7, 1996 from WATEC to Beazer requesting additional money for fill. B. Smith indicates that WATEC is obligated under the letter of February 8, 1996 to place 2 ft. of fill over pond sediments and that WATEC on several occasions has acknowledged and agreed that the ponds will be graded to drain. B. Smith indicates that Beazer will not agree to paying for additional Fire Pond fill, and that WATEC has already indicated that processed fill would be used

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 3/8/96 |

CUMMINGS RITER CONSULTANTS, INC.

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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

for the Medlin Pond. J. Gunn agrees. B. Smith informs J. Gunn that WATEC is to have the Medlin Pond completed for wetlands planting by 3/25/96. J. Gunn agrees. B. Smith also informs J. Gunn that correspondence received by Cummings/Riter in December indicates that the WATEC should not get more money if less material is cut from the Fire Pond dam. J. Gunn indicates that the original grading plan had approximately 2,500 cy of material cut from the Fire Pond dam, while the new grading plan has about 1,300 cy being cut, leaving a shortfall of about 1,330 cy. BG confirms that approx. 2,500 cy were to be cut from the Fire Pond dam, however, costs provided by J. Gunn in December while discussing options to pay for a 2 ft. vs. 4 ft lift of fill over the Fire Pond indicated a net savings to Beazer if less material were cut from the dam. J. Gunn indicates that he will research the no.s and get back to Beazer on 3/10/96.

1530 B. Smith calls BG and indicates that BG should prepare letter documenting J. Gunn's acceptance and acknowlegements of WATEC's committments under the contract terms. B. Smith also indicates that the letter should reiterate the warning to WATEC that continued pumping is at WATEC's risk.

1700 B. Smith review letter for submittal of NCDOT encroachment application. R. Jones leaves site for the day.

1730 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 3/8/96 |

WATEC

**Waste Abatement Technology, L.P.**

1900 Williams Drive, Suite B
Marietta, Georgia 30066
(770) 427-1947, FAX (770) 427-1907

March 8, 1996

Mr. Bruce Geno
Oversight Engineer
Cummings/Riter Consultants, Inc.
c/o Koppers Company, Inc. Site
908 Church Street
Morrisville, North Carolina 27560

Reference: Surface Water Remediation
Water Quality Data

Dear Bruce:

The laboratory has reported 306 ppq TEF's on the sample taken 2/22/96. This sample was taken from carbon vessel #1. The backup sample from the 1 micro filter cartridge (taken 2/22/96) has been submitted to the laboratory for analytical testing under Method 8290. Results from this sample will be ready in 7 - 10 days.

WATEC met with JB Systems today, a filtration firm here in Atlanta, and discussed the use of high efficiency filter bags to further reduce the solids/silt passing through the treatment system. This is again an upgrade to the current filter media bags being used, at a cost 10 times higher than current bags. Removal efficiencies and flow rates are being evaluated, and we expect the new filter media bags to be on-site Monday or Tuesday of next week. Schedule modifications may be required due to lower flow rates in order to maintain water quality restrictions set for the site.

In the meantime, WATEC has suspended treatment of the Fire Pond water and is switching over to the Medlin Pond. Filtration has been upgraded to the use of 5 and 1 micron bags prior to carbon, and 1 micron on the backside of carbon unit 2. Solids loading is significantly less from the Medlin Pond, and the new filter bags will be used to complete the Fire Pond next week, which should reduce the solid/silt and subsequently lower the dioxin levels being detected at the lab.

It was noted with the lab, that their water blank was calculated at 25 ppq. I have asked the quality assurance people at the lab to provide further explanation and review the data report again for accuracy. This information should be available next week.

WATEC will again upgrade the filtration units on the treatment system to minimize the risk of dioxin levels exceeding the 30ppq limit. If you have any questions, please feel free to call me.

Sincerely,

Waste Abatement Technology, L.P.

Joseph F. Gunn
Project Manager

cc: Rodney Jones - WATEC; Site Manager
Jim Cook - Beazer East; Project Manager

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 3/11/96 |
| Day of Week | Monday |
| No. | 89 |
| Sheet | 1 of 2 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0830 BG arrives on site. Triangle Grading Contractors (TGC) is not working today due to wet surface. WATEC technicians are pumping from the Medlin Pond using 6-in. Godwin CD150M deisel trash pump to pump surface water through treatment system. Approx. 14,170,000 gal.s on flow meter. WATEC reports pumping about 700,000 gals. from 3/9/96 to 3/11/96. Medlin Pond drawdown approx. 20 in.

0900 BG faxes letter addressed to J. Gunn (WATEC) to B. Smith for review.

0930 BG leaves message for John Mitsak with Groundwater Technology to call regarding well ID's.

1100 BG identifies damaged well south of Beazer field trailer as MW-5 by faded ink markings on PVC well cap. BG observes that MW-9 is damaged, and that protective casing and first length of PVC riser has been pulled out of ground. The damaged casing and riser are lying next to diversion ditch with concrete debris near northwest corner of Fire Pond. BG unable to determine original location of MW-9. BG observes flow through treatment system of approximately 300 gpm. Trees on former Medlin property which were damaged by WATEC and Triangle Grading Contractors have not yet been treated with tree paint. BG observes spent bag filters from treatment system on ground next to treatment plant.

1330 BG speaks to Rodney Jones (WATEC) concerning well MW-9, Medlin Pond schedule, effluent sampling, cap on surface water treatment of 15 million gallons, filter bags, and rolloff capacity. R. Jones indicates that the rolloff for spent filters has plenty of remaining capacity. BG indicates that spent bag filters should be containerized. R. Jones agrees, and indicates that with the freezing weather the bag filters which had been temporarily stored in the 55-gal. drums froze to the drum as a solid block and have not been emptied. R. Jones indicates that the drums will be emptied this p.m. and the filter bags that are on the ground will be containerized. R. Jones indicates that the 15 mill. gal. cap on surface water treatment should be achieved Tues. or Wed. BG indicates that once the cap is reached, WATEC will need to track O&M of water treatment for comparison to the $0.03/gal. contract amount. R. Jones agrees that O&M will be tracked for 2 or 3 days until a determination can be made as to which is less cost to Beazer. R. Jones indicates that WATEC

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| **Pay Quantities:**<br>WATEC: Rodney Jones (s.m.)<br>Dan Kitchen (tech.) | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.* sunny, low 30's, windy<br>*p.m.* sunny, high 30's, windy | **Health and Safety PPE:**<br>steel-toed boots, safety glasses | **Air Monitoring Results:**<br>None |

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| **Field Representative:** Bruce Geno | **Date:** 3/11/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 3/11/96 |
| Day of Week | Monday |
| No. | 89 |
| Sheet | 2 of 2 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

would like to begin filling Medlin Pond 3/13/96 or 3/14/96, but may slide a day or two, given high initial water level in Medlin Pond. R. Jones indicates that WATEC will continue to pump on a 24-hr basis until the weather forecast indicates that the temp. will not drop below freezing. BG indicates that well MW-9 has been damaged and that BG will have to determine whether this is one of the wells that needs to be sampled. If so, BG indicates that this well will need to be replaced. BG indicates that the well must have been damaged 3/6/96 by TGC, as BG recalls seeing the well when B. Fisher was on site 3/5/96. BG indicates that the well had originally been marked, but may have been damaged earlier during demolition actitivities, as the casing appeared to be slightly pushed over. R. Jones indicates that BG should have received a change order for abandonment of two wells, and that as soon as WATEC receives approval, WATEC will schedule the driller (Trigon). BG asks when WATEC will be taking next effluent treatment sample. R. Jones indicates that a sample will be collected this week for analysis, to comply with the weekly frequency required by the specifications. R. Jones indicates that he forgot to send in the effluent sample collected 2/22/96 from after the 1 micron bag filter on 3/8/96, but will do so today. BG indicates that R. Jones should be sure to send in the sample to lab today.

1500 BG receives corrected analytical results for fill material samples and geotechnical results for second batch of 5,000 cy of processed fill destined for Medlin Pond. BG indicates to R. Jones that trees on former Medlin property damaged by TGC and WATEC should be treated. R. Jones indicates that tree paint is on order. R. Jones indicates that initial Medlin Pond level was up by approx. 3 ft. higher than shown on drawings. BG indicates he believes it was closer to 1 ft higher, as the top of the standpipe appeared to be about 1 ft. below the original pond surface.

1700 BG leaves site for the day. WATEC to pump 24 hours from Medlin Pond.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 3/11/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 3/12/96 |
| Day of Week | Tuesday |
| No. | 90 |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0830 BG arrives on site. WATEC continues to pump from Medlin Pond. Rodney Jones indicates that WATEC will not be pumping through this evening, but instead will be stopping the pump at about 1800, since the forecast is not calling for freezing temperatures.

0900 BG calls B. Smith to discuss letter to Joe Gunn (WATEC) from BG regarding project completion issues. B. Smith indicates that costs provided by J. Gunn 12/13/95 for cut of Fire Pond dam should not be included. BG to add paragraph concerning monitoring well damage by WATEC and WATEC's obligation to abandon or replace same.

1000 Dan Wise leaves site for the day.

1030 BG faxes revised version of letter addressed to J. Gunn to B. Smith and Jim Cook (Beazer).

1130 BG calls J. Cook to discuss schedule for Medlin Pond, treatment total, and comments on letter to J. Gunn. BG informs J. Cook that total volume of water treated is about 14.5 million gal.s and that at current pumping rate (about 350 gpm), WATEC should hit 15 million gal. cap in a couple of days. BG indicates that the drawdown in the Medlin Pond is about 3.5 ft. BG indicates that there is approx. 4 ft. depth left in Medlin Pond. BG informs J. Cook that there is approx. 150,000 gal.s in Fire Pond from the last rain, but that WATEC is concentrating on the Medlin Pond to try to meet the 3/25/96 date for the Medlin planting. J. Cook indicates that BG should fax copy of groundwater monitoring proposal from CRC to J. Cook.

1200 BG measures depth and water level in the monitoring well next to proposed excavation area 3 designated for abandonment by B. Fisher. Depth is 25 ft. and water level is 3 ft. bgs. BG faxes well depth to J. Gunn with change order review for abandonment of MW-8 and MW-1, and letter regarding project completion issues, including monitoring well abandonment, schedule commitments, fill grade, and dioxin/furan results for sample from CV1 collected 2/22/96.

1230 Triangle Grading Contractors (TGC) arrives on site and begins using John Deere 650 G LGP to blade fill from northwest area of Fire Pond. TGC has been instructed by WATEC not to place fill onto sediments, as the water level in the Fire Pond is at the edge of fill in some locations.

1300 John Cutlip arrives on site. BG observes that the Fire Pond diversion ditch near the northeast

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| **Pay Quantities:**<br>WATEC: Rodney Jones (s.m.)<br>Dan Kitchen (tech.)<br>Dan Wise (tech.)<br>John Cutlip (asst. s.m.) | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.* sunny, low 40's, windy<br>*p.m.* sunny, high 50's, windy | **Health and Safety PPE:**<br>steel-toed boots, safety glasses | **Air Monitoring Results:**<br>None |

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| **Field Representative:** Bruce [illegible] | **Date:** 3/12/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 3/12/96 |
| Day of Week | Tuesday |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

corner of the Fire Pond is filled in. BG to inform WATEC that the diversion ditch must be cleaned out before next precipitation.

1500 R. Jones leaves site for the day. TGC demobs John Deere 650 G LGP. TGC continues to shave cohesive fill with Cat D4H XL.

1610 BG receives letter from J. Gunn rebutting BG letter. J. Gunn indicates that WATEC is aware of contract obligations, but original slope of sediments may impede drainage. BG to clarify WATEC's understanding of the project objectives.

1620 BG faxes copy of letter to J. Cook and B. Smith along with page from contract terms relative to existing conditions.

1740 BG leaves site for the day. WATEC discontinues pumping for the evening.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 3/12/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 3/13/96 |
| Day of Week | Wednesday |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0830 BG arrives on site. Triangle Grading Contractors (TGC) is using John Deere 650 G LGP to shave cohesive fill placed in northwest and north central area of Fire Pond. BG calls Joe Gunn (WATEC) to clarify WATEC letter of 3/12/96. BG asks J. Gunn for WATEC's understanding of the project committments. J. Gunn indicates that WATEC is to place a min. of 2 ft. of fill over the sediments and to maintain drainage. Post and Associates are on site to stake perimter of Medlin Pond according to pond limits shown on design drawings.

0840 BG and Rodney Jones walk area near northwest corner of Fire Pond. BG points out the well casing and first section of PVC riser from Monitoring Well M-9 resting next to diversion ditch. R. Jones indicates that he thought he had located the well, but it was actually the 4-in. PVC pipe next to pine tree which is thought to be associated with Enwood Structures sewer. BG to check to see if survey coordinates are available for MW-9 so that well can be properly abandoned. BG indicates that abandonment will be most probable corrective action, since the well is shallow (25 feet deep). BG and R. Jones discuss drainage next to proposed Excavation Area 3 and south of remaining concrete slab. BG indicates that the area was not poorly draining before TGC began placing fill, and that the current drainage will create a wetlands area. BG indicates that WATEC will either have to bring in more fill to place in wet area to increase grade, or shave off placed fill to permit drainage. R. Jones indicates that if 2 ft. of fill are to be placed over sediment as required by contract (in order to support equipment), it may not be possible to shave the area to permit drainage. R. Jones indicates that by the end of the day, WATEC will know how far the area can be shaved. R. Jones indicates that shaving of the cohesive material should be completed by the end of the day. R. Jones indicates that WATEC's efforts are currently focused on the Medlin Pond. WATEC workers are preparing goegrid/geotextile for placement in Medlin Pond. R. Jones to have TGC clean out diversion ditches by the end of the day, and have WATEC tech.s restake and tape off soil excavation areas. R. Jones indicates that WATEC to work through weekend pumping from Medlin Pond. WATEC believes that fill placement can begin 3/18/96 or 3/19/96 to finish Medlin Pond by 3/25/96.

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| **Pay Quantities:**<br>WATEC: Rodney Jones (s.m.)<br>Dan Kitchen (tech.)<br>Dan Wise (tech.)<br>John Cutlip (asst. s.m.) | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.* sunny, low 40's<br>*p.m.* sunny, high 60's | **Health and Safety PPE:**<br>steel-toed boots, safety glasses | **Air Monitoring Results:**<br>None |

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| **Field Representative:** Brian Geno | **Date:** 3/13/96 |

CUMMINGS RITER CONSULTANTS, INC.

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| Date | 3/13/96 |
| Day of Week | Wednes |
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| Sheet | 2 of 5 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0900 BG faxes B. Smith rebuttals to concerns raised in WATEC letter of 3/12/96. Comments pertain to WATEC's agreement to cover remaining exposed portion of Fire Pond as of 2/8/96 with processed fill, original pond bottom slope as evidenced by low point at pump intake, placement of fill and resulting movement/consolidation of sediment has changed bottom slope, and Fire Pond dam material credit is not justified given that less of Fire Pond surface is covered with processed fill than indicated in agreement of 2/8/96.

0930 Tim Johnson (NCDOT) calls BG to indicate that encroachment agreement processing can take 2 to 4 weeks, depending on the case loads of both paperwork and site visits. BG indicates that an additional 4 oversize drawings were sent to attention of John Ransdall.

1000 BG talks to B. Smith regarding thoughts on rebuttal to WATEC's letter of 3/12/96. B. Smith agrees that placement of fill more than required 2-ft. thick around perimeter of Fire Pond exacerbated drainage problems. B. Smith to fax backup provided by WATEC to 2/8/96 agreement for more fill. B. Smith indicates that it's unlikely WATEC would have committed a gross miscalculation of processed fill needed to close Fire Pond. BG indicates that WATEC has stated that TGC has delivered contract amount of 8,500 cy of processed fill to Fire Pond, even though slightly more than half the remaining exposed area as of 2/8/96 was covered with processed fill. B. Smith indicates that Rust has not provided Groundwater Field Operations Plan. BG to call John Funk to determine status of Groundwater Field Operations Plan.

1100 BG calls J. Funk (Rust) to inquire about status of Field Op.s Plan. J. Funk hopes to have Field Op.s Plan to B. Smith by end of the week, along with revised schedule. J. Funk indicates that mob to occur for groundwater 4/4/96. BG calls B. Smith to inform him that additional Field Op.s Plan is forethcoming from Rust.

1200 BG walks site. BG observes area near north-central portion of Fire Pond where mud bubble was created from mudwave folding over onto itself. BG observes that dozer blade has ripped into the mud bubble. Drawdown in Medlin Pond appears a little over 4 ft. BG observes that TGC has used Cat D4H LGP dozer on former Medlin property to blade area near north end of Medlin Pond.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 3/13/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 3/13/96 |
| Day of Week | Wednesday |
| No. | 91 |
| Sheet | 3 of 5 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

1230 J. Cutlip and R. Jones arrive on former Medlin property and begin to coat damaged trees with tree paint. BG informs R. Jones that TGC has broken through geogrid with dozer and has mingled sediment with cohesive fill. BG indicates that he had spoken previously to R. Jones about importance of marking high spots with stakes to keep equipment from breaking through into the sediments. BG indicates that the entire purpose of the project is to cover the sediments and avoid excavation of sediments which would constitute generation of a hazardous waste. BG explains that WATEC should have someone watching the dozer operator to keep him off of the trouble spots. R. Jones indicates that he will mark off the area and instruct dozer operator to stay clear of the area. R. Jones indicates that 2 ft. of fill will be placed over the problem area. BG asks R. Jones if WATEC plans to move the cohesive material currently being shaved over exposed sediments or move over processed fill as topsoil. BG indicates that since Beazer is unlikely to pay for more fill, it may be wise to use the cohesive material as topsoil since topsoil is more expensive than fill. BG indicates that since WATEC may ultimately be paying for fill, it may be in WATEC's interest to use the cohesive material as topsoil. R. Jones indicates that he has thought about it. R. Jones indicates that he believes that WATEC has a legitimate claim for more fill. BG asks R. Jones why 8,500 cy of processed fill covered about 35 % of Fire Pond opposed to 60 % of Fire Pond as estimated for basis of WATEC change order. R. Jones indicates he believes that extra fill was needed to acheive drainage. R. Jones indicates that he believes there are undulations in the surface of the geogrid, and that extra fill was needed to fill in troughs to achieve drainage. R. Jones indicates that the fill is thicker in places, depending on traffic, original thickness of sediments, and softness of sediments. R. Jones indicates that the pond bottom was not as shown on contract drawings. BG agrees that the pond bottom was not as shown in drawings, but that the original slope drained to a low point (where WATEC located pump intake) and that if WATEC were to mimic the original pond surface with a fill surface 2 ft. higher in elevation, the pond would drain. BG explains that the shoreline receeded during pumping, indicating a sloped surface. R. Jones indicates that there was still a lot of water in the sediments. BG indicates that the survey

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 3/13/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 3/13/96 |
| Day of Week | Wednesday |
| No. | 91 |
| Sheet | 4 of 5 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

information provided by Post and Associates does not seem to indicate that processed fill thickness is much greater than 2 ft., yet the area covered by the processed fill is slightly more than half of the estimated 60 % of Fire Pond. R. Jones asks BG if BG believes that WATEC has done everything they can to in good faith to survey and determine where fill could be shaved to conserve fill. BG indicates that it is in WATEC's and Beazer's best interest to conserve the quantity of fill brought on site. BG indicates that Beazer's position is that WATEC may need more fill to close the Fire Pond, but Beazer is not paying for it. BG indicates that Beazer's position is that the job was bid lump sum to place 2 ft. of fill over sediments and maintain drainage, and that WATEC was given more money having failed the first time, but is not going to get a third chance. BG explains that that is the difference between lump sum and time and materials, and that WATEC cannot be turning in wt. tickets and expect to get paid for fill every time they go over. R. Jones indicates that he understands there is risk to a lump sum contract. R. Jones indicates that fill quantities were calculated in the office, but in the field the volumes don't seem to be adequate. BG indicates that WATEC should have learned from experience with the cohesive fill, and that Beazer agreed to pay the $60K to cover the remaining portion of the pond with 2 ft. processed fill. R. Jones indicates that the treatment system is being operated at between 350 and 400 gpm. BG and R. Jones discuss drainage next to Excavation Area 3. BG indicates that the proposed excavation area is a high spot and that fill placement next to the area created two adjacent high spots wherer water accumulates between. BG indicates that the fill was placed over 2 ft. thick in this area initially, and was actually stockpiled outside the area of the pond. R. Jones asks if goetextile and fill were to be placed, who would pay for it. BG indicates that WATEC cannot create ponds where there were no ponds, and that WATEC would be responsible for the fill. R. Jones asks about grading the excavation area to blend with the pond grade. BG explains that the area cannot be excavated to grade, as the soils are designated for incineration. R. Jones indicates that perhaps TGC can back blade the fill placed next to the excavation area to provide drainage. BG indicates that before any fill is placed, the water will have to be evacuated.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 3/13/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 3/13/96 |
| Day of Week | Wednesday |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

1400 TGC ceases blading operations in Fire Pond.

1530 TGC demobs John Deere 650 G LGP. WATEC's 6-in. diesel pump breaks and pumping from Medlin Pond stops. WATEC calls rental company. Replacement pump to arrive this p.m. Total gallons pumped is about 14.8 million gal.s. WATEC should break 15 million cap 3/14/96.

1730 BG leaves site for the day. WATEC is replacing 6 in. pump.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 3/13/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 3/14/96 |
| Day of Week | Thursday |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0830 BG arrives on site. WATEC is rolling geotextile/geogrid composite. BG speaks to R. Jones. WATEC expects to have treatment system operational in a couple of hours. R. Jones indicates that he spoke to Wayne Thompson of Triangle Grading Contractors (TGC) about dozer cutting into geogrid on 3/13/96. W. Thompson indicates that he had instructed the operator to stay away from the soft area where breakthrough occurred and reprimanded the operator. R. Jones indicates that WATEC will excavate the cohesive fill placed adjacent to the bubble, and replace/patch geogrid, and fill over the area with a min. of 2 ft. of fill. R. Jones indicates that by excavating the fill surrounding the bubble, the bubble will hopefully even out a bit so that the final elevation will not be as high. R. Jones indicates that pumping of the Fire Pond will resume as soon as Medlin Pond is dewatered. WATEC to work through the weekend to dewater Medlin Pond. R. Jones and BG discuss drainage next to Excavation Area 3. WATEC has pulled back fill in the area to original grade at one end of the depression, and the depression is not draining. R. Jones indicates that WATEC does not believe that WATEC is resposible for drainage of the area, since WATEC was told to stay out of the area and the area is not part of the Fire Pond. BG indicates that the area does not drain because fill was placed next to it, and WATEC is responsible for blending in fill placed over sediments with existing ground surface to provide drainage. R. Jones indicates that WATEC does not agree it is their responsibility and will prepare a cost estimate for submittal to Beazer to fill in the depression, to include fill costs, geotextile, dozer and operator, and technician.

0930 BG talks to R. Jones to explain Beazer's position with regard to depression next to Area 3. BG explains to R. Jones that the 2/8/96 change order for processed fill was to cover 60 percent of Fire Pond with processed fill, and made no mention of using cohesive material already on site to fill in the open pond bottom. BG indicates that the cohesive material was supposed to be of sufficient quantity to fill over the entire pond, so Beazer essentially paid to fill 60 percent of the Fire Pond twice. BG indicates that Beazer has been lenient on WATEC by allowing WATEC to move the cohesive material that was already paid for by Beazer, to fill in the hole. R. Jones indicates that WATEC will no longer use cohesive material to fill in the open portion of the Fire Pond, but will

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| **Pay Quantities:**<br>WATEC: Rodney Jones (s.m.)<br>Dan Kitchen (tech.)<br>Dan Wise (tech.)<br>John Cutlip (asst. s.m.) | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.* sunny, low 50's<br>*p.m.* sunny, high 60's | **Health and Safety PPE:**<br>steel-toed boots, safety glasses | **Air Monitoring Results:**<br>None |

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| **Field Representative:** [illegible] | **Date:** 3/14/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 3/14/96 |
| Day of Week | Thursday |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

instead use processed fill to cover the exposed sediments, and use the cohesive material that has been shaved and placed near the open hole as topsoil over the processed fill. R. Jones explains that this documentation will indicate that only 200 cy of cohesive fill which was bladed off was used to cover sediments in the Fire Pond. BG explains that there should be plenty of material on site to fill the depression, and that the only item Beazer would pay for would be the extra fabric.

1000 WATEC has treatment system running again.

1030 R. Jones and BG again talk about change order for filling in depression next to proposed Excavation Area 3. R. Jones indicates that WATEC did not fill in this area because they were instructed to keep out of it. R. Jones indicates that there is nothing in the specifications indicating that areas beyond the limits of the pond are WATEC's responsibility for drainage. R. Jones indicates that WATEC should be able to eliminate the costs of the fill material required to fill in the depression, but will need costs for the dozer and operator, pump, and geotextile. BG indicates that he can only justify geotextile costs. R. Jones indicates that WATEC cannot agree with that, but will look at costs for 2 hrs. of dozer/operator, geotextile, and 1-day pump rental. R. Jones indicates that if the total is low enough, WATEC will just do the work with no change order.

1130 R. Jones submits cost estimate of $1,000 to fill in the depression next to Soil Excavation Area 3.

1430 BG talks to B. Smith regarding proposed change order to fill depression next to soil excavation area 3. B. Smith indicates that Beazer should pay only for felt. BG explains that R. Jones and BG disagree, and have come to an impass, and unless Beazer shares some of the labor to move the pump and run equipment, the area may never be filled in. BG to try to negotiate cost down to around $600 by eliminating geogrid.

1530 BG and R. Jones talk again about filling in depression next to excavation area 3 with cohesive fill. BG negotiates with R. Jones to eliminate costs of trash pump and geogrid, but adds 2 more hours of technician time. Revised change order is $650. BG calls Jim Cook (Beazer) to inform J. Cook that BG and WATEC have agreed on $650 to fill in depression, and that is the lowest WATEC will go. BG explains purpose of the effort to provide drainage for the excavation area, and that

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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|---|---|
| **Field Representative:** | **Date:** 3/14/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 3/14/96 |
| Day of Week | Thursday |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

WATEC is deliberately delaying to try to get more money. BG indicates that change order amount is about $650.

1700 BG talks to J. Cutlip (WATEC tech.) who indicates that WATEC will pump until midnight tonight to make up for lost pumping time due to pump breakdown 3/13/96.

1730 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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|---|---|
| **Field Representative:** | **Date:** 3/14/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 3/15/96 |
| Day of Week | Friday |
| No. | 93 |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0830 BG arrives on site. WATEC is preparing geotextile/geogrid for Medlin Pond and pumping from Medlin Pond. Rodney Jones indicates that WATEC has reached the 15 million gallon cap on water treatment so WATEC has begun to track man hours, bag filters, PPE and other costs for O&M of surface water treatment system. R. Jones indicates that WATEC will be folding poly sheeting on Fire Pond side of property and moving to former Medlin property in preparation of backfilling activities scheduled to begin 3/8/96. Drawdown in Medlin Pond about 5 ft., with about 50 percent of Medlin Pond exposed. WATEC is pumping at about 350 gpm from Medlin Pond. Discharge is slightly turbid. R. Jones to collect treatment sample today.

0930 R. Jones collects treatment samples from surface water treatment system.

1315 WATEC ceases geotextile/geogrid preparation and covers prepared rolls of fabric with tarpaulin due to approaching thunderstorm.

1430 Storm has ceased. WATEC continues to pump from Medlin Pond.

1500 R. Jones leaves site for the day.

1630 B. Fisher calls to discuss filling in depression next to proposed soil excavation area 3, schedule for Medlin Pond, well abandonment, and electrical service to trailer. BG indicates that BG got estimate from electrical contractor of $120 to run conduit for trailer electric, and is waiting for the contractor to schedule the work. BG indicates that BG got estimate from WATEC of about $650 to fill in depression next to soil excavation area 3. B. Fisher agrees that $650 is satisfactory to Beazer, and B. Fisher will talk it over with Jim Cook. BG indicates that WATEC has topped 15 million gal. cap on surface water treatment, and WATEC is now tracking costs for O&M of treatment system. BG indicates that Medlin Pond should be drained by 3/18/96, and WATEC has Triangle Grading Contractors (TGC) scheduled to deliver processed fill to Medlin Pond beginning 3/18/96. BG indicates that location of MW-9 cannot be determined, as the protective casing and first section of PVC riser were pulled out of the ground, and the well is now covered with soil. BG indicates that unless Beazer has survey coordinates of MW-9, it may never be found. B. Fisher asks BG to get estimate of well abandonment for MW-5 and MW-8 (presumed ID of well next to

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| **Pay Quantities:**<br>WATEC: Rodney Jones (s.m.)<br>Dan Kitchen (tech.)<br>Dan Wise (tech.)<br>John Cutlip (asst. s.m.) | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.* sunny, low 50's<br>*p.m.* overcast, high 60's, t-strms | **Health and Safety PPE:**<br>steel-toed boots, safety glasses | **Air Monitoring Results:**<br>None |

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| **Field Representative:** B. Geno | **Date:** 3/15/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 3/15/96 |
| Day of Week | Friday |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

exc. area 3) from Rust. BG to call Groundwater Tech. (Charlie Wingerd) to establish well ID, and call electrician to schedule work.

1700 BG leaves message with Odell Electric to call back with schedule for electrical work. B. Smith calls BG. B. Smith indicates that BG should go with Mark Brush 3/20/96 to visit S. Boston, VA site. BG informs B. Smith that B. Fisher has given approval for WATEC change order to fill in depression next to excavation area 3.

1730 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |
| **Field Representative:** | | **Date:** 3/15/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 3/18/96 |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0830 BG arrives on site. WATEC is treating water from the Fire Pond using 3-in. pump. Triangle Grading Contractors (TGC) is placing processed fill in Medlin Pond with John Deere 650 G LGP dozer. TGC is delivering fill to site with three trucks. Rodney Jones (WATEC) indicates that he will speak to Wayne Thompson regarding possibility of scheduling more trucks.

0845 BG calls Gordy Uhr (NCDOT 919-733-3213) to give G. Uhr Beazer corporate address. G. Uhr indicates that encroachment agreement will be going to the attention of James Brennan, since it is J. Brennan's signature which appears on the encroachment form.

0900 BG calls Jim Cook to discuss schedule for Medlin Pond, easement agreement, selection of contractor for groundwater sampling. BG indicates that BG talked to NCDOT and was informed that the encroachment agreement will be sent via U.S. mail to J. Brennan. J. Cook to notify J. Brennan. BG indicates that Medlin Pond is drained, and TGC has began backfilling Medlin Pond with processed fill. BG indicates that it is unlikely that TGC will have the topsoil in place and the wetlands topography in place by 3/25/96. BG to call Dave Hails (EAP) to determine planting schedule for the Medlin wetlands, and see if D. Hails can wait until the end of the week. J. Cook indicates that Cummings/Riter will not be doing groundwater sampling for Koppers site, even though Cummings/Riter had lower costs than GTI, for first couple of years anyway. Jim Cook asks BG to check water level in MW-8 (?) daily.

1030 B. Smith calls BG to discuss progress on Medlin Pond, abandonment of MW-9, B. Fisher's request to get Rust to bid on abandonent of MW-8 and MW-5, notification of Black and Veach for Medlin sediment sample, results for dioxin analysis of effluent sample collected 2/22/96, and review of WATEC change order for additional water treatment above 15 million gal.s. B. Smith informs BG that J. Cook approved of BG spending 3/20/96 travelling to S. Boston, VA with Mark Brush of Westinghouse. B. Smith informs BG indicates that effluent results are not yet available from Triangle Labs. BG to be persistent in asking for laboratory results from WATEC. B. Smith indicates that BG should be very critical of WATEC change order for additional water treatment above 15 million gals. and that Beazer should have choice to stay with 3 cents/gal. contract amount

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| **Pay Quantities:**<br>WATEC: Rodney Jones (s.m.)<br>Dan Kitchen (tech.)<br>Dan Wise (tech.)<br>John Cutlip (asst. s.m.)<br>John Neville (tech.) | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.* overcast, mid 40's<br>*p.m.* overcast, high 40's | **Health and Safety PPE:**<br>steel-toed boots, safety glasses, tyvek, nitrile gloves | **Air Monitoring Results:**<br>None |

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| **Field Representative:** [signature] | **Date:** 3/18/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

or revised amount based on tracking of O&M for change order. B. Smith indicates that WATEC will have to find MW-9 location in order to properly abandon the well. B. Smith indicates it does not make sense for Rust to abandon wells, and that abandonment should be either by WATEC, or if WATEC does not provided reasonable costs, then Cummings/Riter should procure driller and manage abandonment of the wells. BG indicates that NCDOT is working on encroachment agreement.

1300 BG talks to Dave Hails (EAP) to discuss Medlin Pond wetlands planting. D. Hails indicates that it would be better for planting if the Medlin area were not flooded. D. Hails indicates that the wetlands will not continuously have standing water, but only after storm events and then will slowly drain and evaporate. D. Hails indicates that he should be ready to plant 3/28/96. BG to keep D. Hails posted as to WATEC's progress.

1400 BG calls B. Smith concerning review of additional surface water treatment costs. B. Smith indicates that WATEC is entitled to time and a half for overtime hours, and that the overtime rate is probably not included in the labor multiplier. B. Smith indicates that BG should be aware that Beazer believes that Cummings/Riter has culpability in additional water treatment.

1430 BG calls Black and Veach and leaves messages for both Ben Hestir and Kieth Matteson regarding sampling of Medlin Pond.

1500 J. Gunn leaves message for BG for well logs to obtain estimates from drillers for well abandonment. J. Gunn indicates that Trigon cannot fit the abandonment into their schedule, but S&ME can schedule the work at a lower price than Trigon. BG faxes copies of well installation logs for MW-9, MW-5, MW-8(?), and MW-1 to J. Gunn in Atlanta, as requested.

1530 BG reviews O&M estimates by WATEC for additional surface water treatment. WATEC indicates that pumping from the Fire Pond is proceeding at approx. 100 gpm.

1600 BG asks Dan Kitchen when WATEC work week begins, in order to review surface water treatment O&M. D. Kitchen indicates that workweek begins on Monday.

1730 BG leaves site for the day. J. Cutlip and D. Kitchen to remain on site pumping from the Fire Pond until midnight. WATEC has covered processed fill in Medlin Pond with poly sheeting. WATEC is about 1/6 done with processed fill placement in Medlin Pond.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 3/18/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 3/19/96 |
| Day of Week | Tuesday |
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| Sheet | 1 of 2 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0830 BG arrives on site. WATEC is treating water from the Fire Pond using 3-in. pump. Triangle Grading Contractors (TGC) is placing processed fill in Medlin Pond with John Deere 650 G LGP dozer. TGC is delivering fill to site with seven trucks. Storm runoff is coming into Medlin Pond from the ditch leading from the temporary access road. The plastic flex pipe is not diverting the water from the Medlin Pond, as the joint couplings are leaking. In addition, water from the upstream side of the access road is piping through the access road next to the culvert. WATEC is having Sunbelt deliver a 3-in. pump to pump water from high side to low side of Medlin Pond. Runoff is currently backing up against placed fill, and overtopping fill and draining into Medlin Pond. R. Jones has left site for the day to visit another WATEC job site.

0900 BG recieves message from J. Gunn that BG to receive change order for 3-in. pump to pump storm water around Medlin Pond.

0915 Sunbelt delivers 3-in. pump. WATEC sets pump intake on north side of Medlin Pond and discharges to southwest side of Medlin in existing ditch.

0930 BG faxes J. Cook message that site has received approx. 1 in. rain since 0730, and that plastic flex pipe is not working to divert surface runoff from Medlin Pond. BG informs J. Cook that WATEC has mobilized a 3-in. pump to divert some of the storm water, and that the overflow is draining into Medlin. BG informs J. Cook that about 1/6 of the Medlin Pond is covered with processed fill.

1100 Ben Hestir calls to confirm receipt of message that Medlin Pond is drained and that EPA sediment samples can be obtained. BG indicates that weather forecast is for best weather at the end of the week, 3/21/96 or 3/22/96. B. Hestir indicates that he will plan to arrive 3/21/96.

1200 BG receives fax from J. Gunn for abandonment of MW-8(?) and MW-1 for $1250. J. Gunn indicates that WATEC will bear the costs for abandonment of MW-5.

1215 BG leaves message for J. Cook indicating WATEC has submitted change order for $1250 to abandon two wells MW-1 and MW-8. BG measures water level in MW-8(?) at 2.5 ft bgs.

1400 BG talks to J. Cutlip concerning progress of fill placement and ineffectiveness of plastic flex pipe. J. Cutlip indicates that he believed that the flex pipe would work to divert the storm water, and

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| **Pay Quantities:**<br>WATEC: Rodney Jones (s.m.)<br>Dan Kitchen (tech.)<br>Dan Wise (tech.)<br>John Cutlip (asst. s.m.)<br>John Neville (tech.) | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.* overcast, mid 40's, hvy rain<br>*p.m.* ovrcst, hi 40's, intrmt rain | **Health and Safety PPE:**<br>steel-toed boots, safety glasses, tyvek, nitrile gloves | **Air Monitoring Results:**<br>None |

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| **Field Representative:** Bruce Geno | **Date:** 3/19/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 3/19/96 |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

initially thought that the water was coming from the Medlin property and access road. However, after closer inspection, J. Cutlip observed the leakage from the couplings at the joints of the 20 ft. sections. BG agrees that the pipe joints leak more than expected. BG indicates that perhaps WATEC should have used silicone. J. Cutlip indicates that he could try silicone, but would have to wait for the pipe to dry, and after tomorrow, the weather forecast is for good weather, so should be able to get Medlin Pond covered before next storm event.

1600 BG receives message from Jim Cook to approve change order for abandonment of 2 wells.
1610 BG faxes signed change order back to J. Gunn in Atlanta.
1720 WATEC leaves site for the day. WATEC reports hauling approx. 1200 cy today.
1750 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 3/19/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 3/20/96 |
| Day of Week | Wednesday |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

BG not on site today (S. Boston, VA)

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 3/20/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 3/21/96 |
| Day of Week | Thursday |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0830 BG arrives on site. WATEC is pumping from the Fire Pond using 3-in.gasoline pump. Totalizer reading is approx. 15,630,000 gal.s. R. Jones and BG discuss change order forms for additional water treatment above 15 million gals. BG indicates that WATEC should not be charging more than two workers at a time to the water treatment system. BG indicates that he has observed manpower requirements to keep system operating, and that BG cannot justify more than two workers to maintain system. BG indicates that in fact, one of the workers is not dedicated full time to treatment, and has assisted with backfilling operations by counting trucks, laying plastic, and has additionally performed maintenance on site vehicles. R. Jones indicates that he will not change manpower allocations indicated on water treatment change order forms, as WATEC is incurring those costs for water treatment. R. Jones indicates that he has to charge half of his time to water treatment, unless there are no other activities on site, in which case he must charge all of his time. BG reiterates that if R. Jones charges half of his time, then he should charge no more than 1-1/2 the time of other workers dedicated to O&M of treatment. R. Jones disagrees with BG. BG indicates that he will talk with WATEC workers to verify their exclusive committment to water treatment activities, and whether they have in fact been occupied on other activities. R. Jones indicates that BG should not be talking with WATEC workers, and that any questions should be directed to R. Jones. R. Jones indicates that 3-in. pump used to divert storm runoff from around Medlin Pond will be added to the change order for the plastic pipe. R. Jones indicates that the change order will be for pump only, and no labor.

0900 BG observes placement of processed fill material in Medlin Pond. BG estimates that WATEC is approx. 1/2 done with backfilling of Medlin Pond. TGC reportedly is using 7 trucks to deliver fill to Medlin Pond.

1000 Kieth Matteson (Black and Veach) leaves message for BG that he will collect Medlin Pond sediment sample 3/22/96, unless BG indicates otherwise. BG returns call to K. Matteson that 3/22/96 would be the best time for sample collection.

1430 BG and R. Jones discuss change order for additional water treatment. R. Jones is upset that BG

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| **Pay Quantities:**<br>WATEC: Rodney Jones (s.m.)<br>Dan Kitchen (tech.)<br>John Cutlip (asst. s.m.)<br>John Neville (tech.)<br>Dan Wise (tech.) | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.* sunny, mid 40's<br>*p.m.* sunny, hi 40's | **Health and Safety PPE:**<br>steel-toed boots, safety glasses, tyvek, nitrile gloves | **Air Monitoring Results:**<br>None |

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| **Field Representative:** [signature] | **Date:** 3/21/96 |

CUMMINGS RITER CONSULTANTS, INC.

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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

spoke with WATEC workers when R. Jones indicated that all questions regarding allocation of WATEC employees time were to be directed to R. Jones. BG indicates that if he is to sign the change order forms, it is his responsibility to take necessary measures to determine that those forms are correct. BG indicates that R. Jones is necessarily biased one way, and BG is biased the opposite way. R. Jones disagrees that WATEC is biased, and that the change order forms indicate the cost of WATEC doing business. BG indicates that the forms indicate that WATEC certainly is not treating water as efficiently as they could be, and that if they were to bid the job as indicated on the change order forms, they certainly would not be competitive. R. Jones indicates that he has to charge his time and the time of other WATEC employees to surface water treatment, unless there are other activities on site. BG indicates that R. Jones time is administrative and not specific to water treatment. R. Jones indicates that BG does not have a radio and is therefore not aware of the constant decisions being made as to water treatment. BG indicates that R. Jones has contradicted himself by saying that Dan Kitchen has been making the decisions as to when to change the filters and as to what type of filters to use. R. Jones indicates that R. Jones must determine when a pump breaks down, whether to replace the pump, when sampling should occur, where to take samples. R. Jones indicates that he will not alter the change order forms as submitted.

1600 BG leaves message for J. Cook that WATEC's change order for additional water treatment are higher than the contract amount of $0.03/gal. primarily due to lower flow rate, and secondarily due to WATEC's allocation of manhours to surface water treatment.

1730 WATEC leaves site for the day.

1800 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 3/21/96 |

CUMMINGS RITER CONSULTANTS, INC.

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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0830 BG arrives on site. WATEC is folding plastic on Fire Pond for transport to the former Medlin property. Kieth Matteson (Black and Veach) arrives on site to collect sediment samples from Medlin Pond. R. Jones delivers change order for Fire Pond dam regrading effort.

0930 BG faxes copy of change order to B. Smith.

1000 Kieth Matteson has collected sediment sample from Medlin Pond and is awaiting delivery of USEPA paperwork from Federal Express.

1030 BG receives delivery of surface water treatment sample results from WATEC indicating excursion from NPDES discharge criteria for effluent sample collected 2/22/96, and breakthrough from carbon vessel 1 for sample collected 2/28/96. BG faxes copy of effluent sample and associated trip blank results to B. Smith. Rodney Jones (WATEC) informs BG that Wake Stone Quarry has raised price of processed fill material by $3/cy, and Triangle Grading Contractors (TGC) is no longer hauling processed fill due to price increase. TGC has identified a cohesive fill source. TGC is will begin hauling cohesive fill as soon as the cohesive fill is dry enough to handle. TGC has indicated that the material should be dry enough 3/25/96. TGC has indicated that the owner of the cohesive fill source does not allow hauling on weekends. TGC has committed 8 trucks for 3/25/96 to haul cohesive fill to the Medlin Pond. BG asks if the processed fill placed in the Medlin Pond can be shaved and bladed to cover more surface. R. Jones indicates that is WATEC's intention, but is leaving the fill in a thicker lift to support truck traffic. BG indicates that WATEC's agreement of Feb. 8, 1996 was to place granular fill in the Fire Pond and Medlin Pond. R. Jones indicates that if Beazer were to pay the additional $3/cy for the processed fill, WATEC would continue to place the processed fill. BG indicates that the agreement was lump sum, and not time and materials.

1130 BG calls B. Smith to discuss NPDES sample results, WATEC's discontinuation of processed fill placement, and change order for Fire Pond dam. B. Smith indicates that WATEC is obligated to place granular fill. B. Smith to check NPDES draft permit for excursion reporting requirements. BG informs B. Smith that WATEC has indicated that cohesive fill source identified is currently too wet to haul, and that R. Jones to visit source to verify that the source is too wet. B. Smith

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| **Pay Quantities:**<br>WATEC: Rodney Jones (s.m.)<br>Dan Kitchen (tech.)<br>John Cutlip (asst. s.m.) | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.* sunny, mid 40's<br>*p.m.* sunny, hi 40's | **Health and Safety PPE:**<br>steel-toed boots, safety glasses | **Air Monitoring Results:**<br>None |

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| **Field Representative:** | **Date:** 3/22/96 |

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| Date | 3/22/96 |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

indicates that is the reason WATEC switched from cohesive fill to granular fill in the first place.

1330 B. Smith calls BG. BG to determine when WATEC received laboratory data indicating NPDES excursion.

1340 BG calls J. Gunn. J. Gunn indicates that sample results for effluent sample collected 2/22/96 were received by WATEC 3/20/96.

1350 BG informs B. Smith that sample results were received by WATEC 3/20/96. BG to assemble timeline of effluent sampling.. B. Smith indicates that he has faxed message to BG to inform WATEC that WATEC is obligated to use granular fill for the Medlin Pond and Fire Pond. BG gives message from B. Smith to R. Jones concerning WATEC's obligations to use processed fill. BG also obtains sampling dates from R. Jones.

1430 B. Smith calls BG to discuss WATEC measures to improve treatment, including use of high efficiency filters. B. Smith indicates he has informed Judy Garrett of NCDEHNR Water Quality Section.

1500 Kieth Matteson receives EPA paperwork for Medlin Pond samples via Federal Express and leaves site. BG talks to R. Jones to determine what measures were taken to address problems meeting discharge criteria and improve filtration.

1530 BG calls B. Smith to discuss WATEC measures to improve filtration capacity of surface water treatment system and address results obtained 3/8/96 indicating breakthrough from carbon vessel 1. BG indicates that WATEC's use of filters was based on appearance of water being treated, distance of pump intake from pond bottom, frequency of filter changeout required to maintain flow rate, and discoloration of filters upon changeout. BG indicates that there seems to be no definitive measure taken to improve filtration other than use of high efficiency filters.

1600 B. Smith calls BG to inform BG that WATEC should prepare letter to NCDEHNR indicating measures taken to address treatment concerns raised by breach of carbon vessel 1. BG to prepare letter from Beazer to WATEC indicating that WATEC will not be compensated for water treatment from Medlin Pond due to WATEC delay. In addition, B. Smith to check with J. Cook to

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 3/22/96 |

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# FIELD ACTIVITY REPORT

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| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

determine whether or not WATEC to be compensated for surface water treated but failing NPDES criteria.

1620 BG informs R. Jones that WATEC should prepare letter to NCDEHNR to explain measures taken to improve effluent quality after receipt of data indicating breakthrough of CV1. BG inquires about filling in depression next to proposed soil excavation area 3. R. Jones indicates that WATEC and Beazer have not come to an agreement for change order. BG indicates that he was of the understanding that R. Jones and BG had negotiated a change order for $650 to fill in the depression. R. Jones indicates that the change order amount was not acceptable to J. Gunn. BG inquires as to what amount WATEC is asking. R. Jones indicates that an amount between $650 and $1,000 would be acceptable to WATEC, and that R. Jones will work on revised change order estimate.

1640 R. Jones submits revised change order estimate for filling in depression of $800. BG agrees to change order to end WATEC delay. R. Jones indicates that WATEC will do the backfilling of the depression during the week of 3/25/96.

1730 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 3/22/96 |

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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0830 BG arrives on site. WATEC is working in Medlin Pond. Triangle Grading Contractors has 8 trucks delivering cohesive fill to the Medlin Pond. R. Jones indicates that WATEC hopes to have the Medlin Pond capped by the end of 3/26/96.

0845 Grover Nicholson and Dave Lown of NCDEHNR Superfund Section, Div. of Solid Waste Management arrive on site. R. Jones requests that BG accompany G. Nicholson, D. Lown, and R. Jones to treatment plant and discharge location. D. Lown asks BG about sampling chronology and when breakthrough first observed, and what corrective actions BG took regarding treatment. BG indicates that WATEC is responsible for treatment, and that Cummings/Riter is responsible for making sure that WATEC is in compliance with specifications and contract requirements. BG indicates that CRC is also responsible for reporting requirements to the NCDEHNR. R. Jones indicates that after breakthrough was observed from the first carbon vessel, WATEC submitted a true effluent sample also collected on 2/22/96. BG indicates that breakthrough from the first carbon vessel was discovered 3/8/96, and the effluent sample from the sample sampling event was submitted 3/11/96. BG explains that the effluent sample results became available to BG 3/22/96, which is when the NCDEHNR was notified. D. Lown asks to see the treatment plant. R. Jones explains that prefilters are placed before the carbon vessels, that the carbon vessels are operated in series, with a polishing filter after the carbon before final discharge. R. Jones indicates that QC samples are collected from after the first carbon vessel to monitor breakthrough, and true effluent samples are collected at the same time. R. Jones indicates that the samples from after the first carbon vessel are analyzed preferentially, and samples from the second carbon vessel are analyzed if breakthrough is observed from the first vessel. G. Nicholson, D. Lown, R. Jones and BG observe discharge point below Medlin Pond. D. Lown identifies Ms. Medlin's residence for G. Nicholson, and indicates that Ms. Medlin has been the most vocal of the Shiloh residents. D. Lown comments that he is not sure how the state will notify the residents. G. Nicholson indicates that the state is still considering notification of the community. D. Lown asks if the USEPA has been notified of

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| **Pay Quantities:**<br>WATEC: Rodney Jones (s.m.)<br>Dan Kitchen (tech.)<br>John Cutlip (asst. s.m.)<br>John Neville (tech.)<br>Dan Wise (tech.) | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.* sunny, mid 50's<br>*p.m.* sunny, hi 60's | **Health and Safety PPE:**<br>steel-toed boots, safety glasses, tyvek, nitrile gloves | **Air Monitoring Results:**<br>None |
| **Field Representative:** Bruce Geno | | **Date:** 3/25/96 |

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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

the excursion. BG indicates that he believes that the USEPA has been notified. D. Lown asks if there is any more water to be treated. R. Jones indicates that no water will be treated until the next precipitation event. G. Nicholson asks BG if a letter is typically prepared indicating why the excursion occurred and corrective measures taken. R. Jones indicates that WATEC is currently preparing letter of explanation, which should be available 3/26/96.

0930 BG faxes letter to B. Smith addressed to Joe Gunn (WATEC) from Jim Cook (Beazer). BG indicates on fax that state officials have visited site and asked questions regarding treatment system operations.

1100 BG receives comments from B. Smith on letter from J. Cook to J. Gunn. BG makes edits and faxes draft copy of letter to J. Cook.

1200 BG observes that WATEC has filled depression next to proposed soil excavation area 3. BG does not observe geotextile exposed along the edges of the fill area. The area is generally sloped, however, tire tracks of the backhoe have created channels for the water to pond in. BG measures water level in MW-8, at 2.9 bgs.

1400 BG and R. Jones discuss habitat mitigation plan for Medlin Pond. R. Jones asks BG whether a survey of the regraded Medlin Pond is necessary before constructing the low earthen berms for the wetlands topography. BG indicates that if TGC and WATEC feel comfortable that they can establish drainage as intended on habitat mitigation plan provided to WATEC without a survey, then a survey is not required for grading purposes, but will be required for final as-built drawings. BG explains that grades will be the critical parameter, not elevations, since the elevations from the original design will not match with the 2-ft min. lift now being constructed. BG indicates that there must be three successive pools which hold water intermitently. BG inquires about depression next Medlin Pond access road near north end of pond where trucks have been entering. R. Jones indicates that the depression was created with the thought that the area would be backfilled with stone to support trucks, but that the area next to the depression turned out to be sufficient in size.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 3/25/96 |

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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

BG indicates that the depression is not part of regrading and will have to be filled back in. R. Jones indicates that he understands that depression is to be filled in, and that the access road is to come out to the original ground surface. R. Jones informs BG that he is worried that TGC may be bringing too much fill on site and may not have enough room in the hole for material cut from the Medlin Pond dam. R. Jones indicates that he has warned W. Thompson (TGC) that if the material cut from the dam and from the access road does not fit in the hole, that TGC will have to haul it back to Fire Pond. R. Jones indicates that WATEC will keep 3-in. pump for diversion of surface water around Medlin Pond until tomorrow, as the forecast is calling for 50 percent chance of rain tonight. R. Jones indicates that if the pump is returned tomorrow, WATEC will probably get charged for 1 week pump rental. BG indicates that Beazer should not necessarily be responsible for full reimbursement to WATEC of pump, as WATEC has needed to keep the water from getting on the fill to continue with their operations. BG asks R. Jones if WATEC placed geotextile in depression next to proposed soil excavation area 3 before backfilling the depression. BG indicates that geotextile is not visible as R. Jones had indicated that it would be. R. Jones indicates that the geotextile is just below the surface and should be easy to find. BG indicates that R. Jones had indicated on 3/22/96 that the depression would be filled this week, as BG wanted to observe placement of geotextile. R. Jones indicates that WATEC tech.s wanted overtime and worked 10 hours on 3/23/96 to fill in the depression, so Beazer got their money's worth.

1530 B. Smith calls BG to discuss comments on letter from J. Cook to J. Gunn, progress on Medlin Pond, Medlin Pond grades and topsoil requirements,and Rust schedule for groundwater. BG indicates that WATEC has 8 trucks delivering fill to Medlin Pond, and hopes to have Medlin Pond backfilled by the end of the day 3/26/96. BG indicates that after adequate material is delivered for closure of the Medlin Pond, WATEC will begin stockpiling cohesive material in the Fire Pond. Triangle Grading Contractors has only one dozer available at present, so will stockpile material on the Fire Pond side until grading on Medlin side is complete. WATEC hopes to have the Medlin Pond finish graded by 3/28/96. BG indicates that WATEC has filled in the depression, even

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 3/25/96 |

CUMMINGS RITER CONSULTANTS, INC.

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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

though WATEC renegotiated the change order for the work, after BG and R. Jones had established an agreement of $650. BG indicates that R. Jones renegotiated a change order of $800. BG indicates that R. Jones had questions as to final elevations of regraded Medlin Pond area. BG informs B. Smith that as he understood it, the elevations were not critical, but the grades are critical. The elevations shown on the habitat mitigation plan may change due to the min. 2 ft. lift of fill over geogrid. The original design was a 1 ft. minimum cover. B. Smith asks BG to check to determine if the cohesive material being delivered to site meets the criteria for the habitat mitigation plan, and check to see whether any action on Beazer's part is needed for water line installation.

1700 Thane and Gordon arrive on site from GTI to sample monitoring wells.

1745 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 3/25/96 |

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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0830 BG arrives on site. Triangle Grading Contractors is delivering cohesive fill with 6 trucks to the Fire Pond and placing fill with Cat D4H LGP dozer. Groundwater Technology Inc. is on site to sample groundwater monitoring wells. BG reviews letter rec'd 3/25/96 from WATEC regarding substitution of seed mixture, and compares to specification requirements.

0900 BG talks to D. Hails regarding proposed substitute seed mixture. D. Hails indicates that the habitat mitigation plan had two different mixes depending on location for seeding of Medlin Pond area. BG refers to Section 8 of the Habitat Mitigation Plan specifications, and finds three seeding mixes for the Medlin Pond area. D. Hails indicates that WATEC's proposed mix contains Bermuda grass which is essentially a weed, which he would not recommend. WATEC's proposed mix also contains Bahaya grass which D. Hails is not familiar with. BG indicates that the letter from WATEC does not indicate proposed seeding rates. D. Hails indicates that the mixes proposed in the Habitat Mitigation Plan are fairly easy to find. D. Hails indicates that he is willing to work with WATEC to locate the seed mixes given in the Habitat Mitigation Plan, and to determine which seed mixes should be planted where.

0910 BG calls J. Gunn to inform J. Gunn that he cannot approve of substitution seed mix, and that EAP has indicated that Bermuda grass is essentially a weed which EAP would not recommend. J. Gunn indicates that he is fairly flexible with seed mix. BG indicates that the planting mix for the Medlin Pond area is different than the mix for the Fire Pond area, as the wetlands planting scheme will be used as opposed to the interim planting scheme in the contract specifications. J. Gunn indicates that the adjacent Enwood Structures property is covered with Bermuda grass which will likely overtake other species planted in the Fire Pond area. J. Gunn indicates that Fescue is a cool season grass which goes dormant in hot weather and Bermuda grass is a hot season grass, which thrives in hot weather. J. Gunn indicates that it may be useful to determine Beazer's O&M plans for the Fire Pond area to determine an appropriate seed mixture.

0930 BG observes TGC cutting Medlin Pond dam with excavator. R. Jones indicates that the change

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| **Pay Quantities:**<br>WATEC: Rodney Jones (s.m.)<br>Dan Kitchen (tech.)<br>John Cutlip (asst. s.m.)<br>John Neville (tech.)<br>Dan Wise (tech.) | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.* sunny, mid 50's<br>*p.m.* sunny, hi 60's | **Health and Safety PPE:**<br>steel-toed boots, safety glasses, tyvek, nitrile gloves | **Air Monitoring Results:**<br>None |

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| **Field Representative:** Bruce Geno | **Date:** 3/26/96 |

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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

order for the Fire Pond dam will have to be worked out soon so that work may begin. R. Jones asks BG to help locate the proposed soil berms for the Medlin Pond area. BG and R. Jones place pin flags along proposed alignment of 2 soil berms in the Medlin Pond area. The 3rd berm will need to be located once the Medlin Pond dam is lowered to grade. BG indicates that TGC will have to place topsoil over the processed fill near the north end of the Medlin Pond. R. Jones indicates that TGC has already placed the topsoil. BG disagrees that the processed fill is completely covered. R. Jones indicates that WATEC will be stabilizing remaining water in Medlin Pond (approximately 1-in. deep by 25 square feet) with portland cement.

1000 BG returns to site trailer to find S&ME drilling contractors which have come to abandon wells MW-8, MW-5, and MW-1. BG indicates the locations of the three wells. S&ME indicate that WATEC did not instruct them to abandon well MW-9.

1010 BG calls J. Gunn to discuss abandonment of MW-9. BG indicates that he received coordinates for MW-9 on voice mail this a.m. J. Gunn indicates that he understands that the remaining portion of MW-9 is 4 to 5 ft. below ground surface, and will have to be located by surveyors to avoid digging up the area in the vicinity of the former pump house. J. Gunn indicates that WATEC will arrange to have Post and Associates locate the coordinates in the field for MW-9 and WATEC will then excavate the location to try to find and abandon MW-9. J. Gunn indicates that the driller will need to remobilize for the abandonment of MW-9.

1020 BG observes S&ME drillers bringing grout mixer and tremie hose to near MW-8. BG asks the drillers how they are to abandon the wells. Drillers indicate that the wells are to be tremie grouted, and the casings sawn off to be flush with gound surface, or excavated later during future excavation work. BG indicates that he needs to check with WATEC to determine that the abandonment procedures proposed meet state requirements for abandonment.

1030 BG calls J. Gunn to discuss state requirements for abandonment. J. Gunn indicates that the tremie method as proposed, with no overboring, is all the state requires for well abandonment. J. Gunn indicates that well abandonment forms will be submitted to NC by the driller. BG indicates that he

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 3/26/96 |

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# FIELD ACTIVITY REPORT

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| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

will have to confirm that these procedures are acceptable to CRC.

1035 BG calls B. Smith to explain WATEC's proposed abandonment procedure. B. Smith indicates that the tremie grouting procedure is acceptable in DE, and that CRC has used this procedure in DE. B. Smith requests that BG check with Bill Baughman or Doug Spicuzza in CRC PGH office to check to see if there are other concerns or recommendations regarding this method of abandonment.

1040 BG leaves message for B. Baughman or D. Spicuzza to call back concerning well abandonment questions.

1050 Stan James calls BG to discuss schedule for installation of the water line, and mobilization for groundwater treatment building foundation. BG indicates that John Funk (Rust) was to mail application for installation of water meter to Jim Cook (Beazer) 3/25/96. BG understands that the town usually responds in a couple of days. S. James indicates that INCO would like to mobilize for foundation work 4/1/96. BG indicates that there should be no problem with interference from WATEC. S&ME drillers leave site. R. Jones indicates that the two S&ME did not have evidence of 40-hr OSHA training, and therefore were not qualified to abandonment work. R. Jones indicates that the abandonment work will have to be rescheduled. BG indicates that BG appreciates WATEC's respect of OSHA rules. BG asks R. Jones if the letter from WATEC re: NPDES excursion has been prepared. R. Jones indicates that J. Gunn is working on it.

1200 BG provides coordinates to R. Jones for well MW-9 to be located by surveyors. BG faxes copy of seed mix proposed for disturbed area in Medlin Pond area to J. Gunn, and leaves copy with R. Jones. BG receives message from J. Gunn inquiring as to whether the nutrient loading and liming requirements based on the agronomic report for the cohesive material would be appropriate for wetlands mitigation work. BG to check with D. Hails.

1300 BG begins work on letter to Joe Gunn regarding change order. TGC ceases hauling of fill material. R. Jones indicates that TGC excavator has broken and will be a few hours to make the repairs.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 3/26/96 |

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| Date | 3/26/96 |
| Day of Week | Tuesday |
| No. | 99 |
| Sheet | 4 of 4 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

1400 BG and R. Jones talk concerning water in the Medlin Pond. R. Jones indicates that WATEC has pumped all they can using 6-in. pump, and that the remaining water is not enough to fill the lines leading from the Medlin Pond to the treatment plant. R. Jones indicates that WATEC will try to use the 3-in. pump to pump water from the Medlin Pond into a 250 PE tank, and then pump into Beazer tank T3 for later treatment through the surface water treatment plant.

1500 BG observes WATEC dumping water from PE tank containing water from the Medlin Pond into Fire Pond. R. Jones indicates that it would take too long to transfer water from PE tank to Beazer tank T3. R. Jones indicates that WATEC will continue to use the 3-in pump to remove as much water as possible from the Medlin Pond before placing portland cement into the pond to stabilize remaining water.

1600 Bill Baughman calls BG to discuss well abandonment by tremie grouting versus overboring and tremie grout. B. Baughman indicates that as long as the well is sealed above the monitoring zone, and as long as the seal is of good integrity, the tremie method is acceptable. B. Baughman suggests monitoring of ratio of portland, bentonite, and water in grout mix, and monitoring grout uptake in each well. B. Baughman indicates that as long as the client is aware of the procedures and the procedure is acceptable to NC, then WATEC may use the tremie method.

1620 BG tries to reach Jim Cook (Beazer) to discuss well abandonment procedures. J. Cook is unavailable. BG calls Bob Fisher (Beazer) to discuss well abandonment. B. Fisher indicates that he does not see problem with tremie grouting well abandonment, but asks BG to check with John Funk of Rust to get additional verification of state acceptance. B. Fisher asks BG to let him know what John Funk says.

1640 BG leaves message for J. Funk regarding well abandonment procedures which are acceptable to NC. BG explains the procedure WATEC has proposed (i.e., tremie grout with no overboring). BG indicates that the well abandonment is probably to occur within a couple of days, so that a timely response from J. Funk is needed.

1930 BG leaves site for the day. TGC is excavating Medlin Pond dam. WATEC workers are still transporting water using 250 gal. PE tank from Medlin Pond to Fire Pond.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 3/26/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 3/27/96 |
| Day of Week | Wednesday |
| No. | 100 |
| Sheet | 1 of 3 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0830 BG arrives on site. BG receives message from B. Smith for BG to review letter from WATEC regarding NPDES excursion, and to make sure the letter details sampling chronology and corrective measures such as using high efficiency filters and stepping up construction. Triangle Grading Contractors (TGC) is stockpiling cohesive fill in the Fire Pond, and placing fill in the Medlin Pond area using Cat D4H XLP dozer. BG and Rodney Jones talk concerning Medlin Pond planting, letter from WATEC to CRC concerning NPDES excursion, and treatment of water in Fire Pond. R. Jones indicates that about 1,000 gals. of water in Medlin Pond was transfered by pumping into PE tank and transporting tank to Fire Pond and dumping tank in Fire Pond. R. Jones indicates that the Medlin Pond grading, including construction of earth berms, will be finished today. R. Jones indicates that WATEC to have letter for NCDEHNR today. R. Jones indicates he will begin treating water in Fire Pond this p.m. to make room for the ensuing rains.

0900 BG talks to Mike Branson of Rust concerning monitoring well abandonment procedures in North Carolina. M. Branson indicates that overboring is always the preferred method, but that the state accepts tremie method of grouting for well abandonment. M. Branson indicates that for shallow wells, overboring method should not be much more costly than tremie grouting. M. Branson indicates that the void left by removing protective casing should also be filled with grout.

1000 B. Smith leaves message for BG to prepare cover letter to NCDEHNR, with review by P. O'Hara.

1140 BG faxes review letter of change order for revised grading plan to J. Gunn.

1300 D. Hails arrives on site. BG and D. Hails discuss Medlin Pond preparation. BG indicates that TGC has yet to place berms. BG informs D. Hails that processed fill near the north end of the Fire Pond is not yet covered with topsoil due to saturation of processed fill. D. Hails provides name of supplier of Medlin Pond grass mix for disturbed areas outside of wetlands areas.

1330 BG receives March payment request from J. Gunn.

1400 BG talks to J. Cook regarding Medlin Pond planting, schedule for groundwater treatment, change order negotiation, and payment for surface water treatment that did not meet NPDES requirements. J. Cook indicates that he would prefer to pay WATEC for water treatment even though the

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| **Pay Quantities:**<br>WATEC: Rodney Jones (s.m.)<br>Dan Kitchen (tech.)<br>Dan Wise (tech.)<br>John Cutlip (asst. s.m.)<br>John Neville (tech.) | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.* overcast, mid 40's<br>*p.m.* overcast, hi 40's | **Health and Safety PPE:**<br>steel-toed boots, safety glasses, tyvek, nitrile gloves | **Air Monitoring Results:**<br>None |

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| **Field Representative:** Bruce Geno | **Date:** 3/27/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 3/27/96 |
| Day of Week | Wednesday |
| No. | 100 |
| Sheet | 2 of 3 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

discharged water did not meet effluent requirements.

1500 R. Jones and BG call J. Gunn to discuss change order review, availability of effluent analytical results, and letter from WATEC to NCDEHNR.

1600 Hope Taylor arrives on site to discuss effluent monitoring, NPDES excursion, availability of Fire Pond sediment sampling analytical results, correlation of dioxin levels with penta levels in soils to be excavated. BG explains that for the first two months of water treatment, WATEC did not produce lab results for dioxins, and first valid sample for dioxins was not provided until late January. BG explains that WATEC has changed out carbon vessels, due to sample which indicated breakthrough from the first carbon vessel. WATEC had been sampling from between the carbon vessels, even though the specifications require an effluent sample. BG explains that after the carbon changeout, WATEC has changed effluent sample procedures by collecting a sample from between the two carbon vessels and collecting an additional sample of the actual effluent. WATEC has been analyzing the sample collected from after the first carbon vessel preferentially, and only analyzing the effluent sample if the first sample indicated breakthrough from the first vessel. BG indicates that sediment samples from the Fire Pond were collected in late Nov./early Dec. 1995 by Black and Veach, and 3/22/96 from the Medlin Pond. H. Taylor indicates that she is concerned about dioxin samples from soil excavation. BG indicates that dioxons will not be screened, but the post excavation samples will be analyzed for dioxins. H. Taylor indicates that Peggy Medlin and other nearby residents are against returning the Medlin Pond area to a wetlands. Residents are concerned about vectors, primarily snakes and mosquitos. H. Taylor indicates that the community group had asked about expanding Seagandollar wetlands to replaced wetlands which are planned for Medlin area. H. Taylor indicates that the state wetlands expert reviewing the design may have held Beazer to the strict letter of the law requiring replacement of wetlands, without regard for concerns of local residents.

1700 D. Hails arrives on site. Gordy O'Toole informs BG there may have been a typographical error in identification of one of the wells to be sampled (i.e., MW-16B may be MW-15B, since there is no

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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|---|---|
| **Field Representative:** | **Date:** 3/27/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 3/27/96 |
| Day of Week | Wednesday |
| No. | 100 |
| Sheet | 3 of 3 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

MW-16B). D. Hails indicates that the wetlands will not hold water continuously, and is not a swamp. D. Hails indicates that snakes and mosquitos should be no worse that with Medlin Pond, and because area is not continuously wet, much of the time would not even know is a wetland.

1705 BG leaves message for J. Gunn that letter to NCDEHNR regarding NPDES excursion should address measures taken for additional water treatement and that J. Gunn should check date that WATEC began using high efficiency filters. WATEC is placing poly sheeting over southeast portion of Fire Pond.

1830 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 3/27/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 3/28/96 |
| Day of Week | Thursday |
| No. | 101 |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0830 BG arrives on site. Triangle Grading Contractors (TGC) is not placing fill in Fire Pond due to rain. WATEC is not pumping water from the Fire Pond. BG receives call from WATEC's seeding contractor for BG to provide name of vendor to supply seed for disturbed area surrounding Medlin Pond wetlands area. BG calls R. Bodnar of EAP. R. Bodnar provides number for Kelly Hails. BG calls Kelly Hails. Kelly Hails to locate number and name of seed vendor and call back. BG receives voice mail from J. Gunn to fax approved WATEC invoice for March, and comments on draft letter from WATEC to Cummings/Riter re: excursion. BG had faxed after 1700 hrs. 3/27/96.

0900 BG receives call from John Funk regarding well abandonment procedures in North Carolina. J. Funk indicates that tremic method is acceptable to NC, and that well abandonment certificate has to be submitted to NC. BG indicates that BG talked to M. Branson 3/27/96 and resolved issue. J. Funk indicates that INCO will be mobilizing 4/1/96.

0910 BG receives call from Bob Fisher returning BG message from 3/27/96. B. Fisher does not know basis for returning Medlin Pond area to wetlands, but indicates that the wetlands will not be what most people think of as wetlands, and will resemble low-lying area next to Peggy Medlin's property. BG informs B. Fisher that Hope Taylor was on site discussing NPDES excursion with BG. H. Taylor indicated that she will recommend sampling of channel downstream of Medlin Pond and of Crabtree Lake for dioxins. B. Fisher and BG agree that it would be impossible to establish background. B. Fisher indicates that H. Taylor should request a copy of letter by WATEC from NCDEHNR or from USEPA and not from Beazer. B. Fisher indicates that the state should take the lead and put community fears to rest with rational science, and explain the potential risk of the dioxin concentrations. BG indicates that H. Taylor was notified by Grover Nicholson with NCDEHNR Superfund Branch, and that H. Taylor was aware of dioxin levels in both the effluent and associated lab blank.

0930 Gordon O'Toole (GTI) asks BG about well MW16B. BG calls B. Smith in SC to try to determine if well MW16B was a typographical error, or if B. Smith could tell BG where to look to determine basis for groundwater monitoring plan. B. Smith indicates that monitoring plan was developed

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| **Pay Quantities:**<br>WATEC: Rodney Jones (s.m.) | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.* overcast, mid 40's, rain<br>*p.m.* ovrcst, hi 40's, lght, rain | **Health and Safety PPE:** | **Air Monitoring Results:**<br>None |
| **Field Representative:** | | **Date:** 3/28/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 3/28/96 |
| Day of Week | Thursday |
| No. | 101 |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

with emphasis on intermediate wells, and not using deep wells. B. Smith indicates that well MW16B may have been planned, but never installed. BG to call Doug Spicuzza (CRC). B. Smith suggests sending change order information re. Fire Pond dam to Beazer, and let Beazer make decision as to what course of action to take.

1000 BG calls D. Spicuzza in PGH. D. Spicuzza is unable to locate a figure with well MW16B. D. Spicuzza reinforces B. Smith's recollection that intermediate wells were the focus of the sampling program. BG informs G. O'Toole that CRC does not believe that deep wells were to be sampled.

1100 BG and G. O'Toole call B. Smith and ask if B. Smith would talk to Charlie Wingerd (GTI) to determine if well MW16C (deep well) should be sampled in the absence of well MW16B. BG calls Charlie Wingerd to call B. Smith and BG on conference call.

1120 C. Wingerd and B. Smith conference call BG and G. O'Toole. B. Smith explains methodology of selecting intermediate wells for monitoring program, and selecting location of well MW16 as that was the only downgradient location in that particular area. C. Wingerd to check with John Mitzak (GTI) to see if GTI could sample well MW15B in lieu of MW16B.

1130 J. Cook calls BG to check on letter from WATEC. J. Cook indicates that WATEC may be facing fines of $25,000 after reporting deadline of 5 days. BG indicates that he informed WATEC on Friday 3/22/96 that the letter was due in 5 days. R. Jones at that time indicated that he understood that the letter would have to be delivered to CRC 3/25/96, since WATEC knew of the excursion on 3/20/96, and that he would talk to J. Gunn on 3/22/96. J. Cook indicates that in order to expedite receipt of letter from WATEC to NCDEHNR, WATEC should address the letter directly to the NCDEHNR, which will take CRC out of the loop, and possibly mitigate CRC implication by NCDEHNR. BG indicates that WATEC and CRC are unable to come to an agreement on change order for Fire Pond dam work. BG indicates he will send the correspondence between WATEC and Cummings/Riter to Beazer. J. Cook indicates that he would like to have EAP and Rust bid on the work, if the work can be separated into a definable scope. BG indicates that the work is

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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|---|---|
| **Field Representative:** | **Date:** 3/28/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 3/28/96 |
| Day of Week | Thursday |
| No. | 101 |
| Sheet | 3 of 4 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

indicated on a drawing, which is fairly self explanatory and inclusive. BG to ask R. Bodnar and J. Funk to bid on the Fire Pond dam regrading work.

1200 BG faxes J. Gunn address for Judy Garrett of NCDEHNR and address of Beverly Hudson for copy to USEPA, and calls J. Gunn to change address on letter from B. Smith to J. Garrett. J. Gunn indicates that he will change the address on the letter.

1220 BG calls R. Bodnar to explain the revised Fire Pond dam grading plan and asks if EAP would be interested in bidding on the work. R. Bodnar expresses interest. BG gives R. Bodnar verbal description of work, including cutting of 1,300 cy of material on road side of Fire Pond dam, cutting of about 100 trees, about 40 of which are ≥ 1ft in diam. BG indicates that cut soil would be placed in Fire Pond area, and that soil and trees would have to be loaded out onto trucks parked along the road, and that traffic control would therefore be necessary. BG to overnight plans and NCDOT specifications for concrete.

1310 J. Cook calls and asks BG to fax draft version of letter from WATEC to NCDEHNR for Beazer review.

1400 R. Jones presents change order for Medlin Pond berms of $4,500. BG indicates that J. Gunn and BG had a verbal agreement that WATEC would install the berms without a change order. R. Jones indicates that he has talked to J. Gunn and that R. Jones and J. Gunn agreed that there is more work involved than was originally thought, and that WATEC will need change order. R. Jones indicates that TGC has not constructed soil berms, but has stockpiled 325 cy of soil in order to contstruct berms. BG and R. Jones call J. Gunn. J. Gunn indicates that he recalls verbal agreement with BG and that there will be no change order. BG indicates that WATEC has been very unpredictable and not holding to their word. BG indicates that R. Jones negotiated change order for filling in depression next to excavation area 3, but that WATEC excavated outside the limits of regrading shown on the design plans and created another depression. R. Jones indicates that he will blade the area. BG indicates that he should not be moving soil from outside the area of regrading as a borrow source. R. Jones indicates that WATEC tech.s (J. Cutlip and Dan Wise)

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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|---|---|
| **Field Representative:** | **Date:** 3/28/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 3/28/96 |
| Day of Week | Thursday |
| No. | 101 |
| Sheet | 4 of 4 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

probably got a little carried away in digging up too much soil outside the diversion ditch. BG indicates that as he understood it, WATEC would be using fill that had been scraped up in the interior of the Fire Pond. R. Jones indicates that all WATEC had to work with was a backhoe, and that the backhoe was not capable of moving the cohesive material used as pond backfill (i.e.,"backhoe wouldn't touch that stuff"). R. Jones indicates that when WATEC leaves, the depression near the northeast corner of the Fire Pond will be gone.

1600 J. Cook calls BG to give Beazer comments to BG.

1610 BG calls J. Gunn to give J. Gunn Beazer comments. J. Gunn requests that comments be faxed.

1620 BG faxes comments to J. Gunn.

1720 BG leaves site for the day. BG leaves trailer door unlocked for GTI workers. GTI to be finished with groundwater monitoring sampling today.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 3/28/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 3/29/96 |
| Day of Week | Friday |
| No. | 102 |
| Sheet | 1 of 2 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0830 BG arrives on site. WATEC is not pumping water. Triangle Grading Contractors (TGC) is not placing fill. WATEC workers are dismantling intake piping from Medlin Pond, and loading pipe for disposal. BG observes stockpiles of cohesive fill material in Medlin Pond intended for use as wetlands area berms. BG receives message from Jim Cook (Beazer) that BG should look at Statement of Work (SOW) for requirements for pre-construction conference. J. Cook indicates that we may have missed the preconstruction conference for the surface water portion of the contract, but that BG should check SOW for requirements for preconstruction conference which would be applicable to the groundwater portion of the work.

0930 BG leaves message for J. Cook that BG does not have the portion of the SOW regarding preconstruction conference.

1000 Mitchell Brourman and Robert Markwell (Beazer) arrive on site, and tour water treatment, discuss schedule, and tour Seagandollar wetlands.

1100 M. Bourman and R. Markwell leave site. BG receives call from J. Cook. J. Cook indicates that he has faxed copy of SOW to BG. J. Cook indicates that BG should provide schedule for preconstruction conference for soil excavation, and pre-final inspection for surface water, wetlands, groundwater, and soil excavation. BG indicates that J. Funk (Rust) will review plans for the Fire Pond dam work and provide a bid. BG indicates that he has not heard from J.Gunn regarding letter explaining surface water treatment and sampling since 3/28/96 when J. Gunn asked BG to fax J. Cook's comments. BG indicates that he doubts that WATEC's letter was sent out 3/28/96, and will more likely be sent today. J. Cook indicates that WATEC may be digging themselves into a hole. J. Cook asks BG to notify Dave Lown (NCDEHNR) and Beverly Hudson (USEPA) that the preconstruction conference for groundwater is sheduled for 4/1/96.

1130 BG finds fax from J. Cook and fax of draft letter from J. Gunn dated 3/29/96. BG faxes copy of draft letter to J. Cook. WATEC is working on R. Jones site vehicle.

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| **Pay Quantities:**<br>WATEC: Rodney Jones (s.m.)<br>Dan Kitchen (tech.)<br>John Neville (tech.)<br>Dan Wise (tech.) | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.* sunny, mid 50's<br>*p.m.* sunny, hi 60's | **Health and Safety PPE:** | **Air Monitoring Results:**<br>None |
| **Field Representative:** | | **Date:** 3/29/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 3/29/96 |
| Day of Week | Friday |
| No. | 102 |
| Sheet | 2 of 2 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

1200 BG talks to WATEC technicians to discuss schedule. WATEC to use backhoe to move sediment away from the pump intake, to raise the intake away from the pond bottom. WATEC will resume pumping of Fire Pond once a small depression is created with backhoe. D. Kitchen indicates that the repeated pumping and non-pumping, with rain events between pumping events has resulted in the sediments flowing to the low point, so that the water is not very deep, but covers a large surface area.

1310 BG leaves message for Beverly Hudson (USEPA) that 4/1/96 is scheduled start date for groundwater treatment system installation, and that preconstruction conference is scheduled for 9:00 a.m. 4/1/96.

1320 BG calls D. Lown (NCDEHNR) to inform D. Lown that the preconstruction conference is scheduled for 9:00 a.m. 4/1/96. D. Lown asks whether or not USEPA has been informed. BG indicates that a message was left for Beverly Hudson. D. Lown indicates that USEPA may not be able to attend with such short notice.

1330 BG receives call from B. Hudson. B. Hudson indicates that she would like a schedule for groundwater. BG to fax ammended Rust groundwater schedule to B. Hudson.

1600 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 3/29/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 4/1/96 |
| Day of Week | Monday |
| No. | 103 |
| Sheet | 1 of 5 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0700 BG arrives on site. Richard Shelton (Inco site manager) is on site building saw horses to begin construction of forms for building foundation. R. Shelton indicates that hopes to have the building foundation poured 4/3/96 or 4/4/96 depending on the weather. R. Shelton indicates that Stan James (Inco project manager) should arrive on site about 9:00 a.m. BG finds message on answering machine from Hope Taylor left on 3/29/96 regarding letter from WATEC. H. Taylor indicates that she has not received a copy of the letter from WATEC regarding NPDES excursion, and that she has talked with Dave Lown (NCDEHNR) who has indicated that he has not yet received a copy of the letter. WATEC is preparing rolls of geogrid/geotextile.

0800 BG places call to B. Smith to get copy of letter from WATEC. B. Smith not in yet.

0810 BG talks to Jim Cook (Beazer) to ask for a copy of the letter from WATEC to be faxed. BG indicates that he will talk to Dave Hails (EAP) to try to determine schedule for Medlin Ponds planting. BG to prepare monthly discharge monitoring report for March without data from 3/15/96 sample. BG to determine in the next couple of days when to schedule pre-final inspection for surface water. BG gets approval from J. Cook to send copy of WATEC letter to H. Taylor.

0820 BG calls D. Hails (EAP). D. Hails indicates that he will not schedule the wetlands planting until Medlin Pond is regraded. D. Hails indicates that annual rye grass would be appropriate for planting in the area of the proposed wetlands (behind the berms). The seed mix specified in the wetlands mitigation plan for disturbed areas would be appropriate for other disturbed areas, including the area where the road is to be removed.

0830 BG receives copy of letter from WATEC to Judy Garret RE: NPDES excursion from J. Cook. BG

**Pay Quantities:**

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|---|---|
| WATEC: | Rodney Jones (s.m.) |
| | John Cutlip (asst. s.m.) |
| | Dan Kitchen (tech.) |
| | John Neville (tech.) |
| | Dan Wise (tech.) |
| Inco: | Stan James (p.m.) |
| | Richard Shelton (s.m.) |
| | 4 crew |
| Rust: | John Funk (p.m.) |
| | Robert Holland (site QC) |
| | Randall Foulke (QC dir.) |

**Project Changes/Unusual Observations:**
None

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| **Weather Conditions:**<br>*a.m.* overcst, hi 40's, lgt rain<br>*p.m.* overcst, mid 50's, lgt rain | **Health and Safety PPE:**<br>Steel-toed boots, safety glasses, hd hats | **Air Monitoring Results:**<br>None |
| **Field Representative:** [signature] | | **Date:** 4/1/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 4/1/96 |
| Day of Week | Monday |
| No. | 103 |
| Sheet | 2 of 5 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

faxes copy of letter to H. Taylor. WATEC is crushing Medlin Pond intake line to put in rolloff.

0900 Dave Lown (NCDEHNR) arrives on site. D. Lown indicates that he has not yet received a copy of the letter from WATEC. BG indicates that the letter was distributed by WATEC 3/29/96. BG explains that surface water has not been treated since D. Lown was last on site 3/25/96. BG indicates that WATEC is planning to treat and discharge water that has accumulted in the Fire Pond since 3/26/96. D. Lown asks to use the phone. BG indicates that he can use WATEC phone since WATEC trailer is empty. BG returns to Beazer trailer to provide copy of WATEC letter to D. Lown. Envirochem pick up empty rolloff.

0910 B. Smith returns call to BG to talk about addressee on letter from WATEC to Judy Garrett, Medlin Pond condition, monthly monitoring report, and preconstruction meeting for groundwater. BG indicates that J. Cook contacted BG on Friday 3/29/96 to schedule prefinal inspection and preconstruction meeting for groundwater. BG indicates that berms for Medlin Pond have not yet been constructed, and that there are currently no E&S Controls in place. B. Smith indicates that BG should inspect the Medlin area for runoff, to see if the area is eroding. B. Smith indicates that the base bid included silt fence for the Medlin Pond areaBG indicates that Inco workers are preparing forms for the building foundation. BG indicates that D. Lown is on site for groundwater preconstruction conference.

0925 R. Jones has returned to the site and is talking with D. Lown. R. Jones indicates that WATEC tried to pump from Medin Pond evening of 3/24/96 but that 3-in. pump would not maintain prime. R. Jones estimates that up to 3,000 gal.s may have been discharged 3/24/96. R. Jones further indicates that WATEC pumped for about an hour this morning, until D. Lown asked them to stop pumping until WATEC is sure that the effluent meets the discharge criteria. BG asks R. Jones if WATEC has considered frac tanks. R. Jones indicates that he was just discussing use of frac tanks

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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|---|---|
| **Field Representative:** | **Date:** 4/1/96 |

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 4/1/96 |
| Day of Week | Monday |
| No. | 103 |
| Sheet | 3 of 5 |

# FIELD ACTIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

with D. Lown. D. Lown asks R. Jones for an estimate of volume of water in Fire Pond. R. Jones indicates greater than 1 and less than a million gals. BG indicates that BG estimates up to 50,000 gals. R. Jones indicates that the total as of today is probably less than 50K gals. D. Lown asks R. Jones when data for latest sample will be collected. R. Jones indicates that WATEC is currently awaiting results for two samples: one collected 3/15/96 and submitted 3/20/96, and one collected 3/21/96. R. Jones indicates that the sample collected 3/15/96 was submitted with 2-week turnaround, and that results should be available this week at the earliest. D. Lown asks if the laboratory would be able to provide the results sooner. R. Jones indicates that he will call the laboratory. R. Jones indicates that WATEC, Cummings/Riter and Beazer will talk to decide the best course of action, and that WATEC will keep the NCDEHNR abreast of decisions as to how to proceed. BG asks that when pumping is resumed, will samples be collected, given that the pumping may last only one day. R. Jones indicates a sample will be collected as soon as pumping resumes, even if for one day. D. Lown indicates that he agrees with R. Jones that sampling probably would not show anything, but that if there is a perception by anyone familiar with the project that the excursion is not being taken seriously, then everyone, including the NCDEHNR will be in deep trouble. R. Jones indicates that is definately not the case. R. Jones offers filter bags for inspection by D. Lown. R. Jones leaves D. Lown and BG. D. Lown indicates to BG that he will recommend that the state request samples of the drainage ditch downstream of Medlin Pond. D. Lown asks BG what surface water bodies are downstream of Medlin Pond. BG indicates that the nearest body of water is Crabtree Lake. D. Lown indicates that the NCDEHNR does not want to recommend sampling of Crabtree Lake. BG indicates that even if the surface water and fish in Crabtree Lake were sampled, and dioxins were found, it would be impossible to identify the source. D. Lown agrees. BG reminds D. Lown that dioxins were found in ditch between Medlin and Fire Pond, but levels were not high enough to warrant cleanup. BG indicates that is probably the case with ditch downstream of Medlin.

0930 Stan James (Inco) arrives on site. Stan James indicates that John Funk will arrive on site at about 10 a.m.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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|---|---|
| **Field Representative:** | **Date:** 4/1/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 4/1/96 |
| Day of Week | Monday |
| No. | 103 |
| Sheet | 4 of 5 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

1000 J. Funk arrives on site, with Randall Foulke and Robert Holland (Rust). Rust, D. Lown, Inco and BG conduct preconstruction conference. J. Funk indicates that the submittal list is included in the CQC Plan, and that many of the submittals listed have been submitted, including HASP, COP, and CQCP. D. Lown indicates that he has comments on the HASP, which he will try to give to Rust by 4/5/96. D. Lown indicates that he has not yet received the COP. BG indicates that CRC will try to get copy to D. Lown by 4/5/96. BG reviews the construction schedule. S. James indicates that Inco is shooting to have the foundation completed by 4/5/96, weather permitting. BG indicates that BG will review invoicing, change orders and project schedules. BG indicates that Rust should mobilize own facilities. J. Funk indicates that a weekly QC meeting is to be held early a.m. Monday of every week. HASP signoff is only formal documentation of HASP training. Richard Shelton (Rust) indicates that health and safety concerns specific to a particular activity are reviewed before beginning the activity. R. Shelton indicates that Inco workers wear safety glasses, steel-toed boots, and hard hats as mandatory protection. Daily construction logs to be submitted to Rust and summarized by Rust into a weekly report to be submitted no later than the following Tuesday. S. James indicates that the discharge line will need to be located. BG indicates that the final grade of the Fire Pond will have to be establised first. BG to help Inco locate treatment building. BG to be point of contact between Rust and Beazer.

1100 D. Lown leaves site for the day. BG and R. Shelton determine location of groundwater treatment building. Inco workers continue to prepare forms for concrete foundation. WATEC workers continue to prepare rolls of geotextile/goegrid, and place PVC intake pipe into rolloffs with filter bags.

1130 BG, J. Funk, and S. James discuss bid for Fire Pond dam regrading work. BG explains approx. 1,300 cy cut along McCrimmon roadside, some in right-of-way, with about 100 misc. sized trees,

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 4/1/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 4/1/96 |
| Day of Week | Monday |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

mostly scrub, to be removed and grubbed. BG explains culvert work and E&S controls.

1215 J. Funk and Stan James leave site. S. James indicates he will need 3 weeks to prepare bid for Fire Pond work. S. James instructs R. Shelton to order 57 stone for access drive to treatment system building location, and to place geotextile fabric on grade and grade over with stone. R. Shelton indicates that he will order sand to raise the elevation of the area of the treatment building location that drops off.

1430 Inco workers complete preparation of concrete forms and leave site for the day. R. Holland (Rust QC) leaves site for the day. BG receives phone call from Beverly Hudson. Beverly Hudson indicates that she has asked J. Cook to fax WATEC letter but has not received yet. B. Hudson asks BG to fax WATEC letter to her attention. BG informs B. Hudson of the sampling since carbon changeout, description of temporary treatment system, sample results, and discharged volumes.

1440 BG calls B. Smith to inform B. Smith that state has ordered WATEC to discontinue pumping until results show NPDES requirements being met. B. Smith asks BG to keep J. Cook informed. BG indicates that B. Hudson has asked BG to fax letter from WATEC. B. Smith indicates that BG should have WATEC fax the letter.

1450 BG leaves message for Joe Gunn (WATEC) to fax letter to B. Hudson.

1515 BG receives call from J. Gunn confirming receipt of message to fax letter to B. Hudson. J. Gunn indicates that WATEC is preparing to give both the NCDEHNR and the USEPA a call regarding the NPDES excursion and future water treatment.

1630 WATEC workers complete placement of crushed Medlin Pond intake pipe near rolloff and preparation of geotextile/geogrid rolls for placement in Fire Pond, and leave site for the day.

1700 BG leaves message for B. Fisher to call regarding disposal of PVC intake line from Medlin Pond and future disposal in discharge line. BG needs to confirm that the PVC pipe and filter bags need to be put into separate rolloffs.

1730 B. Fisher returns BG call and informs BG that PVC pipe and sediment filter bags have been manifested as two separate waste streams and must be put into 2 separate rolloffs.

1820 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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|---|---|
| **Field Representative:** | **Date:** 4/1/96 |

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 4/1/96 |
| Day of Week | Monday |
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| Sheet | 1 of 5 |

# FIELD ACTIVITY REPORT

**Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55

**Field Activity:** Surface Water Treatment - Pond Backfilling

**Personnel On Site:** B. Geno | **Subcontractor:** WATEC

**Description of Daily Activities and Events:**

0700 BG arrives on site. Richard Shelton (Inco site manager) is on site building saw horses to begin construction of forms for building foundation. R. Shelton indicates that hopes to have the building foundation poured 4/3/96 or 4/4/96 depending on the weather. R. Shelton indicates that Stan James (Inco project manager) should arrive on site about 9:00 a.m. BG finds message on answering machine from Hope Taylor left on 3/29/96 regarding letter from WATEC. H. Taylor indicates that she has not received a copy of the letter from WATEC regarding NPDES excursion, and that she has talked with Dave Lown (NCDEHNR) who has indicated that he has not yet received a copy of the letter. WATEC is preparing rolls of geogrid/geotextile.

0800 BG places call to B. Smith to get copy of letter from WATEC. B. Smith not in yet.

0810 BG talks to Jim Cook (Beazer) to ask for a copy of the letter from WATEC to be faxed. BG indicates that he will talk to Dave Hails (EAP) to try to determine schedule for Medlin Ponds planting. BG to determine in the next couple of days when to schedule pre-final inspection for surface water. BG gets approval from J. Cook to send copy of WATEC letter to H. Taylor.

0820 BG calls D. Hails (EAP). D. Hails indicates that he will not schedule the wetlands planting until Medlin Pond is regraded. D. Hails indicates that annual rye grass would be appropriate for planting in the area of the proposed wetlands (behind the berms). The seed mix specified in the wetlands mitigation plan for disturbed areas would be appropriate for other disturbed areas, including the area where the road is to be removed.

0830 BG receives copy of letter from WATEC to Judy Garret RE: NPDES excursion from J. Cook. BG

**Pay Quantities:**

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|---|---|
| WATEC: | Rodney Jones (s.m.) |
| | John Cutlip (asst. s.m.) |
| | Dan Kitchen (tech.) |
| | John Neville (tech.) |
| | Dan Wise (tech.) |
| Inco: | Stan James (p.m.) |
| | Richard Shelton (s.m.) |
| | 4 crew |
| Rust: | John Funk (p.m.) |
| | Robert Holland (site QC) |
| | Randall Foulke (QC dir.) |

**Project Changes/Unusual Observations:**
None

**Weather Conditions:**
*a.m.* overcst, hi 40's, lgt rain
*p.m.* overcst, mid 50's, lgt rain

**Health and Safety PPE:**
Steel-toed boots, safety glasses, hd hats

**Air Monitoring Results:**
None

**Field Representative:** Bruce Geno | **Date:** 4/1/96

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 4/1/96 |
| Day of Week | Monday |
| No. | 103 |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

faxes copy of letter to H. Taylor. WATEC is crushing Medlin Pond intake line to put in rolloff.

0900 Dave Lown (NCDEHNR) arrives on site. D. Lown indicates that he has not yet received a copy of the letter from WATEC. BG indicates that the letter was distributed by WATEC 3/29/96. BG explains that surface water has not been treated since D. Lown was last on site 3/25/96. BG indicates that WATEC is planning to treat and discharge water that has accumulted in the Fire Pond since 3/26/96. D. Lown asks to use the phone. BG indicates that he can use WATEC phone since WATEC trailer is empty. BG returns to Beazer trailer to provide copy of WATEC letter to D. Lown. Envirochem pick up empty rolloff.

0910 B. Smith returns call to BG to talk about addressee on letter from WATEC to Judy Garrett, Medlin Pond condition, monthly monitoring report, and preconstruction meeting for groundwater. BG indicates that J. Cook contacted BG on Friday 3/29/96 to schedule prefinal inspection and preconstruction meeting for groundwater. BG indicates that J. Cook asked BG to ask J. Gunn to change addressee on letter regarding excursion. BG indicates that berms for Medlin Pond have not yet been constructed, and that there are currently no E&S Controls in place. B. Smith indicates that BG should inspect the Medlin area for runoff, to see if the area is eroding. B. Smith indicates that the base bid included silt fence for the Medlin Pond areaBG indicates that Inco workers are preparing forms for the building foundation. BG indicates that D. Lown is on site for groundwater preconstruction conference.

0925 R. Jones has returned to the site and is talking with D. Lown. R. Jones indicates that WATEC tried to pump from Medin Pond evening of 3/24/96 but that 3-in. pump would not maintain prime. R. Jones estimates that up to 3,000 gal.s may have been discharged 3/24/96. R. Jones further indicates that WATEC pumped for about an hour this morning, until D. Lown asked them to stop pumping until WATEC is sure that the effluent meets the discharge criteria. BG asks R. Jones if WATEC has considered frac tanks. R. Jones indicates that he was just discussing use of frac tanks

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 4/1/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 4/1/96 |
| Day of Week | Monday |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

with D. Lown. D. Lown asks R. Jones for an estimate of volume of water in Fire Pond. R. Jones indicates greater than 1 and less than a million gals. BG indicates that BG estimates up to 50,000 gals. R. Jones indicates that the total as of today is probably less than 50K gals. D. Lown asks R. Jones when data for latest sample will be collected. R. Jones indicates that WATEC is currently awaiting results for two samples: one collected 3/15/96 and submitted 3/20/96, and one collected 3/21/96. R. Jones indicates that the sample collected 3/15/96 was submitted with 2-week turnaround, and that results should be available this week at the earliest. D. Lown asks if the laboratory would be able to provide the results sooner. R. Jones indicates that he will call the laboratory. R. Jones indicates that WATEC, Cummings/Riter and Beazer will talk to decide the best course of action, and that WATEC will keep the NCDEHNR abreast of decisions as to how to proceed. BG asks that when pumping is resumed, will samples be collected, given that the pumping may last only one day. R. Jones indicates a sample will be collected as soon as pumping resumes, even if for one day. D. Lown indicates that he agrees with R. Jones that sampling probably would not show anything, but that if there is a perception by anyone familiar with the project that the excursion is not being taken seriously, then everyone, including the NCDEHNR will be in deep trouble. R. Jones indicates that is definately not the case. R. Jones offers filter bags for inspection by D. Lown. R. Jones leaves D. Lown and BG. D. Lown indicates to BG that he will recommend that the state request samples of the drainage ditch downstream of Medlin Pond. D. Lown asks BG what surface water bodies are downstream of Medlin Pond. BG indicates that the nearest body of water is Crabtree Lake. D. Lown indicates that the NCDEHNR does not want to recommend sampling of Crabtree Lake. BG indicates that even if the surface water and fish in Crabtree Lake were sampled, and dioxins were found, it would be impossible to identify the source. D. Lown agrees. BG reminds D. Lown that dioxins were found in ditch between Medlin and Fire Pond, but levels were not high enough to warrant cleanup. BG indicates that is probably the case with ditch downstream of Medlin.

0930 Stan James (Inco) arrives on site. Stan James indicates that John Funk will arrive on site at about 10 a.m.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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|---|---|
| **Field Representative:** | **Date:** 4/1/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 4/1/96 |
| Day of Week | Monday |
| No. | 103 |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

1000 J. Funk arrives on site, with Randall Foulke and Robert Holland (Rust). R. Jones isolates BG and asks BG if D. Lown had asked before R. Jones arrived on site why WATEC was treating. BG indicates D. Lown had not asked that question. BG was of the understanding that WATEC would not be treating water until NCDEHNR had responded to WATEC letter dated March 28, 1996. However, WATEC treated for about 1/2 hour before D. Lown arrived, but had discontinued according to orders of WATEC management. Rust, D. Lown, Inco and BG conduct preconstruction conference. J. Funk indicates that the submittal list is included in the CQC Plan, and that many of the submittals listed have been submitted, including HASP, COP, and CQCP. D. Lown indicates that he has comments on the HASP, which he will try to give to Rust by 4/5/96. D. Lown indicates that he has not yet received the COP. BG indicates that CRC will try to get copy to D. Lown by 4/5/96. BG reviews the construction schedule. S. James indicates that Inco is shooting to have the foundation completed by 4/5/96, weather permitting. BG indicates that BG will review invoicing, change orders and project schedules. BG indicates that Rust should mobilize own facilities. J. Funk indicates that a weekly QC meeting is to be held early a.m. Monday of every week. HASP signoff is only formal documentation of HASP training. Richard Shelton (Rust) indicates that health and safety concerns specific to a particular activity are reviewed before beginning the activity. R. Shelton indicates that Inco workers wear safety glasses, steel-toed boots, and hard hats as mandatory protection. Daily construction logs to be submitted to Rust and summarized by Rust into a weekly report to be submitted no later than the following Tuesday. S. James indicates that the discharge line will need to be located. BG indicates that the final grade of the Fire Pond will have to be establised first. BG to help Inco locate treatment building. BG to be point of contact between Rust and Beazer.

1100 D. Lown leaves site for the day. BG and R. Shelton determine location of groundwater treatment building. Inco workers continue to prepare forms for concrete foundation. WATEC workers continue to prepare rolls of geotextile/goegrid, and place PVC intake pipe into rolloffs with filter bags.

1130 BG, J. Funk, and S. James discuss bid for Fire Pond dam regrading work. BG explains approx. 1,300 cy cut along McCrimmon roadside, some in right-of-way, with about 100 misc. sized trees,

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|---|---|
| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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|---|---|
| **Field Representative:** | **Date:** 4/1/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 4/1/96 |
| Day of Week | Monday |
| No. | 103 |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

mostly scrub, to be removed and grubbed. BG explains culvert work and E&S controls.

1215 J. Funk and Stan James leave site. S. James indicates he will need 3 weeks to prepare bid for Fire Pond work. S. James instructs R. Shelton to order 57 stone for access drive to treatment system building location, and to place geotextile fabric on grade and grade over with stone. R. Shelton indicates that he will order sand to raise the elevation of the area of the treatment building location that drops off.

1430 Inco workers complete preparation of concrete forms and leave site for the day. R. Holland (Rust QC) leaves site for the day. BG receives phone call from Beverly Hudson. Beverly Hudson indicates that she has asked J. Cook to fax WATEC letter but has not received yet. B. Hudson asks BG to fax WATEC letter to her attention. BG informs B. Hudson of the sampling since carbon changeout, description of temporary treatment system, sample results, and discharged volumes.

1440 BG calls B. Smith to inform B. Smith that state has ordered WATEC to discontinue pumping until results show NPDES requirements being met. B. Smith asks BG to keep J. Cook informed. BG indicates that B. Hudson has asked BG to fax letter from WATEC. B. Smith indicates that BG should have WATEC fax the letter.

1450 BG leaves message for Joe Gunn (WATEC) to fax letter to B. Hudson.

1515 BG receives call from J. Gunn confirming receipt of message to fax letter to B. Hudson. J. Gunn indicates that WATEC is preparing to give both the NCDEHNR and the USEPA a call regarding the NPDES excursion and future water treatment.

1630 WATEC workers complete placement of crushed Medlin Pond intake pipe near rolloff and preparation of geotextile/geogrid rolls for placement in Fire Pond, and leave site for the day.

1700 BG leaves message for B. Fisher to call regarding disposal of PVC intake line from Medlin Pond and future disposal in discharge line. BG needs to confirm that the PVC pipe and filter bags need to be put into separate rolloffs.

1730 B. Fisher returns BG call and informs BG that PVC pipe and sediment filter bags have been manifested as two separate waste streams and must be put into 2 separate rolloffs.

1820 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 4/1/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 4/2/96 |
| Day of Week | Tuesday |
| No. | 104 |
| Sheet | 1 of 3 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0715 BG arrives on site. Richard Shelton and 4 crew (Inco) are on site. R. Jones is also on site. BG asks R. Jones if R. Jones received message from 4/1/96 regarding disposal of PVC pipe and bag filters as two different waste streams. R. Jones indicates that he received the message but disagrees that the waste streams are different and need to be placed into separate rolloffs. BG indicates that Joe Gunn (WATEC) agreed with Bob Fisher (Beazer) that the materials would be manifested as two different waste streams, and would therefore be placed into separate rolloffs. BG indicates that any questions should be directed to J. Gunn. BG asks R. Jones if he knows when sample results for sample collected 3/15/96 will be available. R. Jones indicates that the results will be available today. WATEC is awaiting laboratory results before resuming pumping.

0740 R. Shelton sends all Inco workers except for backhoe operator home as foundation area is too wet to set concrete formwork.

0815 Rob Holland (Rust) arrives on site. BG asks R. Holland if he received message to bring COP for groundwater treatment plant construction. R. Holland indicates that he did not check his voice mail, and did not hear from John Funk. BG indicates that messages were left with both J. Funk and R. Holland.

0830 Post and Associates (surveyor) arrive on site to locate MW-9. BG provides coordinates for wells MW-9 and MW-28A to R. Jones. BG indicates that coordinates for MW-28A are provided to establish coordinate system, if needed.

0900 R. Shelton asks BG if it would be ok to ask WATEC if Inco could buy some geotextile fabric from WATEC. BG indicates that it would be easier for Inco, and BG has no problem with it.

0930 BG calls B. Smith to talk about orientation of building and Rust modifications to groundwater Construction Operations Plan. BG indicates that a building alignment with long dimension parallel to rr tracks may be more advantageous to access and to keep building away from excavation area. B. Smith indicates that BG should check with John Funk (Rust). B. Smith indicates that as long as trucks can get access, there should be no problem. BG and B. Smith

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| **Pay Quantities:**<br>WATEC: Rodney Jones (s.m.)<br>John Cutlip (asst. s.m.)<br>Dan Kitchen (tech.)<br>Inco: Richard Shelton (s.m.)<br>4 crew<br>Rust: Robert Holland (site QC) | **Project Changes/Unusual Observations:**<br>None |

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| **Weather Conditions:**<br>*a.m.* overcst, hi 40's, lgt rain<br>*p.m.* overcst, mid 50's, lgt rain | **Health and Safety PPE:**<br>Steel-toed boots, safety glasses, hd hats | **Air Monitoring Results:**<br>None |
| **Field Representative:** Bruce Geno | | **Date:** 4/2/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 4/2/96 |
| Day of Week | Tuesday |
| No. | 104 |
| Sheet | 2 of 3 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

review Rust COP changes. B. Smith and BG agree that COP can be distributed to USEPA and NCDEHNR. BG to make sure that grouting of blocks is to be done by Inco at no extra cost. BG to check with J. Funk on alternate vault design to try to eliminate confined space entry into vault.

0940 BG, R. Shelton, and R. Holland discuss building location. R. Shelton agrees that alternate orientation of building should not create difficulty, and may eliminate extra fill needed to raise elevation of slab at one end. R. Holland indicates that reorientation of influent line and effluent line should be able to be accomplished without difficulty. R. Shelton agrees that all blocks will be grouted without extra cost. Blocks are also to be covered with bituminous waterproofer. R. Holland to talk to J. Funk about alternate well vault cover to eliminate confined space entry.

1030 R. Holland leaves site for the day. R. Shelton indicates that he has struck a deal with WATEC to purchase geotexile fabric for $1/ft.

1100 BG talks to J. Funk regarding well vault and water line installation. J. Funk indicates that the well vault will be installed with bottom of vault resting on existing ground surface, with fill placed around the outside of the vault, as shown in CRC design. J. Funk indicates that Stan James' (Inco) concern with terminating water line inside building is that the line would be difficult to attach the line to a rigid support, and that it would be more difficult to bring the line up through the slab and through the bottom of the building. S. James has proposed a yard valve for termination of the water line outside of the building. BG indicates that Beazer's only concern may be security. J. Funk indicates that the water line would not be difficult to move inside the building. BG to talk with B. Smith regarding termination of water line.

1400 Jim Cook (Beazer East) calls BG. BG indicates that not much is going on with WATEC surface water work, but Inco is installing road for treatment building. J. Cook asks whether or not BG has talked to J. Gunn today. BG indicates that he has not. J. Cook indicates that J. Gunn to arrive on site 4/3/96 and WATEC is to begin pumping Fire Pond 4/3/96 and backfilling again. WATEC is to mobilize frac tanks to store water from Fire Pond. BG indicates that BG faxed copy of letter to B. Hudson 4/1/96, as J. Cook apparently had wrong fax no. (404-347-1695). J. Cook asks that BG track time related to the NPDES excursion, in preparation of a claim against WATEC. J. Cook

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 4/2/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 4/2/96 |
| Day of Week | Tuesday |
| No. | 104 |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

indicates that NCDEM is calling for sampling of ditch downstream of Medlin, surface water, and bioassay. J. Cook indicates he is preparing a letter to WATEC citing language of contract terms and conditions defining WATEC's liability in damages related to NPDES excursion.

1500 Jim Cook calls again to discuss change order for regrading of Fire Pond dam area. BG indicates that correspondence between WATEC and CRC was overnighted to J. Cook 3/28/96. J. Cook indicates he never received the package. BG to fax change order information to J. Cook and J. Cook to review and discuss with BG this p.m. BG indicates that Randall Bodnar (EAP) indicated today that he will try his best to be competitive with WATEC. J. Cook indicates that even if EAP is $5k higher, he would rather give to EAP. BG indicates that the schedule to finish filling the Fire Pond might be extended somewhat if Fire Pond dam given to EAP because of mobilization.

1510 BG faxes change order info regarding Fire Pond dam work to J. Cook.

1530 R. Holland and Inco leave site for the day.

1630 BG calls B. Smith to discuss ramifications of NPDES excursion. BG indicates that CRC should probably have sent the letter prepared in January documenting problems with WATEC's performance regarding submittals of effluent data, sampling of effluent in accordance with the field operations plan as opposed to sampling between the two carbon vessels for WATEC's QC, and WATEC's responsibilities related to fines/penalties. BG informs B. Smith that J. Cook has been notified by the USEPA that sampling is to be done of ditches, surface water, and biosampling for dioxins downstream of Medlin Pond. BG to begin tracking time related to NPDES excursion. BG informs B. Smith that letter prepared for J. Cook regarding delay and WATEC contractual obligations for water treatment was never sent by J. Cook. BG informs B. Smith that J. Cook has indicated that Beazer is preparing letter to WATEC documenting WATEC's contractual obligations per terms and conditions.

1700 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 4/2/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 4/3/96 |
| Day of Week | Wednesday |
| No. | 105 |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0700 BG arrives on site. Richard Shelton and rest of Inco crew are digging area for groundwater treatment building foundation. R. Jones asks BG whether the wetlands is to be installed for Medlin Pond area. R. Jones indicates that the installation of the berms is holding WATEC up in the Medlin Pond area, and that WATEC could be taking out the road and culvert, if it were not for the wetlands work. BG indicates that the necessary approvals have been obtained, and that as the contract stands, the wetlands are to be installed, so WATEC should install berms. BG asks R. Jones if WATEC will finish the work on the former Medlin property before the next storm event. R. Jones indicates possibly.

0720 BG leaves message for J. Cook (Beazer) to find out if wetlands are to be installed. BG indicates that he has told WATEC to go ahead, but it is unlikely that they will begin work of placing berms today.

0730 J. Cook returns BG call. Jim Cook to prepare memo to Beverly Hudson to let Beazer know by the end of the day today whether the wetlands are to be installed. BG to refax information regarding Fire Pond dam change order request and review to J. Cook.

0740 BG finds fax from Randall Bodnar (EAP) for Fire Pond dam regrading work in WATEC trailer and sends fax to J. Cook.

0750 BG asks R. Shelton to place water line inside the building. R. Shelton indicates that Inco can figure out a way to secure the plastic water line at termination inside the building. R. Shelton indicates that a sleeve will be placed in foundation.

0820 BG faxes B. Smith documentation for change order request for Fire Pond dam to B. Smith with EAP estimate. BG calls B. Smith to inform him that fax is on the way, and that BG believes EAP bid should be given serious consideration. B. Smith to review information and call BG. BG indicates that J. Cook had indicated preference to use EAP unless schedule was impractical.

0830 Chris Tiani (CRC) tracks package sent to J. Cook 3/28/96 overnight with information regarding change order for Fire Pond dam. Package was signed for by Koehler 3/29/96. BG calls R. Bodnar

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| **Pay Quantities:**<br>WATEC: Rodney Jones (s.m.)<br>John Cutlip (asst. s.m.)<br>Dan Wise (tech.)<br>Inco: Richard Shelton (s.m.)<br>4 crew<br>Rust: Robert Holland (site QC) | **Project Changes/Unusual Observations:**<br>None |

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| **Weather Conditions:**<br>*a.m.* sunny, low 40's, sunny<br>*p.m.* sunny, mid 70's, sunny | **Health and Safety PPE:**<br>Steel-toed boots, safety glasses, hd hats | **Air Monitoring Results:**<br>None |

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| **Field Representative:** [illegible] | **Date:** 4/3/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 4/3/96 |
| Day of Week | Wednesday |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

to discuss mobilization of EAP. BG indicates that EAP should be finished by the end of April if EAP is to be given serious consideration. BG indicates that EAP estimate of 20 days is probably accurate. R. Bodnar indicates that EAP could mobilize by 4/10/96 if they had to, but would prefer to mobilize 4/15/96. R. Bodnar indicates that 4/15/96 mob. would still enable them to finish by the end of April.

0930 R. Shelton and BG discuss effluent line from building. R. Shelton indicates that a pipeline to the area where the Fire Pond dam is breached would be the most economical and least O&M method of discharging effluent in Fire Pond area.

1000 Robert Holland (Rust) arrives on site. R. Holland discusses placement of soil around influent sump with R. Shelton. R. Holland indicates that soil will be sloped at 3H:1V. R. Shelton indicates that he is not sure if electrical is to come from below grade or attach to side of building. R. Holland indicates that Inco should assume that the electric hook-up comes in from the top. R. Shelton indicates that BG has informed him that the water line is to be placed inside the building.

1200 BG calls B. Smith to indicate that BG considers EAP estimate for Fire Pond work to be very competitive with WATEC. BG indicates that if WATEC credit against base bid were given to EAP, it would be cheaper for EAP to do the work. BG indicates that J. Cook has informed him to notify Joe Gunn (WATEC) that Beazer has not heard from the NCDEHNR since J. Cook talked with J. Gunn 4/2/96, that B. Fisher will be out of town until 4/8/96, and that Beazer will let J. Gunn know about Fire Pond dam work by the end of the day. R. Holland leaves site.

1300 BG observes placement of No. 67 stone in bottom of excavation for building foundation (8-in) thick, and placement of 4-in lift of sand on top of stone. Form is 16-in high. Inco leaves 1 ft. space between concrete form and edge of stone and sand for building footing. Workers rest a straight edge on top edge of forms and measure down from the straight edge to measure lift thicknesses.

1330 R. Shelton orders concrete for building foundation. R. Shelton indicates that concrete will arrive 14:00 4/4/96.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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|---|---|
| **Field Representative:** | **Date:** 4/3/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 4/3/96 |
| Day of Week | Wednesday |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

1400 R. Holland arrives back on site. R. Shelton has question as to size of conduit from building to sump. R. Holland and BG observe that the drawings do not specify size of conduit. R. Shelton to check with Inco electrical contractor. BG observes that sump depth shown on Rust drawing is 1-in. deep. BG to check whether sump depth is adequate.

1430 BG and B. Smith discuss WATEC change order for Fire Pond dam regrading work. B. Smith indicates that WATEC should not need additional labor to do Fire Pond work if schedule submitted 2/6/96 identifies two weeks being needed to regrade the Fire Pond dam. B. Smith also agrees that WATEC does not have a claim for fill variance from Fire Pond dam of ~1,000 cy. No additional per diem.

1520 BG returns call to J. Cook to explain that EAP is very competitive with WATEC (about $5K less than WATEC) and that R. Bodnar has indicated that he can guarantee that EAP would be done with the work unless the weather interferes. BG indicates that WATEC would use the same caveat. J. Cook asks BG to tell J. Gunn that if he can guarantee that WATEC will have the Fire Pond regraded by 4/30/96, with conditions in the change order for punitive damages beyond that date of $1,000/day, Beazer will approve the change order.

1530 BG learns that J. Gunn has left Atlanta and will be on site tomorrow a.m.

1540 BG leaves message for J. Cook that BG was unable to reach J. Gunn, but that J. Gunn will be on site 4/4/96 a.m.

1600 BG talks to B. Smith regarding sump for groundwater treatment building. BG indicates that the building sump is only 1-in. deep, and that the concrete blocks will be grouted and coated with bituminous-based coating to hold the volume of the equalization tank. BG was informed by R. Holland that the sump will collect silt and fine soil particles and prevent uptake by the sump pump. BG indicates that there will be an access in the building floor to the sump. B. Smith indicates that the sump should be adequate.

1620 R. Holland indicates he would like to speak to J. Funk about putting electrical service to the treatment building below ground rather than above ground.

1700 R. Shelton and R. Holland leave site for the day.

1730 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 4/3/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 4/4/96 |
| Day of Week | Thursday |
| No. | 106 |
| Sheet | 1 of 4 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0800 BG arrives on site. Richard Shelton (Inco) and 4 crew are on site. Joe Gunn and Rodney Jones (WATEC) are on site with 2 crew. Triangle Grading Contractors (TGC) is moving granular fill material into Fire Pond with Cat D4H LGP dozer. Fill is being placed to water's edge. TGC is using 3 trucks (2 tandem, 1 dump trailer) to deliver material to Fire Pond. WATEC to resume pumping from Fire Pond after frac tanks are delivered. BG has message from J. Cook that he has reconsidered penalty for change order approval language to be $500/day after 4/30/96, and BG to ask J. Gunn if he would accept those terms.

0810 BG talks with R. Shelton concerning message left 4/3/96 by Inco's concrete supplier (Steve Collberg 596-9368) that the supplier does not typically do cylinder testing of batch mixes, but that if they had someone available, they could send someone with the delivery driver to assist Inco with the cylinders. BG indicates that R. Shelton is to call with any questions.

0830 BG receives message from J. Cook indicating that J. Gunn called J. Cook to discuss approval for change order for Fire Pond dam regrading work. J. Cook informed J. Gunn that Beazer has another bid for the work of $5k less than WATEC, but J. Cook would be willing to give the work to WATEC if WATEC agreed to penalty of $500/day if Fire Pond dam work not finished by 4/30/96. J. Gunn would not agree to penalty after 4/30/96. J. Cook indicates that J. Gunn asked what WATEC would be losing if the other contractor were to do the work, and determined that WATEC would lose the credit of $15k, and the profit on the change order. J. Gunn to try to reevaluate costs to be more competitive.

0930 Two 21k gal frac tanks from Rain for Rent arrive on site from Richmond, VA. An additional frac tank to arrive early afternoon today.

1015 D. Lown arrives on site with Grover Nicholson (NCDEHNR). D. Lown and G. Nicholson observe 21k gal. frac tanks staged next to temporary surface water treatment system. BG escorts D Lown

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| **Pay Quantities:**<br>WATEC: Joe Gunn (p.m.)<br>Rodney Jones (s.m.)<br>John Cutlip (asst. s.m.)<br>Inco: Dan Wise (tech.)<br>Richard Shelton (s.m.)<br>Rust: 4 crew<br>Robert Holland (site QC) | **Project Changes/Unusual Observations:**<br>None |

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| **Weather Conditions:**<br>*a.m.* sunny, low 50's, sunny<br>*p.m.* sunny, mid 70's, sunny | **Health and Safety PPE:**<br>Steel-toed boots, safety glasses, hd hats | **Air Monitoring Results:**<br>None |

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| **Field Representative:** Bruce Dean | **Date:** 4/4/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 4/4/96 |
| Day of Week | Thursday |
| No. | 106 |
| Sheet | 2 of 4 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

and G. Nicholson to treatment system where J Gunn is staging frac tanks. J. Gunn indicates he will be staging a third tank this p.m. G. Nicholson asks J. Gunn what WATEC plans to do with water in the Fire Pond. J. Gunn indicates that WATEC will use 10 micron and 5 micron filters on the influent side, and 1 micron filter on the effluent side and discharge to frac tanks for sampling before discharge. D. Lown asks what turnaround time WATEC expects from the lab. J. Gunn indicates that WATEC's lab (Triangle Labs) has indicated that they are booked, and that 2 weeks is probably the earliest they could have the results. J. Gunn indicates that WATEC will be pushing to get the Fire Pond sediments covered as long as the weather cooperates. J. Gunn indicates that he estimates about 50k gals. in Fire Pond, and that WATEC would have liked to treat the water and discharge for such a small volume of water. G. Nicholson indicates that NCDEHNR has to notify the community that the water meets effluent criteria before being discharged. J. Gunn indicates that he has no problem with that. J. Gunn asks G. Nicholson and D. Lown if everyone is happy. G. Nicholson and D. Lown indicate they are satisfied.

1030 Rob Holland (Rust) arrives on site. R. Holland indicates that Inco to place double conduit to sump from building, one for electric supply and one for equipment controls. R. Holland indicates that R. Shelton should notify Inco's electrical contractor to give cost differential to put electric line to building underground vs. above ground.

1035 BG escorts D. Lown and G. Nicholson to the groundwater treatment building location. BG indicates that WATEC does not seem to appreciate the gravity of the necessity of meeting the NPDES discharge criteria, as reflected by J. Gunn's comment that he would have preferred to treat and discharge the remaining 50k gals. from the Fire Pond. D. Lown and G. Nicholson ask about concrete vault. BG indicates that earth will be placed around the concrete vault housing instrumentation and valving for the extraction well. BG shows D. Lown and G. Nicholson the extraction well and building foundation. D. Lown and G. Nicholson leave site.

1100 BG calls B. Smith to check to see if underground installation of electric supply to treatment building would suffice. BG to have Inco determine cost difference, and check with J. Cook to get ok. B. Smith indicates that J. Cook may be concerned with any on-site excavation. BG indicates

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 4/4/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 4/4/96 |
| Day of Week | Thursday |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

that J. Gunn called J. Cook before BG had a chance to talk with J. Gunn, and talked with J. Cook about change order for Fire Pond dam. BG to inform J. Cook that BG was also going to ask about WATEC coming down on price. BG informs B. Smith that D. Lown and G. Nicholson were on site to talk to WATEC. BG indicates that D. Lown informed him that the NCDEM will be sampling ditch below Medlin, nearest standing water, and fish in small tributary by Morrisville center. D. Lown indicated that Hope Taylor has said that she has seen people fishing there.

1140 R. Holland leaves site for lunch.

1200 Stan James (Inco) arrives on site. BG and S. James review dwgs. for conduit requirements from building to influent sump. S. James indicates that Rust dwgs. do not show conduit. BG indicates that two separate conduits are shown in CRC bid dwgs. and that it was his understanding that Rust would be directing Inco to place two conduits, one for control, one for electric supply. S. James indicates that code may allow both sets of wire in one conduit. S. James to check with electrical contractor. S. James indicates that the electrical contractor has already ordered the electric poles and scheduled driller for pole installation for overhead lines, so underground installation would not be feasible. S. James indicates that the poles will provide min. clearance of 15 ft. S. James indicates that the cost of the access drive to the treatment building from the Beazer trailer will be subtracted from the credit for switching from copper to HDPE for water supply line. S. James indicates that the road costs would be about $400, while the credit for the water line would be about $1,100. BG asks S. James to keep a running tab of the credits and expenditures, so that one adjustment can be made at the end of the construction.

1230 S. James and R. Shelton leave site for lunch and to pick up supplies.

1300 BG prepares Monthly Monitoring Report for March 1996 to NCDEM.

1310 S. James and R. Shelton return from lunch. S. James calls Elk Electric (elec. sub.) to check on conduit requirements. S. James indicates that a single conduit is acceptable to code from sump to treatment building.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 4/4/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 4/4/96 |
| Day of Week | Thursday |
| No. | 106 |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

1400 Mike Eason (Enwood Structures) arrives on site while BG waiting to talk to J. Gunn. M. Eason asks J. Gunn what the tanks are for staged next to Enwood Structures property. J. Gunn explains that the tanks will be used to store treated water until analytical comes back to enable WATEC to discharge the water. BG talks to J. Gunn concerning schedule for Fire Pond dam and Medlin Pond. J. Gunn indicates that he and Bill Creedon spoke with Jim Cook regarding change order for Fire Pond dam. WATEC to consider accepting change order condition of penalties or rejection of the work by 4/7/96. J. Gunn indicates that he will ask TGC to make installation of the berms in the Medlin Pond area a priority. BG indicates that if the berms are not installed before the next storm event, WATEC should install silt fence. BG indicates that tops of berms and areas outside of high water line are to be seeded with seed mix provided to J. Gunn, including disturbed areas created by installation of temp. access road.

1430 BG receives message from B. Smith to call. BG to work on O&M Plan for submittal to EPA.

1500 J. Gunn informs BG that W. Thompson (TGC) has completed the berms for the Medlin Pond area. BG and J. Gunn to inspect berms. W. Thompson indicates that the berms look high, but are not compacted, and will settle with rain. BG indicates that the berms are higher than shown in the plan, and asks W. Thompson if he could use dozer to shave the berms into a more trapezoidal cross section. W. Thompson indicates that he would rather leave the berms uncompacted for seeding. J. Gunn interjects that the berms can be bladed and scraped with a small tractor. BG indicates that the berms do not presently conform to the design. J. Gunn indicates that more work will be done with smaller equipment. J. Gunn asks W. Thompson about seeding contractor's schedule. W. Thompson indicates that TGC is awaiting the arrival of the seed for Medlin Pond. W. Thompson indicates that the seed was ordered 4/1/96, and should arrive 4/8/96. W. Thompson indicates that the Medlin Pond area can be seeded 4/2/96 or 4/3/96.

1600 Inco workers complete floating of concrete pad for groundwater treatment building foundation and leave site for the day. Inco to return on 4/8/96 to lay block walls for foundation. J. Gunn leaves site for the day. WATEC to pipe treatment effluent to frac tanks 4/5/96 a.m. to begin pumping from Fire Pond. J. Gunn to return to Atlanta.

1630 R. Shelton (Inco) leaves site for the day.

1730 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 4/4/96 |

CUMMINGS RITER CONSULTANTS, INC.

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| Date | 4/5/96 |
| Day of Week | Friday |
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# FIELD ACTIVITY REPORT

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| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Treatment - Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0800 BG arrives on site. BG leaves message for J. Cook to call regarding review of monthly monitoring report to NCDEHNR. BG indicates that B. Smith has made changes to report 4/4/96. Triangle Grading Contractors (TGC) is delivering and placing cohesive fill material into Fire Pond. TGC is using 7 trucks to deliver fill and is using Cat D4H LGP dozer to place fill.

0930 WATEC begins pumping from Fire Pond into frac tanks.

1100 BG calls B. Smith. BG indicates that he has not been able to reach J. Cook regarding review of monthly report to NCDEHNR. B. Smith indicates that BG should wait to hear from J. Cook before sending letter. J. Cook to arrive on Monday 4/8/96. BG indicates that TGC is delivering fill to Fire Pond with 7 trucks, and is pumping water from the Fire Pond.

1300 BG talks to J. Cutlip (WATEC). J. Cutlip indicates that he is getting mixed direction from Rodney Jones and Joe Gunn (WATEC). R. Jones has directed J. Cutlip to tell TGC to stop trucks and shave material into Fire Pond, and move material from the Medlin Pond side into the Fire Pond. J. Gunn has told J. Cutlip to let W. Thompson use his own discretion in determining how much fill is needed to fill the Fire Pond. J. Cutlip indicates that TGC is getting paid on the basis of material placed, so does not have a vested interest in conserving fill. John Cutlip indicates that WATEC is pumping at about 100 gpm, and that the filters are being changed about once per hour. J. Cutlip indicates that the water collected in the Fire Pond is relatively clean, but WATEC will reduce flow rate as the intake gets nearer the bottom of the pond. J. Cutlip indicates that he believes that more frac tanks will be required to store the water currently being pumped from the Fire Pond. J. Cutlip has tried to reach J. Gunn to get authorization to order more frac tanks.

1330 BG receives message from J. Cook to fax effluent sample analytical data to Paul Anderson. J. Cook incates that P. Anderson to use sample results to assess risk related to release of dioxins/furans from excursion.

1400 BG faxes analytical data for three samples to P. Anderson.

1700 BG leaves site for the day.

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|---|---|
| **Pay Quantities:**<br>WATEC: On-site tech.<br>John Cutlip (asst. s.m.) | **Project Changes/Unusual Observations:**<br>None |

| | | |
|---|---|---|
| **Weather Conditions:**<br>*a.m.* sunny, low 50's<br>*p.m.* sunny, mid 70's | **Health and Safety PPE:**<br>Steel-toed boots, safety glasses, hd hats, tyvek, nitrile gloves | **Air Monitoring Results:**<br>None |
| **Field Representative:** | | **Date:** 4/5/96 |

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 4/8/96 |
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# FIELD ACTIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Pond Backfilling, Groundwater Treatment System Construction | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0730 BG arrives on site. Inco laborer is on site removing concrete formwork from foundation slab. Rob Holland (Rust QC) arrives on site. John Cutlip is on site removing poly sheeting from fill near southeast corner of Fire Pond. Joe Gunn is on site.

0745 Richard Shelton (Inco) arrives on site. First truck from Triangle Grading Contractors arrives delivering cohesive fill to Fire Pond. TGC dozer operator arrives on site and begins using Cat D5C LGP dozer to move fill into Fire Pond. Mike Taylor (Rust-Rob Holland's replacement) arrives on site.

0830 BG calls Norfolk Southern Railroad to give 72 hours notice that Beazer will be doing work in railroad right-of-way. BG is to call Glen Maurer in the Raleigh regional office of Norfolk Southern at 831-3052.

0920 John Funk arrives on site for project meeting. J. Funk reviews the scheduled work for the week with Richard Shelton. R. Shelton indicates that the treatment system building is to arrive the evening of 4/9/96. R. Shelton is to set the building on the slab and set the vault on the extraction well 4/10/96. J. Funk indicates that he would like to inspect the building before the building is set on the slab, however, J. Funk is not available 4/10/96. J. Funk, R. Holland, and M. Taylor to inspect the building with BG 4/11/96. Discrepancies will be noted and will either be approved or identified for corrective measures.

0940 R. Holland and J. Funk leave site for the day.

1000 Elk Electric (Inco's Electrical Subcontractor) arrives on site. Joe Gunn asks BG for the waste code from the manifest for the disposal of spent filter socks. J. Gunn informs BG that the rolloff will be taken to Pinewood, S.C. as soon as Envirochem can schedule the rolloff. J. Gunn indicates that the rolloff contains both spent filter bags and PVC pipe from the intake piping from Medlin Pond. BG asks J. Gunn if he notified Bob Fisher (Beazer) that both pipe and filter socks were put into the

| **Pay Quantities:** | | **Project Changes/Unusual Observations:** |
|---|---|---|
| WATEC: | Joe Gunn (p.m.) | None |
| | Rodney Jones (s.m.) | |
| | John Cutlip (asst. s.m.) | |
| Inco: | Dan Kitchen (tech.) | |
| | Richard Shelton (s.m.) | |
| Rust: | 1 laborer | |
| | Rob Holland | |
| | Mike Taylor | |

| **Weather Conditions:** | **Health and Safety PPE:** | **Air Monitoring Results:** |
|---|---|---|
| *a.m.* overcast, low 40's<br>*p.m.* ptly sunny, mid 50's | Steel-toed boots, safety glasses, hd hats, tyvek, nitrile gloves | None |

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|---|---|
| **Field Representative:** Brian Geno | **Date:** 4/8/96 |

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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Pond Backfilling, Groundwater Treatment System Construction | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

same rolloff, because BG had been told by B. Fisher that the pipe and filter socks were to be disposed of in separate rolloffs. J. Gunn indicates he has B. Fisher's approval, because the pipe and filter socks are from the same waste stream.

1020 Elk Electric leaves site for the day.

1030 BG calls B. Fisher to discuss disposal of filter socks and PVC pipe. B. Fisher indicates he had instructed J.Gunn several times to keep the pipe and filter socks in separate rolloffs, but that B. Fisher could change the waste codes to include pipe. BG informs B. Fisher that the rolloff contains about 20 percent pipe. B. Fisher to change Beazer paperwork and call Laidlaw in Pinewood, S.C.

1050 Shannon Craig, Jim Cook (Beazer) and Paul Anderson (Ogden Environmental) arrive on site for meeting with NCDEHNR, NCDEM, and WATEC.

1130 Arnold Olender and Bill Creedon arrive on site.

1300 Dave Lown and Grover Nicholson (NCDEHNR) arrive on site. Hope Taylor (Clean Water and Environmental Protection for Shiloh) arrives on site.

1330 Judy Garrett and Ken Schuster (NCDEM) arrive on site. J. Gunn calls Beverly Hudson for USEPA participation in meeting to discuss NPDES criteria and resolution of potential excursion. See attached meeting minutes.

1510 Meeting adjourns and B. Hudson ends phone call.

1515 J. Garrett and K. Schuster leave site for the day.

1540 D. Lown, G. Nicholson, leave site for the day.

1720 J. Cook and S. Craig leave site for the day.

1730 J. Gunn, A. Olender, and B. Creedon leave site for the day.

1800 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

| | |
|---|---|
| **Field Representative:** | **Date:** 4/8/96 |

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MEETING MINUTES

Attendees:

Bruce Geno, Cummings/Riter Consultants
James Cook, Beazer East, Inc.
Shannon Craig, Beazer East, Inc.
Paul Anderson, Ogden Environmental and Energy Services
Joe Gunn, WATEC
Arnold Olender, WATEC
Bill Creedon, WATEC
Rodney Jones, WATEC
Hope Taylor, Clean Water and Environmental Protection for Shiloh
David Lown, NC Superfund
Grover Nicholson, NC Superfund
Beverly Hudson, USEPA via telephone
Judy Garrett, NCDEM
Ken Schuster, NCDEM

Jim Cook:

The meeting commenced at 1:30 p.m. with an explanation by Jim Cook that there may or may not have been an excursion from substantive NPDES requirements for surface water treatment effluent.

Judy Garrett

North Carolina has received reports of dioxin concentrations in effluent which are in excess of substantive NPDES limits. NC standards are based on fish consumption. Therefore, the state is recommending sampling of fish, sediment, and water downstream of the Medlin Pond.

Jim Cook:

There is at least one apparent error in the reporting of Total Equivalent Concentration (TEQ). The laboratory has assumed that for congeners which were not detected, that the concentration of the congener in the effluent is the detection limit. Jim Cook indicates that if non-detect concentrations were not reported as detection limit to calculate TEQ, the TEQ would drop from about 230 ppq to about 170 ppq for the sample collected 2/22/96. Jim Cook explained that while the Record of Decision (ROD) for the Koppers Superfund Site in Morrisville, NC required monitoring for dioxins/furans and calculation of Toxic Equivalent Concentration. NPDES requirements are non-detect for dioxins, which has been enforced for the pulp and paper industry as non-detect for 2,3,7,8-TCDD. NC surface water discharge limits should be the guiding ARAR. The ROD is therefore does not appear consistent with state monitoring requirements for dioxins. With the help of Paul Anderson, who did the original risk assessment for the site, Beazer has taken an exhaustive look at the dioxin standard versus the requirements of the ROD.

Paul Anderson

North Carolina NPDES limits have been set based on risk levels presented by concentrations of 2,3,7,8-TCDD in surface water which are bioaccumulated in fish. The NC water quality standard is 0.013 ppq. The North Carolina standard is for 2,3,7,8-TCDD only. That is how permits for pulp and paper industry are written. The 0.013 ppq standard is based on potential exposure to dioxin from consumption of water and fish. Because of the bioaccumulation potential of dioxin, the fish consumption pathway is dominant. Calculation of the standard assumes that fish concentrate dioxins 5000 times more than the water concentration. In order to relate Total Equivalent Concentrations (TEQ) to risk in the same way that the standard for 2,3,7,8-TCDD was determined, bioaccumulation factors must be used for each congener.

Each congener has a different propensity for bioaccumulation, and therefore a different bioaccumulation factor. Therefore, if the bioaccumulation factors are used, the TEQ concentration drops in most cases to below the detection limit set for dioxins of 30 ppq. The 30 ppq was used as the detection limit for dioxin as the practical quantitation limit (pql), given that the actual 0.013 ppq standard cannot be measured.

Hope Taylor
The bioaccumulation factors are used where there are no fish data available to calculate bioequivalent concentrations (BTEQ).

Paul Anderson
That is correct.

Dave Lown
Certainly Beazer is not suggesting 30 ppq should be compared to BTEQ.

Paul Anderson
Why not?

Dave Lown
The state standard is 0.013.

Jim Cook
Beazer has looked at the state standard and has tried to use the same approach for other congeners as for 2,3,7,8-TCDD. The standard for 2,3,7,8-TCDD is 0.013, but 30 ppq is the pql. 30 ppq is the minimum that a laboratory should be able to detect. 30 ppq could be seen as a C- grade for a lab. Beazer's proposed compromise position to the state's preference to sample sediments, water, and fish is to sample sediments at the same 3 locations as for the Remedial Investigation (RI) to see if the concentrations of dioxins have increased since the RI.

Joe Gunn
Estimates that 100,000 gallons will be containerized unless more rain is recieved. At present, WATEC has filled three frac tanks at 60,000 gals. each and has 2 more on order. To date, WATEC has treated over 15 million gallons from both the Fire Pond and Medlin Pond.

Arnold Olender
WATEC would like to move on, but with impending rain and 9 to 10 day minimum laboratory turnaround time for dioxin samples, WATEC is fighting a losing battle. The rain will require more frac tanks.

Joe Gunn
WATEC sees no reason to sample each individual frac tank, since the tanks are manifolded together in a cascading system. WATEC will take a composite sample before discharging the treated water.

Dave Lown
Not sure that WATEC has violated the standard, but the DEM should check NPDES permit standards for dioxin regulated industries.

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Hope Taylor
The increased risk of discharging the rest of the water in the Fire Pond versus what has been discharged already is probably negligible, however, one thing that would make the community more comfortable regarding the release would be sampling of fish in the nearest downstream location.

Joe Gunn
WATEC would need 4 more days to cover Fire Pond sediments, but if the site gets more rain, between running out of storage capacity and awaiting lab results, WATEC would never be able to catch up, because there will probably never be a stretch of 10 days when there is no rain.

David Lown
The state has two issues to resolve: (1) has WATEC exceeded the dioxin effluent standard, and (2) how to put community fears to rest.

Meeting is adjourned with Judy Garrett to determine what the state permit standard is for dioxin, and let WATEC know as soon as possible.

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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Pond Backfilling, Groundwater Treatment System Construction | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0830 BG arrives on site. WATEC is using 3-in. pump to treat water from Fire Pond and store in frac tanks on site. WATEC is unable to measure flow rate, as the discharge line is disconnected to direct discharge to frac tank. Triangle Grading Contractors (TGC) is not delivering fill due to rain received last night. Placed fill is too wet to support trucks. Inco is on site cutting notches in concrete blocks to receive channels under building floor. R. Jones indicates that he is not sure TGC will agree to terms of subcontract for regrading of Fire Pond dam. R. Jones indicates that he will put TGC under lump sum contract, and not time and materials, which is different from the way TGC is currently contracted. R. Jones indicates that TGC may not agree to lump sum, so that WATEC could subcontract EAP, if EAP is the contractor which J. Cook is considering to use for Fire Pond work.

0900 J. Cook arrives on site. BG and J. Cook walk site. BG indicates the low spot created by WATEC during filling of depression next to proposed excavation area 3. BG indicates that WATEC created the hole in taking native material to fill the depression. BG indicates that R. Jones has agreed to grade the hole and blend it in. J. Cook indicates that he believes that WATEC can blend and grade the area without importing fill. J. Cook and BG observe trees along Fire Pond dam. BG indicates that the top 5 feet of the dam will remain intact, and the portion of the dam facing McCrimmon Rd. will be graded to 2H:1V which is approx. existing slope. BG indicates that the row of trees on top of the dam will remain. J. Cook and BG inspect Medlin Pond area, and observe approx. 2 ft. standing water behind most upstream berm. J. Cook indicates that the berms are not intended to pond water, and are too high. J. Cook indicates that the berms should be graded with 3H:1V side slopes, and should be 1.5 ft. high max. BG indicates that the outfall needs to be covered with rock to prevent erosion.

1030 J. Cook talks with R.Jones. J. Cook indicates that Beazer would not be interested in having EAP subcontract to WATEC, but Beazer would instead contract directly with EAP. J. Cook indicates that if WATEC needs to know by noon as to whether or not WATEC change order for Fire Pond

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| **Pay Quantities:**<br>WATEC: Rodney Jones (s.m.)<br>John Cutlip (asst. s.m.)<br>Dan Kitchen (tech.)<br>Inco: Richard Shelton (s.m.)<br>1 laborer<br>Rust: Mike Taylor | **Project Changes/Unusual Observations:**<br>None |

| | | |
|---|---|---|
| **Weather Conditions:**<br>*a.m.* ptly sunny, high 30's<br>*p.m.* ptly sunny, low 50's | **Health and Safety PPE:**<br>Steel-toed boots, safety glasses, hd hats | **Air Monitoring Results:**<br>None |
| **Field Representative:** | | **Date:** 4/09/96 |

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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Pond Backfilling, Groundwater Treatment System Construction | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

dam will be approved, WATEC should first get a firm committment from their subcontractor (TGC). J. Cook indicates that with or without the credit for fill lost from the Fire Pond dam, WATEC should be moving fill to cover the Fire Pond sediments. BG indicates that the letter of 2/8/96 obligates WATEC to place a minimum 2 ft. cover over exposed sediments, regardless of where material cut from dam is placed. R. Jones indicates that WATEC needs to know where the fill from the dam will be placed, as the hole is getting smaller. J. Cook indicates that WATEC can always find a place to put the fill, as WATEC has proven that fill can be lost on site. R. Jones indicates that WATEC can remove the Medlin Pond access road, and of the 1,700 cy placed in the road, WATEC could probably salvage an estimated 1,000 cy of fill to place in the Fire Pond. R. Jones indicates that TGC has offered to place off-site borrow for the same price as removing and placing fill for the Medlin Pond access road. R. Jones indicates that the difference is the time, as TGC can bring in trucks more quickly than they can excavate the road and move the material to the Fire Pond side. R. Jones indicates that WATEC's preference is to grade the road, and blend the road fill in with existing grades, and place pine straw. BG indicates that pine straw is not considered restoration, as the contract spec.s require soil ammendments and seeding/mulching of disturbed areas. R. Jones indicates that whatever seed is used for the rest of the pond would be used for the road area. J. Cook indicates that the road is not very wide, and would not require much seed. J. Cook indicates that if WATEC cannot agree with subcontractor, it would make sense to let EAP do the seeding as well,and take out the line item from WATEC's contract.

1400 R. Jones and J. Cook walk to Medlin Pond to discuss final grading and additional work required for Medlin Pond. BG tries to call Norfolk Southern RR. BG receives phone call from D. Hails who indicates that EAP plans to mobilize for Medlin Pond wetlands 4/22/96.

1430 Inco leaves site for the day.

1440 J. Cook and R. Jones return from Medlin Pond. J. Cook indicates that R. Jones has agreed to include proper construction of the soil berms for Medlin Pond with the change order for the Fire Pond dam. BG indicates that if the Medlin Pond access road is "blended in", the final grades

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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|---|---|
| **Field Representative:** | **Date:** 4/09/96 |

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# FIELD ACTIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Pond Backfilling, Groundwater Treatment System Construction | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

should be such as to prevent erosion, and that the graded area will have to support vegetation. BG indicates that the berm design is probably too small to construct with TGC's dozer. WATEC needs to figure out how to construct the berms. J. Cook further indicates that the berms are intended to hold back water, so that they must be structurally sound, and be compacted during construction. J. Cook indicates that that there were compaction requirements included in the specifications for the Habitat Mitigation Plan. J. Cook recalls 90 percent compaction of the soil. BG indicates probably achievable with small earth moving equipment in small lifts. BG indicates that unless the berms are constructed and the area seeded before the next precipitation event, WATEC should install E&S controls. BG indicates that rock should be placed in the outfall as shown on the base bid drawings to prevent washout of the channel created where the Medlin Pond dam used to be. R. Jones indicates that WATEC has rock on site. BG, R. Jones, and J. Cook call J. Gunn to discuss terms of the change order which WATEC has agreed to. R. Jones indicates that the soil berms will be constructed as shown on the drawings, the Medlin Pond road will be blended in with the existing topography, topsoil will be added, as needed to support vegetation, and the disturbed areas will be seeded. J. Cook gives verbal edits to J. Gunn for letter to state with summary of analytical data for dioxins and intent to discharge stored treated water. J. Gunn to address the letter to J. Cook of Beazer, and fax to state today.

1630 J. Cook leaves site for the day.

1700 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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|---|---|
| Date | 4/10/96 |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Pond Backfilling, Groundwater Treatment System Construction | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0730 BG arrives on site. Inco laborer is on site drilling hole in bottom of concrete well vault for conduit. BG calls Kenneth Web with Norfolk Southern RR to notify that work will be proceeding in RR right-of-way. K. Web indicates the easiest thing to do would be to fax copy of agreement between Beazer and RR and let K. Web review.

0745 BG faxes copy of RR access agreement to K. Web. Triangle Grading Contractors (TGC) begins delivery of cohesive fill material to Fire Pond. TGC is using Cat D5H XLP to place fill.

0810 K. Web calls BG and informs BG that K. Web has not received the appropriate internal RR paperwork to premit access to right-of-way, and that he cannot allow access until he receives the appropriate paperwork. K. Web instructs BG to call Eugene Green at 803/255-4335 at Norfolk Southern Piedmont Regional Office. BG unable to reach E. Green but talks to Harriet (E. Green's sec.) who directs BG to talk with Gary Johnson at 803/255-4235. Harriet connects BG to G. Johnson. Harriet informs G. Johnson that Beazer paperwork is in order and that BG is requesting access to RR right-of-way. BG indicates that Beazer has completed an access agreement, but that the K. Web has indicated he does not have the appropriate paperwork in his office to allow Beazer access. G. Johnson indicates that he can take care of the paperwork internally from his office. G. Johnson asks BG when access is planned. BG indicates that the work will begin 4/11/96 at 08:00. BG further indicates that the work is at least 50 feet away from the tracks, and that the right-of-way is 100 ft. on either side of the tracks.

0830 BG leaves message for Butler Tyler (contractor for Bell South) to call with estimate for moving telephone pedestal.

0945 B. Tyler leaves message for BG to call Celia Faust (821-6921), engineer for Bell South, to obtain estimate for moving telephone pedestal next to McCrimmon Rd. for Fire Pond regrading work.

1100 BG receives message from J. Cook that Beazer should not issue change order for Fire Pond dam work, as R. Jones (WATEC) has indicated that the trees will not be saved anyway. J. Cook

| **Pay Quantities:** | | **Project Changes/Unusual Observations:** |
|---|---|---|
| WATEC: | Rodney Jones (s.m.) | None |
| | John Cutlip (asst. s.m.) | |
| | Dan Kitchen (tech.) | |
| Inco: | Richard Shelton (s.m.) | |
| | 1 laborer | |
| Rust: | Mike Taylor | |

| **Weather Conditions:** | **Health and Safety PPE:** | **Air Monitoring Results:** |
|---|---|---|
| *a.m.* ptly sunny, high 30's<br>*p.m.* ptly sunny, low 50's | Steel-toed boots, safety glasses, hd hats, tyvek, nitrile gloves | None |

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|---|---|
| **Field Representative:** Bruce Geno | **Date:** 4/10/96 |

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|---|---|
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Pond Backfilling, Groundwater Treatment System Construction | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

indicates that the base bid included regrading of this area. BG to conference call with B. Smith and J. Cook at 13:00.

1300 BG and B. Smith leave message for J. Cook to call B. Smith. WATEC begins discharging treated water from frac tanks into diversion ditch on west side of Fire Pond.

1315 BG and B.Smith conference call to J. Cook. B. Smith explains to J. Cook that in addition to saving some of the trees along the Fire Pond dam, the revised grading plan more importantly avoids cutting into sediments. B. Smith further explains that the base bid did not include some of the E&S controls necesssary for the site. BG explains that the reason given by WATEC for most of the increase in cost of regrading the Fire Pond dam is due to extra handling and care needed to remove the trees and soil by loading onto McCrimmon Rd. BG additonally explains that it is hard to say how much of the cost of the change order is due to the extra handling required. BG to mark trees along top of Fire Pond dam that are to be saved.

1325 B. Smith calls BG. BG to send J. Cook list of items to be included for punchlist for Medlin Pond side of property.

1400 Inco begins grouting of slab to provide positive drainage to sump. Inco did not provide enough slope on slab surface to facilitate drainage to sump and is using a veneer of grout on top of slab.

1730 BG leaves site for the day. Inco is grouting building slab. WATEC is discharging contents of frac tanks.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 4/10/96 |

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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Pond Backfilling, Groundwater Treatment System Construction | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0800 BG arrives on site. Geopure has delivered treatment system building with prefabricated treatment components. Inco workers are painting interior of building secondary containment with bituminous coating. Triangle Grading Contractors (TGC) is delivering fill and placing fill with Cat D4H XLP dozer.

0810 Inco crane arrives for setting treatment building on foundation, and well vault over well.

0900 Lee Cox (Elk Electric-Inco sub.) arrives on site with drill rig for installation of utility poles for overhead electric supply to building. Inco sets building on foundation slab. M. Taylor to inspect building this p.m. and check off treatment building components vs. components specified in contract documents. Stan James (Inco) arrives on site to supervise off-loading of building from truck. John Funk arrives on site to coordinate inspection of building. BG to check with J. Cook to determine if Beazer has sent application for water meter to Morrisville.

0940 J. Funk and Stan James leave site for the day.

1000 TGC arrives on site with 2 truck loads of straw to be placed in Fire Pond, small tractor to spread soil ammendments, and crew of about 12 workers to spread mulch. BG talks to R. Jones. R. Jones agrees that it is premature to begin seeding of Fire Pond, as the pond still needs to be finish graded to promote drainage and disked. BG further indicates that BG has not received submittal information for seed, and soil ammendments. R. Jones indicates that TGC is being warned that TGC will be held accountable if the seeding needs to be redone because it does not meet with the specifications. Mike Taylor leaves site. M. Taylor to return this afternoon to perform QC inspection of treatment building components.

1100 BG calls J. Gunn. J. Gunn agrees that the seeding is being done prematurely. J. Gunn to work on a letter to BG documenting the proposed change in seed mix and application rates, change order to

**Pay Quantities:**

| | |
|---|---|
| WATEC: | Rodney Jones (s.m.) |
| | John Cutlip (asst. s.m.) |
| | Dan Kitchen (tech.) |
| Inco: | Richard Shelton (s.m.) |
| | Stan James (p.m.) |
| Rust: | 2 laborers |
| | Mike Taylor |
| | John Funk (p.m.) |

**Project Changes/Unusual Observations:**
None

| **Weather Conditions:** | **Health and Safety PPE:** | **Air Monitoring Results:** |
|---|---|---|
| *a.m.* sunny, high 40's<br>*p.m.* sunny, low 70's | Steel-toed boots, safety glasses, hd hats, tyvek, nitrile gloves | None |

**Field Representative:** [signature] **Date:** 4/11/96

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 4/11/96 |
| Day of Week | Thursday |
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# FIELD ACTIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Pond Backfilling, Groundwater Treatment System Construction | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

Beazer for the change in seed mix, submittals for the soil ammendments, and submitttals for seed certification. BG indicates that WATEC's proposed seed mix and application rate cannot be approved verbally, as it is a change to the specifications. BG needs appropriate documentation. BG indicates that the seed bed will need to be picked through to remove debris, (i.e. metal, roots, wood) from the surface before planting begins. J. Gunn indicates that most of the debris will be removed during disking. In addition, debris will be removed by hand before planting. J. Gunn indicates that the ammendments are being placed at 2.5 tons per acre, which is the application rate recommended in the agronomic report. BG indicates that the ammendments are being placed before the certification of analysis has been submitted by WATEC to Cummings/Riter. J. Gunn indicates that it is probably better to place the ammendments now in order that the ammendments will be incorporated into the topsoil during finish grading and disking. J. Gunn indicates that J. Cook does not have a problem with straw and tacking in non-traffic areas (versus crimping, as required by the specifications). J. Gunn indicates that he has received 8290 results for sample collected 3/21/96.

1200 BG receives attached fax from J. Gunn.

1130 Inco sets precast concrete well vault over extraction well with crane. Inco begins using backhoe to excavate trench for conduit from building to sump.

1300 Elk Electric have finished setting utility poles and stringing line from meter box near decon pad to groundwater treatment building. Elk Electric has two electricians remaining on site, wiring building.

1400 Mike Taylor returns to site. BG, M. Taylor and Howard (Rust) review groundwater treatment system as delivered. M. Taylor keeps marked-up drawing of treatment system piping and instrumentation diagram for review by John Funk.

1600 BG talks to R. Jones concerning removal of phone pedestal along McCrimmon Pkwy in road right-of-way, mudwave problem for Fire Pond closure, change order for Fire Pond dam work, and notification from NCDEM as to approval for discharge of stored treated surface water. BG indicates that the phone company will begin moving the pedestal 4/15/96 and should be finished

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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|---|---|
| **Field Representative:** | **Date:** 4/11/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 4/11/96 |
| Day of Week | Thursday |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Pond Backfilling, Groundwater Treatment System Construction | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

moving the pedestal by 4/20/96. BG indicates that the mudwave at the south end of the Fire Pond created from closure of the last remaining portion of the exposed pond should not be pushed into the low point of the pond to ensure drainage. R. Jones agrees. BG indicates that the sediments are more liquid than solid, and that WATEC should consider contingency for solidifying the sediments to permit fill placement over the sediments. R. Jones indicates that WATEC will continue to push the sediments toward the southwest corner of the Fire Pond and place and patch geogrid and geotextile as necessary to cover the sediments. R. Jones disagrees that contingency needs to be considered. BG indicates that J. Cook should have the change order letter completed by 4/12/96. BG asks R. Jones if WATEC received any approval or correspondence from the NCDEM before discharging treated water stored in frac tanks. R. Jones indicates that no correspondence was received, but that the frac tanks were sampled and discharged.

1730 BG leaves site for the day. Inco is securing metal ties to groundwater treatment building and compacting trenches for conduit. WATEC continues to place fill in south end of Fire Pond.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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|---|---|
| **Field Representative:** | **Date:** 4/11/96 |

WATEC
**Waste Abatement Technology, L.P.**
1300 Williams Drive, Suite B
Marietta, Georgia 30066
(770) 427-1947, FAX (770) 427-1907

**PROJECT MEMORANDUM**
Koppers Company Site
Surface Water Remediation Contract
Project No. 50007

To: Bruce Geno, Oversight Engineer — cc: Rodney Jones-WATEC

From: Joe Gunn, Project Manager

Date: April 11, 1996

Subject: Seeding

Based on my conversation with Rodney Jones and Wayne Thompson, the following will be performed:

- Preparation of the surface will include removal of debris, roots and rocks prior to seed placement.
- The seed mixture to be applied is Tall Type Fescue @ 6#/1000sf, and Common Bermuda @ 2#/1000sf (in accordance with NCDOA recommended seeding rates).
- Lime/Fertilizer/Seed certifications will be submitted today from Wayne to Rodney; Rodney will forward this information to you today.
- The straw will be tacked using an emulsified oil product meeting DOT specifications. A MSDS sheet on the material will be submitted prior to application.
- A cost credit for the seed mix substitution will be given to Beazer based on raw cost of specified seed mix and the raw cost of the substituted seed mix.

Should you need additional information, please feel free to contact me.

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 4/12/96 |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Pond Backfilling, Groundwater Treatment System Construction | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0845 BG arrives on site. Inco is not on site. Triangle Grading Contractors is transporting fill along the top of the Fire Pond dam from the Medlin Pond access road.

0900 BG receives change order for credit for change in seed mix for Fire Pond from WATEC.

1030 Jim Cook calls BG to discuss comments on Monthly Monitoring Report for March to NCDEM and change order record. BG indicates that J. Cook has received the latest version of the table with dioxin monitoring results included with Monthly Monitoring Report. J. Cook indicates that the table should include all available dioxin analytical results, and should indicate that the monitoring parameter is now 2,3,7,8-TCDD and not dioxins/furans. Table should also indicate that the detection limit as determined by NCDEM is 10 ppq. BG to edit Monitoring Report and attached letter and fax to J. Cook, along with change order for seed received from WATEC. J. Cook indicates that Beazer has received the encroachment agreement from NCDOT. J. Cook to fax copy of NCDOT encroachment agreement for regrading work on Fire Pond dam.

1100 BG receives copy of NCDOT encroachment agreement and provides copy to R. Jones and faxes copy to Joe Gunn (WATEC).

1130 BG talks to B. Smith regarding groundwater treatment system inspection, Fire Pond closure activities, seeding, and mudwave problem. BG indicates that the groundwater treatment system was inspected 4/11/96 with Mike Taylor of Rust. BG indicates that M. Taylor and BG marked up full-size CRC drawing, and drawing was kept by M. Taylor to review with J. Funk (Rust project manager). B. Smith indicates that BG should document findings of inspection in IQAT Certification Report. BG indicates that WATEC is very close to closure of Fire Pond. BG indicates that the sediment at the south end of the pond where WATEC had located the pump intake is more liquid than solid, and that BG has spoken to R. Jones about adding a solidifying agent, such as kiln dust or portland cement, to enable the dozer to place material on top of the sediment. BG indicates that R. Jones has been resistant to adding stabilizer on the basis that it would take a large amount of stabilizing agent, that the material would then become difficult to

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| **Pay Quantities:**<br>WATEC: Rodney Jones (s.m.)<br>John Cutlip (asst. s.m.)<br>Dan Kitchen (tech.)<br>Dan Wise (tech.) | **Project Changes/Unusual Observations:**<br>None |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.* sunny, high 50s<br>*p.m.* sunny, low 80's | **Health and Safety PPE:**<br>Steel-toed boots, safety glasses, tyvek, nitrile gloves | **Air Monitoring Results:**<br>None |

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| **Field Representative:** [signature] | **Date:** 4/12/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 4/12/96 |
| Day of Week | Friday |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Pond Backfilling, Groundwater Treatment System Construction | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

handle, and that R. Jones believes it will be possible to keep pushing the material to get on top of it. BG indicates that the material, if WATEC continues to push the material, will likely be pushed onto clean fill placed at southwest corner of Fire Pond. B. Smith indicates that WATEC should avoid placing sediments onto clean fill, and that WATEC must ensure that sediments are covered with at least 2 ft. of soil. BG to call J. Gunn to discuss contingencies for covering the sediments which continue to be move as fill is placed. BG indicates that WATEC has constructed a ramp off of McCrimmon Pkwy near the Enwood Structures property in order to use an off-road dump truck to bring fill in from top of dam. BG indicates that R. Jones had stated WATEC's intention of beginning the Fire Pond dam work on 4/15/96, but that WATEC has not yet received approved change order letter from Jim Cook of Beazer. B. Smith indicates that WATEC should be ready to break through the Fire Pond dam as soon as the sediments are covered, in order to prevent collection of storm water on fill surface. BG indicates that WATEC first needs to build the inlet wall and modify the culvert inlet so that the filter berm basin can be constructed before the dam is breached. BG indicates that collection of water on the fill surface will delay final grading in the area where the water pools, but the collection of water will be unavoidable is the site receives rain before the dam is breached.

1200 BG calls J. Gunn to discuss contingencies for covering sediments at the south end of the Fire Pond. BG indicates that WATEC has included in the bid costs for stabilizing the liquid remaining in the bottom of the pond which could not be pumped through the system. BG indicates that the sediments in the bottom of the pond are more liquid than solid, and that if WATEC continues to push the mud to the west, it is likely that the mud will end up on clean fill already placed. BG indicates that it is necessary to keep a minimum of 1 ft. cover of clean fill over sediments. J. Gunn indicates that it may be possible to let the sediments ride up onto clean fill, sacrifice the clean fill and geogrid already placed, and place new layers of geogrid/geotextile and clean fill over the sediments. J. Gunn indicates that stabilizing agents would help to strengthen the top few inches of sediment, but would not improve the strength of sediment at depth, which is important to keep the sediment from moving. J. Gunn indicates that in order for stabilizing agent to be effective, the

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 4/12/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Pond Backfilling, Groundwater Treatment System Construction | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

stabilizer would have to be mixed, but such mixing would result in on-site treatment, and possibly generation of a hazardous waste. BG to have R. Jones call J. Gunn to discuss contingencies for filling over the very soft sediments at the end.

1230 BG calls B. Smith to review discussion with J. Gunn. B. Smith agrees that for stabilizing agent to work, the stabilizer would have to be mixed at depth. B. Smith indicates that the method of a dual layer of fill and geotextile/geogrid is not recommended, as this may be a change in the design, and would create a situation in one area of the Fire Pond which is different than other areas of the pond, and would be a variation from the design. BG indicates that it may be unavoidable to cover over the sediment. BG to inform WATEC this is not the preferred contingency plan, and that WATEC should consider adding stabilizer to the sediments in place.

1300 BG talks to R. Jones to discuss filling over pond sediments at the very end of pond closure. R. Jones indicates that WATEC lost the cohesive fill borrow source, and is moving Medlin Pond access road fill. BG indicates that WATEC should consider adding stabilizer to the aqueous mixture remaining in the pond. R. Jones indicates that adding stabilizer would make the material difficult to move and handle. BG indicates that the material would increase in strength, but would not solidify in place. R. Jones then indicates that in order to place the cement, it would create a hazardous waste situation, and that the grading contractors are not 40-hr OSHA trained. R. Jones indicates a preference to mobilize tanker trucks to vacuum out a volume of sediment to fill a couple of trucks and dispose of off-site. BG indicates that vacuuming the sediments would be generating a hazardous waste, and WATEC would have to bear the cost of treatment for disposal. R. Jones indicates that WATEC would not bear the cost. BG indicates that WATEC's bid included adding stabilizer to the remaining water in the pond which could not be pumped through the system. R. Jones indicates that the sediments are not water. BG indicates that the sediments being pushed are behaving more as a liquid than solid. R. Jones indicates that he disagrees that the sediments are more liquid in behavior. BG indicates that if R. Jones was talking about mobilizing tanker trucks, that would seem to indicate that he would be treating the sediments as a liquid waste. R. Jones disagrees. BG indicates that WATEC is obligated to cover the sediments with a minimum of 2 ft of fill, and that if sediments are pushed onto previously placed clean fill, WATEC must place

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 4/12/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 4/12/96 |
| Day of Week | Friday |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Pond Backfilling, Groundwater Treatment System Construction | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

additional fill to cover the sediments. R. Jones indicates that the sediments will not be pushed onto clean fill. R. Jones indicates WATEC will continue to cover the sediments with geotextile and geogrid, patching the grid and geotextile, as needed to cover the sediments. R. Jones indicates that WATEC does not need contingency, and that methods being used now will work to cover the sediment. BG indicates that J. Gunn has asked R. Jones to call J. Gunn. R. Jones agrees to call J. Gunn to discuss contingencies for covering sediments.

1500 J. Cook calls to indicate that J. Funk will not receive the check for the water meter installation from town of Morrisville until 4/17/96. J. Cook indicates that checks are issued Tuesdays and Fridays, but the check will not be issued today. BG indicates that Inco will not return to the site until 4/22/96, until the water meter is installed, so that Inco may begin trenching for the water supply line. BG indicates that Rust may have to install numerous additional treatment system components in order for the treatment system to comply with the design. J. Cook indicates that BG should call Bob Fisher to check to see if Mark Tish or Paul Kelemenkish (Beazer) have reviewed plans for the groundwater treatment system. J. Cook to get letter for Fire Pond dam change order to WATEC this afternoon, with a tentative date identified for the pre-final inspection. BG to inform with state and federal agencies, once WATEC provides approval for tentative inspection date. BG to follow up with WATEC. BG indicates that the Monthly Monitoring Report to J. Garrett was changed to reflect that stored water has been discharged, and the table changed to include all available analytical data. J. Cook agrees.

1530 Pat O'Hara calls BG. BG informs P. O'Hara that meeting was held with Beazer, NCDEM, NCDEHNR, community representative Hope Taylor, and WATEC on 4/8/96. As a result of the meeting, substantive NPDES monitoring requirements have been changed from ROD to NC standard of 2,3,7,8-TCDD as the only dioxin monitoring parameter. BG informs P. O'Hara that many discrepancies were noted with groundwater treatment system as designed by CRC. P. O'Hara recommends review by D. Spicuzza. BG indicates that about 40 % of Fire Pond was seeded even though the regraded surface does not drain, and will require additional grading work. BG indicates that WATEC may have been concerned that Beazer had mentioned pulling the line item from WATEC's contract and issuing the work to another contractor. BG indicates that WATEC is very close to closure of the Fire Pond, and to begin regrading Fire Pond dam 4/15/96.

1700 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** | |
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |
| **Field Representative:** | | **Date:** 4/12/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 4/15/96 |
| Day of Week | Monday |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Fire Pond Backfill | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0800 BG arrives on site. Triangle Grading Contractors is using Cat excavator with approx. 10 ft. long, 8-in wide I-beam to grade Fire Pond area, and cover remaining exposed area at the southwest corner of Fire Pond near Enwood Structures office building. BG speaks to R. Jones concerning breakthrough/breach of Fire Pond dam. R. Jones indicates that WATEC would like to break through the dam to let storm runoff drain from Fire Pond area. Rain is supposed to reach site late afternoon today. BG indicates that WATEC should have filter berm basin in place before dam is breached. R. Jones indicates that WATEC to install filter berm next week, and cannot let storm water pond up on new fill, as fill will become saturated and WATEC will be delayed from getting back on and finish grading and seeding the area. BG to call B. Smith to discuss options.

0830 BG calls B. Smith. B. Smith indicates that at a minimum, WATEC should install silt fence before breakthrough of Fire Pond dam. WATEC was to include silt fence with base bid. BG estimates approx. 350 ft. of silt fence was to be included in base bid for Fire Pond, and approx. another 250 ft. for the Medlin Pond.

0900 BG talks with R. Jones and indicates that WATEC should install silt fence before breaking through the Fire Pond dam. BG indicates that WATEC had approx. 350 ft of silt fence in base bid for Fire Pond and additional footage for Medlin Pond. BG indicates that the fence bid for Medlin Pond could be used in Fire Pond area. BG indicates that two rows of silt fence placed upslope of Fire Pond breakthrough should suffice. R. Jones to talk to Joe Gunn about silt fence installation.

0930 BG receives call from C. Fautz of Bell South. C. Fautz indicates that phone co. will be moving phone pedestal along McCrimmon Pkwy beginning today. BG to have letter signed by Beazer authorizing work.

1000 BG calls B. Fisher. B. Fisher indicates that he will sign letter from phone company to authorize relocation of phone pedestal. BG explains that J. Cook had agreed that Beazer should be invoiced directly to avoid mark-up by WATEC or Cummings/Riter. BG informs B. Fisher that Inco is not

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| **Pay Quantities:**<br>WATEC: Rodney Jones (s.m.)<br>John Cutlip (asst. s.m.)<br>Dan Wise (tech.)<br>Dan Kitchen (tech.) | **Project Changes/Unusual Observations:**<br>None |

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| **Weather Conditions:**<br>*a.m.* overcast, low 40's<br>*p.m.* overcast, low 60's, shwrs | **Health and Safety PPE:**<br>Steel-toed boots, safety glasses, hd hats, tyvk, gloves | **Air Monitoring Results:**<br>None |

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| **Field Representative:** [signature] | **Date:** 4/15/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 4/15/96 |
| Day of Week | Thursday |
| No. | 114 |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Pond Backfilling, Groundwater Treatment System Construction | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

on site this week, and is awaiting installation of water meter at site to begin installation of water line to treatment building. B. Fisher indicates that two Beazer employees will be visiting site on 4/18/96 to inspect treatment system and offer recommendations for revisions. BG to check with John Funk (Rust) to determine schedule for soil excavation.

1030 BG leaves message for J. Funk to call regarding schedule for soil excavation.

1400 Triangle Grading Contractors fells trees near southwest corner of Fire Pond with excavator. TGC uses excavator to excavate soil from the Fire Pond dam and transport soil with Cat off-road articulated dump to cover remaining exposed sediments at southwest corner of Fire Pond. Sediments have encroached on clean fill. WATEC is trying to place geotextile and geogrid over sediments which have encroached on clean fill, and recover with minimum 1 ft. lift of soil. Sediments which were pushed from the center of the Fire Pond in a westerly direction toward Enwood Structures property are fluid-like. Soil cut from dam is being placed with Cat D4H XLP dozer.

1730 BG leaves site for the day. WATEC has not breached dam or installed silt fencing. TGC continues to place soil cut from Fire Pond dam over remaining exposed sediment.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 4/15/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 4/16/96 |
| Day of Week | Tuesday |
| No. | 00 |
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# FIELD ACTIVITY REPORT

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| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

BG not on site today (S. Boston, VA)

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 4/16/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 4/17/96 |
| Day of Week | Wednesday |
| No. | 114 |
| Sheet | 1 of 2 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

1300 BG arrives on site from S. Boston, VA. B. Smith is on site. Rust (WATEC sub.) has mobilized vacuum truck to evacuate tanks T1 and T2 to treat contents through WATEC surface water treatment system. Envirochem have mobilized 4 rolloffs to receive carbon from surface water treatment system. BG receives message from B. Fisher that meeting for soil excavation will be held 4/24/96 with Rust and Inco to review soil excavation program. BG and B. Smith talk about punchlist for completion of surface water treatment contract. B. Smith has been informed by R. Jones that this is Triangle Grading Contactors last day on site. B. Smith indicates that he has spoken to Rodney Jones about WATEC's improper installation of silt fence. R. Jones indicated that rather than spend the time to install the fence right, he would prefer to pay the fine. B. Smith indicated to R. Jones that Beazer does not want a site in violation of county regulations. R. Jones has indicated that WATEC will install the fence properly.

1400 BG and B. Smith inspect treatment building. BG to check with J. Funk whether Rust to provide bilko manway for sump access, and to see if discharge line can be put into same trench as water supply line with gravity or pressure discharge. BG to ask J. Funk if treatment pump will provide enough pressure for discharge line to McCrimmon Pkwy if line does not gravity drain.

1500 BG and B. Smith walk Medlin Pond area. B. Smith indicates that sediments at southern end of Medlin Pond need to be covered, as well as exposed geogrid. BG indicates that outfall from Medlin Pond area was constructed in the location shown on the design drawings, even though it is offset from the natural drainage course. BG and B. Smith discuss alignment of outfall with natural drainage course, but agree to leave as is due to near certain change order request from WATEC to alter the outfall location. BG to talk with D. Hails regarding water retention of berms (i.e., with 1.5 feet ht of berms, areas behind berms will not drain), and erosion control of berms at berm outlet. BG to inform WATEC that area near former truck entrance to Medlin Pond needs to be fine graded and removal of fence around Medlin Pond completed. B. Smith indicates that R. Jones informed him that WATEC has run out of geotextile and will use reinforced plastic sheeting to finsh the job. B. Smith indicates that initially he objected to the use of the plastic, as the plastic would not allow the trapped sediments to drain and consolidate.

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| **Pay Quantities:**<br>WATEC: Rodney Jones (s.m.)<br>John Cutlip (asst. s.m.)<br>Dan Wise (tech.)<br>Dan Kitchen (tech.) | **Project Changes/Unusual Observations:**<br>None |

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| **Weather Conditions:**<br>*a.m.* sunny, low 50's<br>*p.m.* sunny, mid 70's | **Health and Safety PPE:**<br>Steel-toed boots, safety glasses, hd hats, tyvek, nitrile gloves | **Air Monitoring Results:**<br>None |
| **Field Representative:** Bruce [illegible] | | **Date:** 4/17/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 4/17/96 |
| Day of Week | Wednesday |
| No. | 114 |
| Sheet | 2 of 2 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Pond Backfilling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

1530 B. Smith speaks to R. Jones concerning sediments which are being squeezed out from beneath equipment at southwest corner of Fire Pond. B. Smith informs R. Jones that sediments are approaching the dam and must be trapped. R. Jones indicates that WATEC will trap sediments and place
minimum of 1 ft cover over sediments. BG to inform J. Cook about former Fire Pond stand pipe outlet and necessary removal of same for Fire Pond regrading work. BG to inform J. Cook that WATEC damaged fence between Adams Products property and Beazer property. Fence was not indicated on design drawings. BG receives fax from Celia Fautz indicating that Bell South has received appropriate signatures from Beazer and has completed removal of phone pedestal next to McCrimmon Pkwy.

1600 B. Smith leaves site for the day.

1630 BG returns to site. BG leaves message for D. Hails (EAP) to call.

1730 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |
| **Field Representative:** | | **Date:** 4/17/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 4/18/96 |
| Day of Week | Thursday |
| No. | 115 |
| Sheet | 1 of 3 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Groundwater Trtmt System Rvw, Surface Water Trtmt System Dismantling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC, Rust |

**Description of Daily Activities and Events:**

0800 BG arrives on site. Rust (WATEC subcontractor)is using vacuum truck to evacuate Beazer tank T1 to pump contents through WATEC surface water treatment system. WATEC is dismantling remaining system piping and placing intake pipe and effluent pipe into separate rolloffs. WATEC to have Rust remove carbon from carbon vessels and place into rolloffs.

0810 Stan James calls BG to check on delivery of items for groundwater treatment system. BG indicates that plastic pipe for water supply lines has arrived. BG informs Stan James that B. Smith would like to replace the manhole cover for the well vault with a bilco cover, as specified in the bid documents. S. James indicates that he will talk to John Funk (Rust).

0900 Lee Cox (Elk Electric) arrives on site and informs BG that electricians will be here today to run electric supply from building to well vault. BG indicates that conduit is installed and buried.

0930 Mark Kish and Paul Kilchenstein (Beazer) arrive on site to inspect groundwater treatment system. BG provides bid documents, including drawings, for review.

0945 John Funk and Howard Shu (Rust) arrive on site. J. Funk indicates he received check from Beazer for water meter. J. Funk to deliver check to municipal authority this p.m. with application for water meter installation. Inspection of groundwater treatment system building and well vault is conducted. BG informs P. Kilkenstein that site is unsecured, thus well vault is concrete and will be surrounded with compacted soil. BG indicates that fiberglass cover had been proposed, but that J. Cook and B. Smith had reservations that fiberglass would be substantial enough to house equipment. P.K. indicates that Beazer has other unsecured sites next to railroad tracks where simimlar well equipment is housed in plywood sheds. P.K. indicates that vault will be confined space entry, which is undesirable. BG informs J. Funk that bid documents included a bilco manway. J. Funk asks if circular manway would suffice. BG indicates circular cover would suffice. M. Kish indicates that one of Beazer's systems has a bilco cover with a hydraulic piston spring system which is easy to operate. J. Funk to check into bilco cover.

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| **Pay Quantities:**<br>WATEC: Rodney Jones (s.m.)<br>John Cutlip (asst. s.m.)<br>Dan Wise (tech.)<br>Dan Kitchen (tech.) | **Project Changes/Unusual Observations:**<br>None |

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| **Weather Conditions:**<br>*a.m.* sunny, high 50's<br>*p.m.* sunny, mid 80's | **Health and Safety PPE:**<br>Steel-toed boots, safety glasses, hd hats | **Air Monitoring Results:**<br>None |

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| **Field Representative:** B. Geno | **Date:** 4/18/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 4/18/96 |
| Day of Week | Thursday |
| No. | 115 |
| Sheet | 2 of 3 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Groundwater Trtmt System Rvw, Surface Water Trtmt System Dismantling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

1030 Inspection of groundwater treatment system building begins. J. Funk indicates that iron fouling may be a problem, depending on location. Rust system at RDU Airport has no iron fouling problems, but other nearby systems do. J. Funk indicates citric acid system with small tank and pump with flow regulator to add citric acid as sequestriant to influent could be retrofit to system relatively easily to keep iron in suspension. J. Funk indicates that NC has allowed citric acid system on other treatment systems. M. Kish indicates Beazer does not want iron disposal problem. M. Kish indicates probably good idea to have alarm on sump. J. Funk indicates design did not include alarm, only level switch. J. Funk indicates that autodialer has not been provided for system, so Rust is flexible as to number of additional alarms and data inputs. P.K. indicates that Beazer prefers to avoid PVC piping and use steel or HDPE. BG indicates that spec.s called for steel piping, but during bid process, steel changed to PVC. J. Funk indicates that Rust will replace hoses between system pumps and cartridge filters and between two carbon vessels with PVC pipe. Rust to check compatability of PVC with design influent levels of phenol and penta, as well as compatability of EDPM seals on valves (vs. teflon or neoprene). P.K. indicates that he would prefer to have an eye wash station in the building, since potable water will be available. P.K indicates that casters can be purchased from lab supply. P.K. indicates that currently no protection of system pumps against dead head condition. Beazer to recommend pressure relief with alarm or pressure switch to disable system pumps. BG indicates that NPDES requirements do not require notification for downtime of system. M. Kish recommends pH probe as remote monitoring possibility. BG indicates that pH not NPDES monitoring requirement, therefore, pH not needed. M. Kish agrees. M. Kish asks how breakthrough to be determined. J. Funk indicates analytical monitoring results will be used to determine breakthrough. M. Kish indicates pressure drop across each carbon vessel needed to determine when backwash needed. Rust to move rotameter flow measurement device currently wall-mounted in line between well pump and EQ tank to downstream side of system pumps near flow regulating valve. Rust to check size of filter cartridges. Spec.s called for 10 micron size bag filters. J. Funk indicates 10 micron may require too much maintenance and may want to use 30 micron. Rust to provide check valves and gate valves downstream of system pumps for isolation.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |
| **Field Representative:** | | **Date:** 4/18/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 4/18/96 |
| Day of Week | Thursday |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Groundwater Trtmt System Rvw, Surface Water Trtmt System Dismantling | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

Rust to provide pressure relief from upstream side of cartridge filters and from top of carbon vessels, with relief directed back to EQ tank. Rust to provide pressure indicator on influent side of cartridge filters. Rust to move effluent sample port and pressure indicator to upstream side of flow totalizer, as M. Kish is concerned that sample port would draw vacuum in current configuration. BG indicates that J. Cook will likely leave treatment system issues to P. Kilkenstein and M. Kish. M. Kish also recommends backwash capabilities to backwash carbon, since carbon will have to be incinerated. P. Kilkenstein and M. Kish to prepare letter with recommendations for treatment system programmable logic control (plc) capabilities, additional sensors, alarms, backwash capability and switching of lead carbon canister to Jim Cook.

1300 BG provides copies of O&M Manual provided by Rust, spec. requirements for O&M Manual, and copy of NPDES requirements to M. Kish. M. Kish and P. Kilkenstein leave site.

1330 J. Funk, Howard Shu, and BG review ammendments to treatment system to be completed by Rust. J. Funk to prepare letter to BG regarding options to provide valving for backwash capability, and capability to switch lead carbon vessel. J. Funk indicates that flex hose with cam locks is one option.

1400 WATEC has emptied both storage tanks T1 and T2, and treated contents through carbon vessels. Rust is beginning to empty carbon from carbon vessels and WATEC is dismantling filtration system.

1500 BG talks to R. Bodnar to discuss Medlin Pond drainage and questions on proposed drainage on upslope side of rail spur. R. Bodnar indicates that the Medlin area should drain, as the bottom of the berm matches the elevation of the regraded surface. BG to get copies of sections and profile of berms overnighted from Pittsburgh.

1600 R. Bodnar leaves message that he was mistaken that the bottom of the berm is about 1 ft higher than regraded surface, so depth of water behind berms should be max. of 1 ft. BG to discuss with R. Bodnar 4/19/96.

1640 BG calls K. Bird to discuss schedule for soil excavation. P. O'Hara to visit site 4/24/96.

1740 BG leaves site for the day. Rust and WATEC continue to remove carbon from vessels and place into rolloffs.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 4/18/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 4/19/96 |
| Day of Week | Friday |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Trtmt System Demobilization | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC, Rust |

**Description of Daily Activities and Events:**

0830 BG arrives on site. Rust (WATEC sub.) is using vacuum truck to unload carbon from Carbon Vessel 1 and place into rolloffs. WATEC has dismantled treatment system piping, and has stockpiled PVC pipe near northwest corner of Fire Pond. R. Jones and BG discuss dismantling of surface water treatment system. R. Jones indicates that WATEC will schedule delivery of rolloffs to Pinewood, SC. BG indicates that because BG has other work commitments, BG will provide manifests to WATEC for Envirochem truck driver. BG indicates that Beazer to get completed copies of the manifests. BG indicates that Envirochem driver needs to complete the information on the manifests. R. Jones indicates that he will make sure the paperwork is filled out and return copies to BG. BG provides manifests for pipe, filter socks, and carbon. BG indicates that the manifest for the filter socks was changed to include PVC pipe. R. Jones indicates he is not sure the rolloff does contain pipe after all, as WATEC was concerned that it would be too much work to get the pipe sections into the same rolloff as the socks. R. Jones to check the rolloff. R. Jones indicates that the rolloffs with the carbon do not appear to contain free liquid, and that portland cement is being used to stabilize the free liquid. BG observes that plastic sheeting has been placed at opening of vessel and next to rolloff to contain spillage. R. Jones indicates the only carbon on the ground is from workers PPE. BG indicates that WATEC needs to be very careful not to spill carbon. R. Jones indicates that he needs copy of punchlist. BG indicates that he is working on list, and can only provide draft copy. R. Jones indicates that he would appreciate even a draft copy. BG provides R. Jones with copy of punchlist marked "preliminary punchlist".

0900 Hope Taylor arrives on site. H. Taylor inquires about availability of analytical results for surface water treatment effluent. BG indicates that WATEC released water from frac tanks on basis that there was never a detection of 2,3,7,8-TCDD in any surface water treatment samples by WATEC. WATEC prepared letter to NCDEM with analytical data for all samples. All results, with the exception of one sample, had detection limits below 10 ppq. WATEC decided to release water stored in frac tanks on basis that there was no violation, and on assumption that water in frac tanks would also show non-detect for 2,3,7,8-TCDD. BG indicates that WATEC discharged frac tank

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| **Pay Quantities:**<br>WATEC: Rodney Jones (s.m.)<br>John Cutlip (asst. s.m.)<br>Dan Wise (tech.)<br>Dan Kitchen (tech.) | **Project Changes/Unusual Observations:**<br>None |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.* sunny, high 50's<br>*p.m.* sunny, mid 80's | **Health and Safety PPE:**<br>Steel-toed boots, safety glasses, hd hats | **Air Monitoring Results:**<br>None |

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| **Field Representative:** | **Date:** 4/19/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 4/19/96 |
| Day of Week | Friday |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Trtmt System Demobilization | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

water into Fire Pond diversion ditch, which then flowed to Medlin Pond. H. Taylor indicates that the NCDEM has backed away from sampling of surface water, sediment, and fish downstream of Medlin Pond. However, EPA has agreed to collect sediment from the same two locations sampled for the RI to see if dioxin levels have increased. H. Taylor also indicates that she understands Beazer's position of wanting to avoid sampling, but is trying to raise money in the community to sample fish at closest downstream location from Medlin Pond and have samples analyzed at Duke with the intention of issuing a community advisory if warranted. H. Taylor indicates that her intent is to protect public interest, and not to place blame on Beazer as the source of release if hazardous levels are detected in fish.

1030 J. Cook calls BG to discuss progress. BG indicates that WATEC has completed backfilling of the Fire Pond, but has not provided positive drainage. BG indicates that there is an area on Medlin of exposed sediments apparently created from breaking through of geotextile. BG indicates that TGC is no longer on site, and that WATEC plans to finish all work. BG indicates that WATEC has treated contents of T-1 and T-2 and is dismantling treatment system. J. Cook indicates that he needs final volume of treated surface water to determine final contract amount. BG indicates that WATEC believes they have brought all the fill they are going to bring on site to finish job, but Fire Pond does not drain. BG indicates that TGC had started to clear Fire Pond dam and cut soil for covering of last of exposed sediment in Fire Pond. BG indicates that WATEC lost borrow source 4/12/96 so began using Medlin Pond access road fill. BG indicates that Mark Kish and Paul Kilkenstein (Beazer) visited site 4/18/96 and inspected system with John Funk and Howard Chu (Rust). BG indicates that P.K. and M.Kish will be preparing letter to J. Cook with recommendations for design changes. BG indicated to M. Kish and P.K. that J. Cook would likely leave decisions for design changes to them. BG indicates that BG is somewhat concerned that depending on how long M. Kish and P.K. need to make recommendations, may delay groundwater treatment system start-up. BG to remind WATEC that as condition of change order, WATEC agreed to shape Medlin Pond berms, per EAP design.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 4/19/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 4/19/96 |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Trtmt System Demobilization | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

1100 Bob Fisher calls BG to schedule meeting for soil excavation work. B. Fisher indicates that 4/25/96 may be better than 4/24/96 due to other committments. B. Fisher to call J. Funk to check with J. Funk's schedule, and let BG know by end of today. BG indicates no preference for either day. B. Fisher indicates he will overnight manifests for soil excavation program to BG.

1300 R. Jones leaves site for the day.

1330 BG receives message from R. Bodnar to call back to discuss Medlin Pond grading. BG takes site walk and shoots roll of film. BG to inform J. Cook that WATEC removed soil on former Medlin property to below original grade along access road area.

1400 Mark Kish (Beazer) calls BG. M. Kish to fax BG preferred access to well vault which consists of a 4ft. by 4ft bulkhead door system, with hydraulic spring. BG indicates that mag meter for well vault has not yet been ordered. M. Kish is interested in knowing whether the mag meter will have 4 to 20 milliamp output. M. Kish also inquires as to why the well vault is not recessed below ground surface, with the vault cover flush with existing grade. BG indicates uncertainty, but offers that the existing concrete pad which supported the protective casing is about 2 ft. thick, and jack-hammering away the concrete could possibly damage the well riser. BG to inquire as to rationale for setting well vault on grade and placing soil around the vault, vs. submerging the vault.

1640 B. Smith calls BG to inquire whether soil excavation meeting scheduled 4/24/96 is the preconstruction conference meeting.

1700 BG calls B. Fisher to discuss soil excavation meeting scheduled for 4/24/96. B. Fisher indicates that the meeting has been rescheduled for 4/25/96. B. Fisher indicates that he had not thought about inviting the agencies and making the meeting the preconstruction conference, but wishes to make the meeting the preconstruction conference to avoid having to schedule two meetings. BG to draft a letter for review by J. Cook on 4/22/96.

1730 BG calls B. Smith to inform B. Smith that NCDEM and USEPA will be notified by voice mail this evening and by fax letter 4/22/96 that the preconstruction conference for the soil excavation program is scheduled for 11:00 a.m. 4/25/96. B. Smith indicates that the reason for the well vault being left above existing grade is concern for shallow groundwater.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 4/19/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 4/19/96 |
| Day of Week | Friday |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Trtmt System Demobilization | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

1800 BG obtains final surface water treatment volume from WATEC. 15,660,660 gals. on flow totalizer, and 105,000 gal.s additional from frac tanks which bypassed flow totalizer for total of 15,765,660.

1830 BG observes carbon vessel carbon removal activities. BG asks John Cutlip to be very careful that if any carbon is spilled or contacts the ground, that WATEC should shovel it up immediately and place into rolloff. J. Cutlip to cover exposed sediments in Medlin Pond area with plastic before leaving for the evening.

1900 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 4/19/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 4/22/96 |
| Day of Week | Monday |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Trtmt System Demobilization | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0830 BG arrives on site. Inco is not on site this week, as reportedly are awaiting for installation of water meter from the town of Morrisville. Howard Chu (Rust) is on site to inspect transfer pumps in groundwater treatment system building. H. Chu indicates that the cut sheets provided with the O&M Manual supplied by Geopure do not seem to be what was provided in the building. WATEC has emptied and deconed both carbon vessels. Water used to decon vessels is containerized in 55-gal. drums staged on decon pad. WATEC is operating excavator on Fire Pond dam to remove trees near McCrimmon Pkwy.

0900 BG calls J. Cook (Beazer) to discuss letter to Beverly Hudson concerning scheduled soil excavation preconstruction conference. BG indicates that he will fax draft copy to J. Cook for review. BG indicates that WATEC has emptied and deconed both carbon vessels, and is working on the Fire Pond dam. J. Cook asks whether BG has spoken to D. Hails. BG indicates that BG will talk to D. Hails, but told R. Bodnar that the berms are still not constructed properly, and that the area is holding water. BG to discuss with D. Hails. BG indicates that the area needs to be drained and allowed to dry before WATEC can put equipment back onto the Medlin Pond area.

1000 BG talks to R. Jones concerning punchlist dated 4/18/96 provided to R. Jones. R. Jones indicates that 4/30/96 will be good date for pre-final inspection with the agencies (state and federal). R. Jones indicates that WATEC has abandoned MW-9. BG asks if a well abandonment report was submitted to NC. R. Jones indicates that the report will be completed and submitted to NC by the subcontractor who abandon the well. BG indicates that BG is unwilling to compromise on any of the issues identified in the punchlist. BG indicates that area next to proposed excavation area 3 does not drain, and that WATEC is obligated to make the Fire Pond area drain regardless of whether the area is inside or outside the limits of the Fire Pond. BG indicates that the area drained before WATEC commenced on site operations, and does not drain as a result of WATEC's activities. R. Jones indicates it is not WATEC's responsibility, that WATEC is not going to bring more fill into the Fire Pond area, but as a compromise, WATEC will try to back blade the area downslope of the ponded water with the loader bucket to try to provide drainage. BG indicates that WATEC is resposible for seeding the Medlin area outside of the berms. R. Jones indicates that J.

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| **Pay Quantities:**<br>WATEC: Rodney Jones (s.m.)<br>John Cutlip (asst. s.m.)<br>Dan Wise (tech.)<br>Dan Kitchen (tech.) | **Project Changes/Unusual Observations:**<br>None |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.* sunny, mid 60's<br>*p.m.* sunny, mid 80's | **Health and Safety PPE:**<br>Steel-toed boots | **Air Monitoring Results:**<br>None |
| **Field Representative:** Bruce [illegible] | | **Date:** 4/22/96 |

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|---|---|
| Date | 4/22/96 |
| Day of Week | Monday |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Trtmt System Demobilization | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

Cook had indicated that all seeding on the former Medlin property would be done by EAP. BG to clarify with J. Cook. R. Jones asks BG what to do with mulch from clearing/grubbing. BG indicates that WATEC was supposed to have blended the material with the fill in the ponds, in accordance with WATEC's Field Operations Plan, but after repeated reminders by BG to do so, BG does not have any recommendations. R. Jones indicates that the material can be put in the woods, or load it into rolloffs and dispose of it offsite (at WATEC's cost). BG indicates that ditch leading to Medlin is to be armored for erosion protection. R. Jones indicates that WATEC will leave it as earth. BG indicates that earth will not satisfy county requirements. R. Jones indicates that WATEC will not place stone unless Beazer pays for it. BG indicates that the ditch was disturbed by WATEC, is outside the limits of regrading, and was disturbed for access, not for design requirements. BG indicates that WATEC is responsible for erosion for 1 year, so would be cheaper to spend the money on materials than have to come back. R. Jones indicates that change order for flex pipe did not include removal. WATEC to submit change order for removal of flex pipe. R. Jones indicates that ruts on seeded surface will not be reshaped, and that WATEC will not be moving any equipment onto the seeded area, as the grass is coming up. BG indicates that Beazer will want to mow the area, so debris, roots, and other objects larger than 1-in. need to be removed from the surface. R. Jones indicates that Beazer will never be able to mow the area, as it will always be too wet. BG indicates that if the site were properly graded to drain, there would be no problem areas. R. Jones indicates that WATEC is satisfied with the way the Fire Pond area drains. R. Jones indicates that the only way to install the silt fence properly is with a trencher, such as a ditch witch, but that the ground in the Fire Pond area is too soft to support a trencher. BG indicates that the fence could be installed with hand tools. R. Jones disagrees.

1330 BG explains culvert work to WATEC, that first section of culvert will be replaced with new section, that bell end will face out, and coupling will be used to join two male ends. R. Jones indicates that WATEC will try to save the trees in the area of regrading, if possible. BG indicates that R. Jones had already told J. Cook that "hardly any trees would be left" as partial justification for more handling involved with Fire Pond regrading work. R. Jones indicates that he wanted J. Cook to accept that, but WATEC will try to save trees in the area were the design indicates cut.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 4/22/96 |

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|---|---|
| Date | 4/22/96 |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Trtmt System Demobilization | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

BG indicates that it will not be possible to save trees and meet required grades, especially if construction equipment needs to work around the trees to save the trees. R. Jones believes trees can be saved.

1400 J. Cook calls BG to indicate no comments on letter to B. Hudson with date of proposed preconstruction conference for soil excavation. BG informs J. Cook that R. Jones has indicated that 4/30/96 would be good day for pre-final inspection, even though the Fire Pond dam work will not be completed. BG indicates good idea to get meeting over with, because when the soil excavation begins, BG will not have any time. J. Cook agrees to have pre-final inspection 4/30/96. BG indicates that BG informed R. Jones that the Medlin Pond needed to be graded and seeded as soon as possible, but that R. Jones had responded that WATEC would leave Medlin regrading as one of the last items on the list. BG to provide punchlist to J. Cook. BG indicates that R. Jones is not cooperative on items listed, and seems to be trying to extort more money from Beazer by indicating the area next to proposed soil excavation area 3 will not be graded to drain, unless Beazer approves change order. BG indicates to the extent possible, Bob Fisher (Beazer) should perform site walk and establish the tone with WATEC that WATEC will not be paid for work not completed.

1430 BG talks to B. Smith. BG indicates that R. Jones and BG discussed punchlist, and that BG indicated unwillingness to compromise on any of the issues on the list. BG indicates that R. Jones is not being cooperative with Medlin Pond regrading and silt fence installation. B. Smith indicates that BG should talk to J. Gunn or A. Olender.

1600 BG leaves message for R. Jones to dispose of leaking 55-gal. drums staged near WATEC storage trailer.

1630 BG talks to K. Bird regarding confined space entry issue of well vault. K. Bird indicates that the confined space definition would best be left to the individual or firm doing work in the vault. BG indicates that the only reason to physically enter the vault would be to replace equipment housed in the vault. K. Bird indicates that the situation is borderline between non-confined space and confined space situation.

1700 BG leaves site to travel to S. Boston, VA.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 4/22/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 4/23/96 |
| Day of Week | Tuesday |
| No. | 118 |
| Sheet | 1 of 1 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Trtmt System Demobilization | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC, Rust |

**Description of Daily Activities and Events:**

1500 BG arrives on site. WATEC is using bucket loader in Fire Pond dam area to remove soil from the Fire Pond dam. Soil from the dam is being stockpiled at the southeast corner of the Fire Pond.

1530 BG receives call from Howard Chu (Rust). H. Cu indicates that letter was prepared and sent to town of Morrisville for water consumption estimate. H. Chu indicates that the hook-up fee will be approved by R. Butler, engineer for town of Morrisville. H. Chu indicates that pressure relief valves identified by Rust are about $200. H. Chu trying to find cheaper alternative. H. Chu indicates that the mag-meter for the well vault is flow totalizer, and as ordered, will not have 4-20 milliamp output capacity. H. Chu indicates that 4-20 milliamp output could be provided if Beazer so desires. BG to determine if flow totalizer measurements via remote will benefit Beazer. H. Chu indicates Rust's preference to retrofit and modify the system before start-up, if possible, to control costs. BG informs H. Chu that Beazer (M.Kish and P. Kilkenstein) had indicated that Rust should not delay system start-up waiting for Beazer to make final recommendations. H. Chu indicates that PVC pipe should not have compatability problems with anticipated concentrations of phenol and penta. H. Chu indicates that Inco will be at site 4/25/96 to discuss required changes in piping configuration and installation of additional equipment.

1600 BG leaves message for M. Kish (Beazer) indicating that flow meter inside well vault is totalizer, and can be provided with 4-20 milliamp output if Beazer wants. BG informs M. Kish that the well vault was set on grade due to concern of intercepting shallow groundwater if installed below grade. BG informs M. Kish that 4ft. by 4ft. cover for well vault was ordered, and that confined space entry issue is not clear, and that the definition could go either way. BG indicates that PVC should be compatible with anticipated phenol/penta concentrations. BG asks M. Kish to let BG know if mag meter with 4-20 milliamp output is desired.

1700 BG leaves site for the day.

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| **Pay Quantities:**<br>WATEC: Rodney Jones (s.m.)<br>John Cutlip (asst. s.m.)<br>Dan Wise (tech.)<br>Dan Kitchen (tech.) | **Project Changes/Unusual Observations:**<br>None |

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| **Weather Conditions:**<br>*a.m.* sunny, high 50's<br>*p.m.* sunny, mid 80's | **Health and Safety PPE:**<br>Steel-toed boots, safety glasses, hd hats | **Air Monitoring Results:**<br>None |
| **Field Representative:** [illegible] | | **Date:** 4/23/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 4/24/96 |
| Day of Week | Wednesday |
| No. | 119 |
| Sheet | 1 of 3 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Trtmt System Demobilization | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC, Rust |

**Description of Daily Activities and Events:**

0830 BG arrives on site. WATEC is dismantling carbon treatment vessels for demobilization. WATEC has mobilized a crane to attach support framework for transport of vessels, and to load prepared vessels on flat bed trailer.

0900 BG calls Paul Kilkenstein to discuss Beazer recommended mod.s to groundwater treatment system. P. Kilkenstein indicates that Beazer woul like flow meter/totalizer with 4 to 20 mA w/pulse output, flow totalizer/mag meter with 4 to 20 mA output, mercury level switch, and pressure transducer with 4 to 20 mA output and 0 to 100 psi range. P. Kilkenstein indicates that Beazer would prefer to have the well vault installed with the top flush with existing grade. BG indicates that the reason that the vault was set on grade was concern of intercepting shallow groundwater during excavation, and leaking problems if vault was set below groundwater table. P.K. indicates that the vault is to be grouted and sealed for water tightness, and vault should not float out of the ground. P. Kilkenstein indicates that the pipe and conduit already installed in the vault can be relatively easily removed.and that after the vault is set below grade, conduit and piping can be run into vault out the side to about 18 to 12 inches below grade (frostline), and the vault can then be filled inside with soil, to the elevation of the conduit and piping to eliminate confined space entry issue.

0945 BG calls Howard Chu to relay information for system controls and montoring from Beazer. H. Chu to call Paul Kilkenstein to clarify equipment requirements.

1000 H. Chu calls be to inform BG that H. Chu talked to P. Kilkenstein, and now understands that Beazer wants the following remote monitoring capabilities:

1. instantaneous flow at the well vault
2. totalized flow through the system
3. differential pressure between cartridge filters
4. differential pressure between carbon filters
5. pressure switch to disable transfer pumps, with alarm condition

Beazer is undecided as to how information is to be transmitted, by autodialer or modem or other.

1040 Flat bed trailer truck arrives for hauling carbon vessels.

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| **Pay Quantities:**<br>WATEC: Rodney Jones (s.m.)<br>John Cutlip (asst. s.m.)<br>Dan Wise (tech.)<br>Dan Kitchen (tech.) | **Project Changes/Unusual Observations:**<br>None |

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| **Weather Conditions:**<br>*a.m.* sunny, mid 50's<br>*p.m.* sunny, mid 70's | **Health and Safety PPE:**<br>Steel-toed boots, safety glasses, hd hats | **Air Monitoring Results:**<br>None |

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| **Field Representative:** [illegible] | **Date:** 4/24/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 4/24/96 |
| Day of Week | Wednesday |
| No. | 119 |
| Sheet | 2 of 3 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Trtmt System Demobilization | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

1045 B. Smith calls to discuss preparation for soil excavation meeting, letter to USEPA with notification of prefinal construction inspection, groundwater treatment system well vault, proposed design modifications to treatment system, and WATEC progress. BG indicates that silt fence has yet to be installed properly. BG indicates that BG to prepare for meeting for soil excavation, and estimate no. of sample kits required. B. Smith indicates that Beazer should be aware of leaking potential of recessed well vault from shallow groundwater.

1400 WATEC has carbon vessels loaded onto flatbed trailer. WATEC has used hand shovels to clean up carbon spilled onto soil near carbon vessels during changeout and dismantling.

1530 Flatbed trailers (2) with filtration equipment and carbon vessels leave site.

1600 Ricky Macon (Envirochem) arrives on site to pick up rolloff of carbon for delivery to Pinewood, South Carolina. BG observes rolloff with carbon as it is being loaded onto ramp truck. BG observes no leakage from the rolloff. BG observes leaking rolloff with filter socks staged near nw corner of Fire Pond. WATEC has proped the front of the lid-topped rolloff with the filter socks and cracked the tailgate to let the rolloff drain. BG observes wet soil near cracked rolloff gate.

1630 Dave Hails (EAP) arrives on site. BG and D. Hails walk Medlin wetlands habitat area. D. Hails was not informed that he would be planting the berms and the area downslope of the last berm. BG indicates that WATEC was to plant the area, but that J. Cook had then told R. Jones that the area would be planted by EAP. D. Hails indicates that the two most upslope berms can be reworked by hand, so that machinery does not need to be used. D. Hails indicates that the most downslope berm needs to be lowered, and the clods broken up to enable grass to hold better. D. Hails indicates that the spillways from each of the berms should be protected with erosion mat. D. Hails indicates that EAP can plant all the plants EAP has brought with them. D. Hails indicates he would like to discuss grading work on Medlin Pond berms with R. Jones to come to an understanding of what additional work needs to be done, and to verify that EAP planting will not be disturbed by WATEC operations in Medlin Pond area.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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|---|---|
| **Field Representative:** | **Date:** 4/24/96 |

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 4/24/96 |
| Day of Week | Wednesday |
| No. | 119 |
| Sheet | 3 of 3 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Surface Water Trtmt System Demobilization | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

1700 R. Jones, D. Hails, and BG walk Medlin Pond area. D. Hails indicates that spillways for the first two berms can be reworked by hand to concave shape and protected with erosion control mat. R. Jones indicates that as long as he stays on the berm, R. Jones can create the desired shape with the backhoe. R. Jones indicates that WATEC will have a John Deere 450 LGP dozer for a week, and at that time, will smooth grade the pond area, and fix the last berm. R. Jones indicates that he can use riprap from diversion ditches and extra riprap on site to line outfall from Medlin Pond area. R. Jones indicates that WATEC will line the berm outfalls with erosion control mat. D. Hails indicates that EAP will have to order the seed for the berms and the area downslope of the last berm, as these areas were initially out of EAP's scope. D. Hails indicates he will have to come back in late May/early June to do additional wetlands planting for Medlin.

1730 BG again asks R. Jones to cover exposed sediments in Medlin Pond area with plastic until WATEC can bury the sediments. R. Jones indicates he will do so 4/25/96. WATEC leave site for the day.

1800 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 4/24/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 4/25/96 |
| Day of Week | Thursday |
| No. | 120 |
| Sheet | 1 of 2 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Fire Pond Dam Regrading, Wetlands Planting, Soil Exc. Precon. Meeting | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC, Rust |

**Description of Daily Activities and Events:**

0800 BG arrives on site. WATEC is working on regrading Fire Pond dam. EAP is planting wetland species in Medlin Pond area.

0900 Stan James (Inco) arrives on site to inspect groundwater treatment building with John Funk (Rust).

0915 J. Funk arrives on site. S. James and J. Funk review proposed changes to groundwater treatment system.

1030 Bob Fisher arrives on site for Preconstruction Soil Excavation Meeting.

1050 Bill Smith arrives on site. B. Fisher begins meeting. J. Funk indicates that he has in his notes that CRC will provide surveyor. B. Smith indicates that Rust is to be paid based on surveyed volumes of in-place soil, both for excavation and placement, so Rust needs to have surveyor. J. Funk indicates Rust did not budget for surveyor and planned to use level to measure in-place quantities. B. Fisher indicates that CRC to provide surveyor. B. Fisher indicates that trucks can scheduled to arrive 5/6/96, or wait a couple of days after mob date for Inco to construct staging area, etc. S. James indicates that Inco would prefer to wait a couple of days after mob. for trucks. B. Fisher indicates that Dart trucking has allocated 4 trucks/day. Trip to Calvert City, KY to take 1 day, so same truck to arrive alternate days.

1100 Dave Lown (NCDEHNR) arrives on site for meeting. B. Fisher reviews above with D. Lown. B. Fisher indicates that he will have envirochem stage 3 rolloffs on site for use as interim storage, or for shipping directly to LWD, for continuity of work operations. BG to coordinate with excavator operator closely, so that operator does not remove any soil which operator has not been directed to move. Inco to mobilize truck load of kiln dust for stabilization of material shipped off site. B. Fisher cautions that any added wt. to trucks will be costly. Inco to have portable truck scales for weighing trucks before leaving site. Decon. pad to be covered with plastic before deconing related to soil excavation to avoid mixing K001 waste with F032. Water used to decon is to be stabilized, wrapped in plastic with the stabilizer (kiln dust), and placed in trucks with excavated soil. Alternately, decon to take place over trucks and stabilized in truck. BG to sample preferentially at interface of anticipated impacted/unimpacted surface first to delineate clean soil for on-site stockpiling.

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| **Pay Quantities:**<br>WATEC: Rodney Jones (s.m.)<br>John Cutlip (asst. s.m.)<br>Dan Wise (tech.)<br>Dan Kitchen (tech.) | **Project Changes/Unusual Observations:**<br>None |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.* sunny, mid 50's<br>*p.m.* sunny, mid 70's | **Health and Safety PPE:**<br>Steel-toed boots, safety glasses, hd hats | **Air Monitoring Results:**<br>None |

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| **Field Representative:** | **Date:** 4/25/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 4/25/96 |
| Day of Week | Thursday |
| No. | 120 |
| Sheet | 2 of 2 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Fire Pond Dam Regrading, Wetlands Planting, Soil Exc. Precon. Meeting | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC, Rust |

**Description of Daily Activities and Events:**

1200 BG, B. Fisher, J. Funk, S. James, and Dave Lown walk proposed excavation areas. BG indicates that BG has asked WATEC to move mulch pile several times. BG has also asked WATEC to remove debris cast into excavation area 2. BG to draft a letter to WATEC with requirements to WATEC to make room for Inco and soil excavation program, including drainage of area next to soil excavtion area 3, clearing of decon pad, removal of rock pile, rolls of dismantled fence, plastic sheeting, debris. B. Fisher indicates that mulch to be cast beyond tree line on Fire Pond and Medlin Pond.

1300 S. James, D. Lown, and J. Funk leave site for the day. B. Fisher, B. Smith, and BG walk site, and observe R. Jones trying to push over large pine tree in direction of Fire Pond with excavator parked on edge of McCrimmon Pkwy. BG points out damage to trees along top of Fire Pond dam. B. Fisher indicates that WATEC must remove remaining felled trees on former Medlin property. BG indicates that R. Jones used track excavator this a.m. to cover sediments exposed in Medlin Pond. EAP is planting wetland species in Medlin Pond area.

1430 B. Fisher leaves site for the day. BG and B. Smith leave site for lunch.

1510 BG and B. Smith return to site from lunch.

1530 B. Smith leaves site for the day.

1730 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 4/25/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 4/26/96 |
| Day of Week | Friday |
| No. | 00 |
| Sheet | 1 of 1 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Fire Pond Dam Regrading | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

BG not on site today (S. Boston, VA)

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 4/26/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 4/29/96 |
| Day of Week | Monday |
| No. | 121 |
| Sheet | 1 of 4 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Fire Pond Dam Regrading, Groundwater Treatment System Installation | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC, Rust |

**Description of Daily Activities and Events:**

0900 BG arrives on site. WATEC is moving soil and trees from Fire Pond dam area onto Fire Pond. WATEC has subcontractor removing logs cut from Fire Pond dam to pulp mill. Inco is on site to begin placement of soil around well vault and modification of treatment system to comply with spec. requirements.

0920 Stan James (Inco) arrives on site to review mods. to groundwater treatment system addressed in memo from Rust to Inco dated April 19, 1996.

0940 John Funk (Rust) arrives on site to meet with Stan James. J. Funk and S. James inspect brick building. J. Funk informs BG that Inco will be removing flanges from pressure vessels in brick building this week, and Rust will be sampling contents, if any. BG asks J. Funk if Beazer was made aware of delay in installation of water line due to additional fees. J. Funk indicated that Bob Fisher was told 4/25/96 and agreed that Rust would pay Morrisville with reimbursement to Rust. J. Funk informs BG that J. Funk understands that Beazer will contract directly with analytical lab for analysis of residue. BG to call J. Cook to determine analytical contractor and how to arrange for sample analysis. J. Funk informs BG that there is a drum in the brick building which appears to be leaking. BG to check with J. Cook to determine appropriate course of action to remove leaking drum. S. James indicates that the subcontractor he would have used to remove trees from Fire Pond dam area was going to save the trees along the top of the dam. S. James indicates that very few of the trees have not been damaged, and that WATEC's method of grading, creating a vertical wall 5 ft. from trees, exposed the roots and leaves trees very susceptible to fungus and beetles. S. James indicates he can provide name of forester if BG desires to document that the trees will die from the stress.

1000 Triangle Grading Contractors arrives with 20 yd trailer dump truck. WATEC loads dump truck with mulch material for off-site disposal.

1030 Ricky Macon (Envirochem) arrives on site. R. Macon picks up last of 3 carbon rolloff boxes for transport to Pinewood, SC. BG provides manifest to R. Macon. R. Macon indicates that he

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| **Pay Quantities:**<br>WATEC: Rodney Jones (s.m.)<br>John Cutlip (asst. s.m.)<br>Dan Wise (tech.)<br>Inco: Richard Shelton<br>1 operator<br>1 laborer | **Project Changes/Unusual Observations:**<br>None |

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| **Weather Conditions:**<br>*a.m.* overcst, mid 50's<br>*p.m.* overcst, mid 60's, shwrs | **Health and Safety PPE:**<br>Steel-toed boots, safety glasses, hd hats | **Air Monitoring Results:**<br>None |
| **Field Representative:** | | **Date:** 4/29/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 4/29/96 |
| Day of Week | Monday |
| No. | 121 |
| Sheet | 2 of 4 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Fire Pond Dam Regrading, Groundwater Treatment System Installation | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC, Rust |

**Description of Daily Activities and Events:**

inspeceted the bottom of the rolloff box twice while loading the rolloff, and did not observe leaking from the rolloff.

1030 BG leaves message for P. Kilkenstien to call. BG leaves message for J. Cook that Rust has indicated that Beazer to pay for analytical work for pressure vessels and that there are additional fees related to water line installation, so that water line will be delayed. BG calls P. O'Hara. BG indicates that Chad Coy should schedule to arrive 5/7/96. BG indicates that BG needs to schedule surveyor, soil screening kits, alert analytical lab, air monitoring equipment.

1100 Rodney Jones and BG discuss letter from CRC to WATEC dated 4/26/96 concerning potential contractor interference, and removal of obstructions near proposed soil excavation areas. R. Jones indicates that the drums staged near the storage trailer are not leaking. BG indicates that the clear plastic under the drums is now brown with petroleum staining. R. Jones indicates that the drums were dirty, and that the material came from the sides of the drums, and not from leaking of the drums. BG indicates that the area around the drums is probably laden with TPH constituents, because the drums were not covered with plastic, and that rain has overflowed plastic lining placed beneath the drums. R. Jones indicates that no residual TPH could have gotten on soil. BG indicates that if rain overflowed the plastic lining under the pallets upon which the drums are stacked, then TPH would be on soil. R. Jones disagrees. R. Jones agrees that drums should be covered with plastic. BG indicates that diversion ditch on north side of Fire Pond should be graded to blend with the surrounding ground surface. R. Jones asks if BG doesn't want any drainage. BG indicates that the regraded area should generally slope toward the Fire Pond. R. Jones indicates that in order to clear the access area for the soil excavation work, that WATEC will have to delay work on Fire Pond dam, which is not something WATEC planned on. BG indicates that WATEC was to have Fire Pond dam work completed by now. R. Jones indicates that WATEC has only spent 4 good days on the Fire Pond dam. and that the rest of the time WATEC was working on dismantling treatment system. BG asks R. Jones how many workers WATEC has on site. R. Jones indicates that WATEC has 3 workers on site, but that is all they need for the work they are doing. BG indicates that every month WATEC submits a schedule which is extended from the last month.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 4/29/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 4/29/96 |
| Day of Week | Monday |
| No. | 121 |
| Sheet | 3 of 4 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Fire Pond Dam Regrading, Groundwater Treatment System Installation | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC, Rust |

**Description of Daily Activities and Events:**

R. Jones indicates that the schedlules are always weather dependent. BG indicates that the original end date was 12/95, and that the site has not received 6 months of bad weather. R. Jones indicates that the site has received 6 months of bad weather. BG disagrees, and indicates that the duration could have been shortened if WATEC had committed more resources. R. Jones indicates that more is not always better. BG agrees that more is not always better, but that is not the issue, the issue is whether WATEC committed adequate resources to meet WATEC's own schedule. BG indicates that BG thought that the change order for the Fire Pond dam was to save the trees along the top of the dam. R. Jones indicates that the change order was not to save the trees, but to do additional work. BG indicates that the area of the dam in the base bid was to be substantially regraded, and that the justification for the change order by J. Gunn was largely founded on the requirement of additional material handling required to save the trees along the top of the dam. R. Jones disagrees. BG shows R. Jones the letter from J. Gunn dated 3/21/96, which indicated that the new design would not allow trees along dam to be pushed into Fire Pond area, but trees would have to be cut and hauled out along McCrimmon Rd. BG indicates that the trees were pushed anyway into the Fire Pond. R. Jones indicates that only a few trees were pushed into the Fire Pond, and indicates that most of the damage was done by the equipment. R. Jones indicates that the trees will be coated with dressing and will survive. BG indicates that he has been informed that the lob lolly pines are very sensitive and susceptible to disease. BG indicates that BG cannot direct the contractor how to achieve the goal, but can give the contractor the goals. BG indicates that he thought it was understood that saving the trees along the top of the dam was a goal.

1330 BG leaves site for lunch and to use phone. BG leaves message for B. Smith that BG would prefer B. Smith to be in attendance for pre-final meeting on 4/30/96.

1400 BG returns from lunch. R. Macon has returned with rolloff of carbon, and has loaded rolloff with PVC pipe from treatment system. R. Macon indicated that he detected leak from rolloff containing carbon while travelling from Raleigh. R. Macon indicates that initially thought it was rain water, but closer inspection revealed leakage from tailgate. R. Macon returned rolloff with carbon to the site, and has picked up rolloff with PVC pipe. R. Macon indicates that R. Jones disagreed that leak

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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|---|---|
| **Field Representative:** | **Date:** 4/29/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 4/29/96 |
| Day of Week | Monday |
| No. | 121 |
| Sheet | 4 of 4 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Fire Pond Dam Regrading, Groundwater Treatment System Installation | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC, Rust |

**Description of Daily Activities and Events:**

was not rain water.

1420 R. Jones asks BG to point out areas on eastern side of Fire Pond that are not draining. BG indicates that the discolored dark areas due to staining of tar tacking material is indicative of poor drainage. BG points out several (about 8) appro. 5 ft. dia. areas which are puddled. R. Jones indicates that he thought BG had more substantial areas in mind. BG indicates that the areas may very well become more substantial with more rain.

1600 Joe Gunn arrives on site. BG and J. Gunn walk Fire Pond and Medlin Pond. BG indicates that WATEC does not seem to have anyone performing QC. J. Gunn agrees that drainage of east side of Fire Pond is not positive. J. Gunn indicates that 50 percent of seeding budget and some of backfill budget should be escrowed until WATEC can come back and fill in small depressions. J. Gunn agrees that majority of trees along Fire Pond dam are damaged and may die as result of damage.

1730 BG and J. Gunn leave site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 4/29/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 4/30/96 |
| Day of Week | Tuesday |
| No. | 122 |
| Sheet | 1 of 3 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Fire Pond Dam Regrading, Groundwater Treatment System Installation | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC, Rust |

**Description of Daily Activities and Events:**

0840 BG arrives on site. BG receives message from Jim Cook (Beazer) that Shannon Craig (Beazer) talked to Beverly Hudson (EPA) and explained that the pre-final inspection meeting scheduled for today would not be the last meeting with the contractor for acceptance, and that S. Craig was under the impression that B. Hudson was confusing the meeting with the preconstruction conference.

0900 BG meets with J. Gunn and R. Jones (WATEC) to discuss project completion issues and punchlist provided to WATEC 4/18/96. J. Gunn and R. Jones propose alternate method of attaching bell end of culvert to headwall, and eliminating coupling. BG to call NCDOT for approval. J. Gunn proposes escrowing money for installation of underdrain until fill in Fire Pond dries. J. Gunn indicates that unseeded portion of Fire Pond needs to be final graded and seeded once the fill is dry enough to support dozer. R. Jones indicates that drums used to store diesel fuel will be placed back in building. J. Gunn indicates that Envirochem is scheduled for pick up of diesel-filled drums. BG indicates that PVC pipe needs to be pulled from the culvert, and the inlet pipe disposed of with the PVC filter socks. R. Jones indicates that PVC pipe will be pulled as soon as rain stops. J. Gunn agrees to clean up visible surface debris on portion of the Fire Pond that has been seeded. J. Gunn indicates that any other debris which surfaces will not be responsibility of WATEC. J. Gunn indicates that logs will be removed from former Medlin property. WATEC agrees to remove plastic flex pipe and either dispose of or place on site, at Beazer's discretion. Ditch leading to Medlin will be graded into a swale and seeded, and culvert removed. The disturbed area leading to Medlin Pond will be graded to drain to swale and seeded. Upon demob, phone service terminated. Tires used to secure sheeting taken to Apex landfill. WATEC to mobilize additional tech.s to finish punchlist items. J. Gunn to have seed, soil ammendment, and chain-link fence cut sheet sub.s to BG by 5/3/96. J. Gunn indicates that he will write letter to Beazer informing Beazer that warranty is viod if Beazer does not wait until summer dry weather before trying to mow Fire Pond, and other rec.s for O&M. Fill used for access to northeast corner of Fire Pond will be used to place in area not draining next to proposed soil excavation area 3. BG indicates he will be much more stringent in making sure min. 6-in. topsoil over granular fill in Fire Pond. J. Gunn indicates fence should go on top of Fire Pond dam, out of McCrimmon Rd. right-of-way.

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| **Pay Quantities:**<br>WATEC: Joe Gunn (p.m.)<br>Rodney Jones (s.m.)<br>John Cutlip (asst. s.m.) | **Project Changes/Unusual Observations:**<br>None |

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| **Weather Conditions:**<br>*a.m.* overcst, mid 50's, rain<br>*p.m.* overcst, mid 60's, shwrs | **Health and Safety PPE:**<br>Steel-toed boots, safety glasses, hd hats | **Air Monitoring Results:**<br>None |

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| **Field Representative:** [signature] | **Date:** 4/30/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 4/30/96 |
| Day of Week | Tuesday |
| No. | 122 |
| Sheet | 2 of 3 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Fire Pond Dam Regrading, Groundwater Treatment System Installation | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC, Rust |

**Description of Daily Activities and Events:**

1030 BG receives message from Mike Taylor (Rust) for BG to provide analytical parameters for vessel sampling. BG calls M. Taylor and informs M. Taylor BG to determine parameters, but Rust to arrange for analytical work, as Beazer will not be contracting analytical work. BG leaves message for J. Cook to call with sampling parameters. BG leaves message with K. Matteson (Black and Veach) apologizing for the short notice as to the prefinal inspection, and explaining likelihood of additional prefinal inspection. BG indicates that letter was faxed to B. Hudson 4/24/96, but that apparently B. Hudson did not receive fax. BG explains desire to get the meeting over with, and that the meeting may have been confused with the mob date for soil excavation.

1050 Douglas Moore (NCDEHNR) arrives on site for pre-final construction inspection. BG explains remediation program. BG explains problem with high spot at southeast corner of pond created by pushing mudwave. BG explains still finish grading needed in east side of Fire Pond to provide positive drainage. BG indicates that groundwater treatment system is being installed, and soil excavation to begin next week.

1120 BG begins prefinal inspection meeting by reviewing punchlist items with Doug Moore, J. Gunn, and R. Jones.

1135 B. Smith arrives on site and joins meeting.

1200 BG, J. Gunn, R. Jones, and B. Smith walk site, and note action items needed to complete project.

1330 D. Moore leaves site. WATEC and CRC break for lunch.

1410 WATEC and CRC return from lunch. BG, B. Smith, R. Jones and J. Gunn discuss remaining issues. WATEC agrees to shape channel leading to Medlin Pond disturbed during access into swale shape after the area dries sufficiently. B. Smith explains that installation of E&S controls is crucial. R. Jones indicates that he understands that silt fence placed on former Medlin property is ineffective, but WATEC placed it there because it was shown in the base bid. B. Smith indicates that riprap shown in base bid at outfall from Medlin Pond should be moved to Beazer side of property, and installed to fan out the flow from the outfall. WATEC agrees to install landlock erosion control mat between the last berm and the riprap, and along ouflow points of berms. B.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 4/30/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 4/30/96 |
| Day of Week | Tuesday |
| No. | 122 |
| Sheet | 3 of 3 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Fire Pond Dam Regrading, Groundwater Treatment System Installation | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC, Rust |

**Description of Daily Activities and Events:**

Smith explains that upstream side of erosion matting should be trenched in. WATEC agrees to trench in mat. B. Smith explains that WATEC should inspect all installed silt fence after each storm event to repair any damage to silt fence. WATEC agrees to inspect/repair silt fence. B. Smith indicates that material placed back onto slope of Fire Pond dam to make 2H:1V slope face should be placed in 1 ft. lift max. and compacted, as the area will be flooded a couple of times each year and the slope must be stable. R. Jones agrees to place fill on slope in max. 1 ft. lifts and compact with excavator. R. Jones indicates that the trees along the top of the Fire Pond dam damaged by WATEC during regrading of the area will be painted with tree dressing and wrapped, according to the recommendations of forester being consulted by WATEC. R. Jones indicates that the area next to proposed excavation area 3 will be filled whenever Beazer prefers, however, R. Jones recommends that Beazer wait to see what the limits of the excavation will be before placing soil which may have to be excavated. B. Smith to wait to consult Beazer about preference as to sequence of filling the area. BG to talk to Beazer regarding waiver for taking stumps and limbs to construction and demolition debris landfill. R. Jones indicates that WATEC scheduling priority is to achieve grades for the Fire Pond dam area, and then install inlet wall, followed by installation of filter berm basin. B. Smith indicates that prefered priority would be installation of inlet headwall followed by filter berm installation. R. Jones indicates that he cannot install inlet headwall before regrading the area. J.Gunn indicates that WATEC will be ready to demob 5/30/96, and ready for final inpection 5/25/96.

1530 J. Gunn leaves site for the day.

1545 B. Smith leaves site for the day.

1600 BG calls Post and Associates (surveyor) to request surveying for soil excavation areas. BG speaks with Tim and indicates that surveying to be done before 5/6/96, and that survey will consist of setting about 8 to 10 stakes with elevation and coord.s. BG calls Ensys and orders 48 tests. BG to have PGH office send check and BG to pick up kits 5/7/96. BG sets up time for refresher soil penta screening for 1400 5/7/96.

1700 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 4/30/96 |

CUMMINGS RITER CONSULTANTS, INC.

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| Date | 5/1/96 |
| Day of Week | Wednesday |
| No. | 00 |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Fire Pond Dam Regrading | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |
| **Description of Daily Activities and Events:**<br>BG not on site today (S. Boston, VA) | |
| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |
| **Field Representative:** | | **Date:** 5/1/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 5/2/96 |
| Day of Week | Thursday |
| No. | 123 |
| Sheet | 1 of 2 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Fire Pond Regrading, Lift Thickness Checks | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0750 BG arrives on site. On-Site techs. are using wheelbarrow to transport fill cut from Fire Pond dam and stockpiled near groundwater treatment building to fill low spots on northern side of Fire Pond. WATEC is having On-Site operator use excavator to place fill next to proposed soil excavation area 3.

0815 BG calls Jim Cook. BG indicates that WATEC has requested that limbs and roots from Fire Pond dam be disposed of off-site. J. Cook agrees. BG informs J. Cook that John Funk (Rust) has observed leaking drum in brick building. J. Cook to check with Bob Fisher (Beazer) to establish contents of drum and determine coarse of action.

0830 BG calls Dave Henderson (NCDOT) regarding installation of inlet headwall. D. Henderson agrees that instead of replacing last section of 18-in. culvert, in order to avoid undercutting utilities, WATEC can cut off damaged section of existing culvert, and splice with new bell end, with the coupling incorporated into the inlet headwall. D. Henderson to communicate design change to Gordy Uhr (NCDOT).

0900 Ricky Macon (Envirochem) arrives on site to pick up filter socks. R. Macon loads rolloff of filter socks onto ramp truck, but observes leakage from tailgate. R. Macon unloads rolloff of filter socks with tailgate proped up so flow runs to front of rolloff and does not leak, and loads rolloff of carbon returned to site 4/29/96. R. Macon informs BG that he observed leakage from tailgate. R. Macon insists that the water was in the carbon, and is not from rainwater getting into rolloff from poorly secured tarp. R. Jones insists that the water is rainwater which got into the rolloff while in transport on 4/29/96. R. Macon informs BG that R. Jones instructed R. Macon to set the rolloff of carbon on the ground. R. Macon informs BG that R. Jones cracked open tailgate, poked hole in liner, and let the water run on the ground. R. Macon incicates that Mike Eason (Enwood Structures) observed water leaking from rolloff onto ground. R. Macon informs BG that R. Jones immediately closed rolloff tailgate.

1200 R. Macon leaves site for the day, and indicates that both rolloffs will have to be repacked with portland cement. R. Macon to return 5/6/96. WATEC mobilizes small excavator (KimatsuFX4) to

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| **Pay Quantities:**<br>WATEC: Rodney Jones (s.m.)<br>John Cutlip (asst. s.m.)<br>3 On-Site tech.s<br>1 On-Site operator | **Project Changes/Unusual Observations:**<br>None |

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| **Weather Conditions:**<br>*a.m.* overcst, mid 50's, rain<br>*p.m.* overcst, mid 60's, shwrs | **Health and Safety PPE:**<br>Steel-toed boots, safety glasses, hd hats | **Air Monitoring Results:**<br>None |

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| **Field Representative:** | **Date:** 5/2/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 5/30/96 |
| Day of Week | Thursday |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Soil Exc., Groundwater Treatment System Construction | |
| **Personnel On Site:** B. Geno | **Subcontractor:** Rust |

**Description of Daily Activities and Events:**

Cary News photographer Alan Weed at digital pager no. provided by Sherri Williamson.

1630 Bob Fisher (Beazer) calls BG. BG indicates that manifests were provided to Envirochem. BG indicates that M. Eason has looked at heat exchanger, and M. Eason indicated he will call B. Fisher with names of people potentially interested in the heat exchanger. BG indicates that the drums of carbon from the surface water treatment system are approx. 1/2 full of carbon with about 8 in. of free liquid covering carbon. B. Fisher indicates that either J. Gunn or Inco is to stabilize the contents of the drum and put stabilized carbon in rolloffs destined for Pinewood, SC.

1650 Dart truck is loaded with material from STP-6 thru STP-8. Truck does not have capacity to take material staged in rolloffs. BG provides manifest to driver.

1700 Dart truck leaves site, destined for Calvert City, KY.

1720 Inco leaves site for the day, not to return until 6/3/96.

1730 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |
| **Field Representative:** | | **Date:** 5/30/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 5/30/96 |
| Day of Week | Thursday |
| No. | 141 |
| Sheet | 1 of 2 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Soil Exc., Groundwater Treatment System Construction | |
| **Personnel On Site:** B. Geno | **Subcontractor:** Rust |

**Description of Daily Activities and Events:**

0720 BG arrives on site. Joe Gunn (WATEC) is meeting with Wayne Thompson (Triangle Grading Contractors). Inco is pumping water from SE corner of Ex. 3 into tank T-2. Inco has used pressure washer to clean heat exchanger and pumped water into T-2.

0800 W. Thompson and Joe Gunn leave site.

0830 Post and Associates arrive on site to survey for as-built dwgs.

0900 BG talks to Stan James concerning groundwater treatment system installation and regrading of area immediately west of brick building to promote drainage. BG explains that the area west of the former process building does not have to be covered with topsoil and seeded, but should instead be suitable for parking. BG understands that eventually the area will be overrun with grass. S. James indicates that the unit cost for fill will apply to the grading work west of the brick building if process fill can be used. BG indicates that process fill will be suitable. S. James indicates that the electrician will be back on site 6/5/96 to wire additional treatment system controls. S. James also indicates that carbon vessels to be loaded 6/5/96.

1200 BG calls Mike Durda (Dart) for M. Durda to leave message for BG as soon as truck headed to Morrisville off loads in Pinewood, SC, so BG can anticipate approx. arrival time.

1230 M. Durda leaves message for BG that Dart truck has off-loaded in Pinewood, SC and is on way to site.

1500 Tracy (Envirochem) arrives on site. BG provides 5 manifests, 3 for Pinewood, SC, and 2 for Calvert City, KY. Tracy indicates that Bob Fisher has informed Envirochem that B. Fisher would like to stabilize contents of the drums containing carbon and water.

1530 John Funk arrives on site to inspect Inco modifications to groundwater treatment. J. Funk indicates that modifications made in treatment building are according to design, however, a remote capability flow monitor needs to be put into well vault. J. Funk indicates that the town of Morrisville is stalling with the water meter installation due to concerns of providing safe working environment for town workers.

1600 Dart truck arrives on site. Inco prepares to load stockpiles STP-6, STP-7, and STP-8. BG pages

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| **Pay Quantities:**<br>WATEC: Joe Gunn<br>Inco: Richard Shelton (foreman)<br>Reggie Orr (operator)<br>Rust: Gordon (operator)<br>Mike Taylor | **Project Changes/Unusual Observations:**<br>None |

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| **Weather Conditions:**<br>*a.m.* ptly sunny, mid 60's<br>*p.m.* sunny, low 70's | **Health and Safety PPE:**<br>Steel-toed boots, safety glasses, hd hats | **Air Monitoring Results:**<br>None |

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| **Field Representative:** Bruce Geno | **Date:** 5/30/96 |

CUMMINGS RITER CONSULTANTS, INC.

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| Date | 5/29/96 |
| Day of Week | Wednesday |
| No. | 140 |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Soil Exc., Groundwater Treatment System Construction | |

1500 BG calls Mike Durda (Dart) to determine when truck will arrive for loading of stockpiled material and material in overloaded rolloff. M. Durda indicates truck has to dump in Pinewood, SC before heading to Morrisville, NC, and that M. Durda has told truck driver that 1600 hrs is latest he can arrive on site to be loaded. BG informs R. Shelton that truck may be as late as 1600 hrs, and that the truck first has to dump in Pinewood, SC. M. Durda to call if truck is to be late.

1630 Inco leaves site for the day.

1700 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |
| **Field Representative:** | | **Date:** 5/29/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 5/29/96 |
| Day of Week | Wednesday |
| No. | 140 |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |

**Field Activity:** Soil Exc., Groundwater Treatment System Construction

B. Smith has prepared a letter with change order for C/R. BG indicates total amount of change order is around $19k, covering extra time for B. Smith and BG. J. Cook indicates that BG should not need to be on site week of 6/3/96 with exception of 6/5/96-6/6/96 for Final Construction Inspection. BG indicates that Dave Lown is on site (arrived at 11:10). J. Cook informs BG that BG can discuss any of the same issues BG discussed with J. Gunn with D. Lown. BG informs J. Cook that sidewall sample from Ex. 3 that failed for dioxin was one of first samples taken, prior to discovery of abandoned sump. BG informs J. Cook that Dave Hails (EAP) will not be able to plant Medlin Pond area until 6/10/96.

1110 Dave Lown arrives on site.

1130 BG talks to D. Lown regarding progress of soil excavation. BG indicates that Ex. 2 has been backfilled, and Ex. 1 is in process of being backfilled. D. Lown indicates Grover Nicholson will attend Final Construction Inspection scheduled for 6/6/96.

1300 Sherri Williamson arrives back on site with fax from J. Cook indicating News and Observer can obtain photos as coordinated with BG. BG to call News and Observer when truck arrives for loading of stockpiled soil.

1330 BG calls Ms. Jordan (Bell South) to have 462-1534 transferred from WATEC's name into Beazer's name. BG has obtained permission from J. Gunn to transfer the no. and Ms. Jordan has spoken with J. Gunn.

1400 BG receives call from B. Fisher. BG informs B. Fisher that Dart truck to arrive 5/30/96. BG to provide manifests to Tracy of Envirochem for rolloffs to Pinewood, SC and rolloffs to Calvert City, KY, as BG not to be on site week of 6/3/96, except for two days. BG indicates Inco to pressure wash heat exchanger from former process building. BG indicates additional soil from Ex. 3 has been placed into a 2nd rolloff destined for Calvert City. BG indicates additional samples have been taken for lab analysis, and results to be available in 7 days. B. Fisher indicates that material from former sump placed in first rolloff has been profiled for Calvert City facility and can be delivered whenever Envirochem can schedule. BG to check with Tracy of Envirochem on scheduling of loads to Pinewood and Calvert City.

1430 BG calls Tracy of Envirochem. Tracy indicates rolloffs to Pinewood scheduled for 6/3/96 and 6/4/96. Tracy to pick up manifests 5/30/96 a.m. Tracy indicates that rolloffs can be moved around on site to stage out of the way of regrading operations for Ex. areas on 6/3/96 a.m.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 5/29/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 5/29/96 |
| Day of Week | Wednesday |
| No. | 140 |
| Sheet | 3 of 5 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Soil Exc., Groundwater Treatment System Construction | |
| **Personnel On Site:** B. Geno | **Subcontractor:** Rust |

**Description of Daily Activities and Events:**

in the design. BG indicates vertical cuts created during placement of culvert rip rap apron should be cut back. J. Gunn indicates the apron was installed according to plan. BG indicates the installation should not be left with vertical sides. J. Gunn indicates he will not do without more money. BG indicates J. Gunn should prepare a change order to cut the slopes back. BG indicates stumps of trees remain on Fire Pond dam and should be cut off flush with ground. J. Gunn agrees. BG indicates that trees that were pushed onto fence during installation of diversion ditch should be disposed of. J. Gunn disagrees and indicates trees will be cut up and left in wooded area to north of Fire Pond. J. Gunn indicates that WATEC will not remove 1 in. and larger debris from Medlin Pond surface. BG indicates that CR/Beazer allowed WATEC to use the fill as topsoil, even though it was clear it contained material larger than 1 in. with the understanding that WATEC would remove (pick through) the material prior to seeding. J. Gunn indicates removal of the debris will now be EAP's responsibility. J. Gunn indicates that Bob Fisher has informed J. Gunn that Beazer does not plan O&M activities for former Medlin Pond area, so removal of debris not necessary.

0930 Sherri Williamson (Cary News) arrives on site to inquire about soil removal. BG indicates that S. Williamson should speak to J. Cook or Shannon Craig of Beazer and provides phone no. S. Williamson indicates desire to take some photos. BG indicates most of the excavation is complete, and permission needed from Beazer. S. Williamson leaves site.

1000 BG calls B. Smith to check to see if B. Smith has any reservations concerning WATEC using processed fill to grade swale. B. Smith indicates that as long as WATEC places soil on top of the processed fill which will grow soil, WATEC can use processed fill.

1100 BG calls Jim Cook (Beazer) to discuss outcome of meeting with J. Gunn. BG indicates J. Gunn's attitude is that if USEPA does not have a problem with the site conditions, then it does not matter that WATEC has not fulfilled their obligations to Beazer or met requirements of the design. J. Cook indicates that Wayne Thompson (Triangle Grading Contractors) has been calling Beazer trying to get payment, and has indicated TGC will put lein on property unless paid. J. Cook looks through contract at language for subcontractors. J. Cook finds mechanics leins cannot be placed on property. Dispute resolution through mediator, or suit in Pittsburgh court. BG indicates

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 5/29/96 |

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 5/29/96 |
| Day of Week | Wednesday |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Soil Exc., Groundwater Treatment System Construction | |
| **Personnel On Site:** B. Geno | **Subcontractor:** Rust |

**Description of Daily Activities and Events:**

BG needs to verify that WATEC has constructed that volume. J. Gunn indicates the surveyors are on site today for as-built dwgs., and as builts can be used to determine detention storage. BG indicates that the swale leading to former Medlin Pond should be made narrower, so that standing water does not create a pond upgradient of the former pond. J. Gunn indicates water is ponding because elevation of fill has blocked the flow. BG indicates that flow is blocked to some degree, but that the swale should be made less wide by filling in the swale, maintaining the invert el. but making the cross-sectional area less. J. Gunn asks if processed fill can be used to fill swale. BG to let J. Gunn know if processed fill can be used by 12 p.m. today. BG indicates that upslope edge of erosion control mat in Fire Pond outlet channel was not trenched in. J.Gunn agrees to trench the matting in. BG indicates that the Fire Pond grade concentrates flow to a central swale (which holds water) and then outlets through the wider designed Fire Pond channel. BG indicates that the flow is concentrated, and then is somehow supposed to be unconcentrated in ditch. BG explains that the drainage will only erode the channel, and that the Fire Pond grades are not as designed. J. Gunn agrees that the Fire Pond channel will not serve to unconcentrate the flow and that the channel will erode with time. BG indicates that the mound of mud near the Enwood Structures property does not drain as evidenced by standing water all around and near top of mound. J. Gunn indicates that the area has settled and firmed up with settlement, enough to support a mowing machine. BG disagrees and indicates that the area is still very soft. J.Gunn indicates that the site has received rain and that is why the surface is soft. BG indicates that the area is soft because the aqueous phase sediments were pushed into a pile. BG indicates that sediments and fabric are exposed on the surface of the Fire Pond near the mound. J. Gunn acknowledges that sediments are exposed, and that he had area seeded to try to dry the area up. BG asks if geogrid geotextile will be put over exposed sediment and covered with fill. J. Gunn indicates that geotextile will probably be placed before placing fill over exposed sediments. BG indicates that sediments are exposed in the Medlin Pond area near former dam. J. Gunn indicates he was unaware sediments were exposed. BG indicates base bid included about 5 cy to be placed in Medlin Pond outfall area. J. Gunn indicates that the channel is not eroding, and therefore does not need more rip rap, even if included

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 5/29/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 5/29/96 |
| Day of Week | Wednesday |
| No. | 140 |
| Sheet | 1 of 5 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Soil Exc., Groundwater Treatment System Construction | |
| **Personnel On Site:** B. Geno | **Subcontractor:** Rust |

**Description of Daily Activities and Events:**

0700 BG arrives on site. Inco is pumping water from Ex. 1 and discharging into Fire Pond area in preparation of backfilling excavation. BG informs R. Shelton that s.s. heat exchanger will need to be deconned for possible salvage. Inco to backfill Ex. 1 today.

0800 Joe Gunn (WATEC) arrives on site.

0830 BG receives call from Dave Lown (NCDEHNR) to discuss progress of soil excavation work and backfilling requirements. D. Lown indicates he received call from Cindy Gurly (USEPA) regarding backfill compaction testing waiver. BG explains that given the 90 % Standard Proctor compaction requirement in specs. and means of achieving compaction, as well as variety of different types of materials to be used for backfilling, Standard Proctor would not be representative of backfill, and waiver of compaction testing will not change the compaction methods. BG explains that the fill will be placed in controlled lifts of about 1 ft. and compacted either by tamping with excavator bucket or by running over the fill with the excavator. BG indicates that no compaction requirements were enforced for the Fire Pond, per recommendations of geogrid manufacturer. D. Lown indicates that he does not have concern with waiver of backfill requirements, and will inform Cindy Gurly so. BG indicates that backfill will continue this afternoon. BG indicates that 31 dioxin samples were collected, and 2 samples from Ex. 3 failed performance standard requiring additional excavation. D. Lown indicates he may visit site today or tomorrow.

0900 BG and J. Gunn discuss progress on punchlist. J. Gunn indicates that Triangle Grading to remove access off McCrimmon Pkwy this p.m. BG indicates that the biggest issues are drainage of the Fire Pond and area leading to former Medlin Pond, exposed sediments in both ponds, detention storage volume of regraded Fire Pond dam, surface debris in Medlin Pond, and rip rap apron work. BG indicates that erosion control matting was not placed on Fire Pond dam on 2H:1V slopes as specified on revised grading plan. J. Gunn indicates straw and tacking were placed in lieu of erosion control mat. BG indicates that regrade design allowed for certain detention volume, and

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| **Pay Quantities:**<br>WATEC: Joe Gunn<br>Inco: Richard Shelton (foreman)<br>John Shelton (laborer)<br>Reggie Orr (operator)<br>Gordon (operator)<br>Rust: Mike Taylor | **Project Changes/Unusual Observations:**<br>None |

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| **Weather Conditions:**<br>*a.m.* overcst, mid 70's<br>*p.m.* overcst, low 80's | **Health and Safety PPE:**<br>Steel-toed boots, safety glasses, hd hats | **Air Monitoring Results:**<br>None |

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| **Field Representative:** [signature] | **Date:** 5/29/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 5/28/96 |
| Day of Week | Tuesday |
| No. | 139 |
| Sheet | 3 of 3 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Soil Exc., Groundwater Treatment System Construction | |
| **Personnel On Site:** B. Geno | **Subcontractor:** Rust |

**Description of Daily Activities and Events:**

small pond. WATEC should make the depression more narrow by placing fill in the disturbed area of the natural drainage coarse leading to the Medlin Pond. Material bigger than 1 in. should removed from the surface of the Medlin Pond. BG observes exposed sediments in Medlin Pond former dam area which need to be recovered with separation geogrid/geotextile and additional fill. BG observes that less than 5 cy (approx. 5 cy shown on base bid dwgs.) of riprap was placed in Medlin Pond outfall.

1500 Inco is installing submersible pump.

1700 Inco leaves site for the day.

1715 BG calls B. Smith to discuss pumping of water from Ex. 1 before backfilling can begin. B. Smith agrees that water from Ex. 1 can be discharged on ground surface.

1730 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 5/28/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 5/28/96 |
| Day of Week | Tuesday |
| No. | 139 |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Soil Exc., Groundwater Treatment System Construction | |
| **Personnel On Site:** B. Geno | **Subcontractor:** Rust |

**Description of Daily Activities and Events:**

be able to provide a truck until 5/30/96. BG indicates that 3 rolloffs have been filled with debris from excavations and are ready for Pinewood. BG to call Envirochem to see when Envirochem can schedule delivery of rolloffs to Pinewood. BG to check on utility transfer. BG informs B. Fisher and J. Cook that electricity has been in Beazer's name since project start-up. BG indicates that BG has called phone co. and will call again this p.m. to check progress of transfer of no. B. Fisher asks BG to have Inco bury the phone line near WATEC's field trailer.

1330 BG returns to site. BG finds note on chair from J. Gunn indicating J. Gunn not to return to site until 5/29/96 a.m. BG finds stockpiles 6, 7, and 8 and marks off the stockpiles for Inco.

1400 Bell South arrives on site to repair phone line. BG indicates that only 462-1534 no. needs to be fixed. BG performs site inspection of Fire Pond and Medlin areas to discuss with J. Gunn. Inco begins to stabilize material from 55-gal. drum in loader bucket using lime. Worker is in level C. Findings of site inspection are as follows: WATEC had agreed to dispose of culvert removed from upslope side of rail spur. Currently, removed sections of culvert are staged on Enwood property and next to rail spur. BG observes area in Fire Pond that are not draining, as well as exposed sediment near mounded area at SW corner of Fire Pond. BG observes that the mounded area is not graded to drain. BG observes pieces of old bulkhead on surface near mounded area. BG observes tree trunks that have not been cut off at grade along Fire Pond dam. Many tree roots remain in Fire Pond dam area. Erosion control matting placed in Fire Pond outlet channel is not trenched in at top. Water is getting under the matting and is eroding the channel. In addition, the Fire Pond area leading to the outfall is graded to a swale which is less than 12 ft. wide (2 or 4 ft. wide) thus concentrating flow before it gets to the outfall channel. Flow cannot be concentrated and then expected to spread out into the 12 ft. wide channel. Rip rap apron placed at culvert outlet resulted in WATEC leaving vertical sides. Vertical slopes approx. 2 ft. high should be laid back by hand, to 2H:1V. Soil removed from the area where the rip rap apron was placed should be graded in to the Medlin Pond access area. Swale leading to Medlin Pond is too wide, resulting from too much soil being removed from the access area, and then creating a bigger depression than existed prior to work. The depression leading to the former Medlin Pond area is collecting water, and looks like a

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 5/28/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 5/28/96 |
| Day of Week | Tuesday |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Soil Exc., Groundwater Treatment System Construction | |
| **Personnel On Site:** B. Geno | **Subcontractor:** Rust |

**Description of Daily Activities and Events:**

1000 BG arrives on site from PGH. Inco is stockpiling fill material to west of brick former treatment building on perimeter road. Mike Taylor (Rust) indicates that Inco has used a 5-gal. bucket as bench scale test to see if lime will stabilize the contents of the 55-gal. drum. M. Taylor indicates it appears that the lime will work. Inco to begin stabilization of the drum contents this p.m. Inco has completely backfilled Ex. 2. Inco is also working on well vault, preparing to set the pump in the well and hardlining the extraction well piping. Inco needs to procure steel cable for support of submersible pump. BG indicates that the lime used to stabilize the drum contents to be put into rolloff with demo debris for Pinewood, SC. BG informs M. Taylor that M. Eason of Enwood Structures may be around today to inspect the heat exchanger from the former treatment building. BG receives fax with remaining penta results faxed on 5/24/96 from Ceimic. Results indicate that 3 of 12 stockpiles of soil (6, 7, 8) fail performance standard for dioxin. BG informs J. Gunn that BG and J. Gunn should discuss WATEC progress and punchlist. BG indicates that p.m. would be better, as BG would like to walk the site before discussing the list. J. Gunn indicates the phone line was cut this a.m. by Inco, and that repair order is in. J. Gunn indicates that he will be on site 5/28/96 and 5/29/96. J. Gunn indicates that WATEC has demobed copy machine and fax machine, and will be demobing site trailer this p.m.

1100 Willy of Envirochem drops off rolloff box for Ex. 3 soil and redistribution of soil in staged rolloff containing excavated mat'l from Ex. 3.

1200 BG leaves site to make phone calls. BG calls Bob Mitzel (916) 933-1640 with Alta Labs to get dioxin results for remaining samples. B. Mitzel indicates that results for remaining samples are all below 7 ppb TEQ, thus meeting dioxin performance standard.

1220 BG calls Bob Fisher and Jim Cook with Beazer East. BG indicates that remaining post-ex. sample results have been obtained, and that all excavation samples meet performance standard with the exception of the two samples from Ex. 3 previously discussed, and that 3 of 12 soil stockpile samples failed performance standard for penta, and will have to be incinerated. BG explains that

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| **Pay Quantities:**<br>WATEC: Joe Gunn<br>Inco: Richard Shelton (foreman)<br>John Shelton (laborer)<br>Reggie Orr (operator)<br>Gordon (operator)<br>Rust: Mike Taylor | **Project Changes/Unusual Observations:**<br>None |

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| **Weather Conditions:**<br>*a.m.* overcst, mid 70's, shwrs<br>*p.m.* overcst, low 80's | **Health and Safety PPE:**<br>Steel-toed boots, safety glasses, hd hats | **Air Monitoring Results:**<br>None |

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| **Field Representative:** [signature] | **Date:** 5/28/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 5/23/96 |
| Day of Week | Thursday |
| No. | 138 |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Soil Exc., Building Debris | |
| **Personnel On Site:** B. Geno | **Subcontractor:** Rust |

**Description of Daily Activities and Events:**

not available soon enough to schedule truck for 5/24/96. BG indicates may be easier to use rolloff to store additional soil excavated from Ex. 3, and once material in first rolloff is manifested for Calvert City facility, material can be transferred from overweight rolloff to new rolloff. B. Fisher agrees will be easier to manage rolloff than to manage additional trucks. BG to call Envirochem to have additional rolloff delivered. BG informs B. Fisher that an additional rolloff has also been mobilized for debris from the brick process building and debris from the excavations. BG indicates that BG to leave site today and return 5/28/96. B. Fisher indicates that the heat exchanger should be profiled under existing manifest which identified a variety of demolition materials, however, BG to call Laidlaw to make sure heat exchanger can be disposed of under existing manifest. BG indicates thus far lab data indicates Ex. 3 is most likely to fail dioxin standard.

1310 BG calls B. Smith to discuss post-ex. dioxin results. B. Smith indicates backfilling of Ex. 2 can begin, since all data is below performance standards for penta and dioxins. B. Smith indicates effort should be taken to replace soil removed from surface back onto surface, and to place soil removed below grade in bottom of excavations, preferentially over processed fill. B. Smith indicates Inco should be very certain not to have left over soil.

1400 BG calls Dennis of Laidlaw to indicate that heat exchanger may have already been profiled for disposal on existing manifest. Dennis indicates that profile does not include piping or heat exchanger, but that letter from Beazer to alter profile would allow Pinewood facility to accept the heat exchanger and metal pipe.

1415 BG leaves message for B. Fisher to alter profile for building debris to include 0 to 50 percent metal pipe and equipment (i.e., heat exchanger) per Laidlaw. Inco cuts bottom of metal container removed from Ex. 3 to place into rolloff.

1630 Inco leaves site for the day.

1800 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 5/23/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 5/23/96 |
| Day of Week | Thursday |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Soil Exc., Building Debris | |
| **Personnel On Site:** B. Geno | **Subcontractor:** Rust |

**Description of Daily Activities and Events:**

0810 BG arrives on site. WATEC is not on site. WATEC's seeding subcontractor is placing mulch in Fire Pond area. Inco is preparing contents of former process building for disposal. Pressure vessels are being cut with torch, and heat exchanger is to be cut, all for disposal at Laidlaw's Pinewood, SC facility. M. Taylor (Rust) is monitoring Inco Health and Safety.

0900 BG calls Ceimic lab to get results for rolloff sample (isopropylether, penta, and flash). Lab to call back.

0930 R. Shelton indicates that heat exchanger inside former process building cannot be cut with torch. R. Shelton indicates that the heat exchanger is stainless steel, and will require plasma torch. BG to check with Laidlaw to see if Pinewood landfill can accept heat exchanger as is, approx. 12 ft. long and 12-in. dia.

1000 BG talks to Dennis of Laidlaw. Dennis indicates that he believes the heat exchanger would not be a problem. BG to check to see if manifest has been completed by B. Fisher. BG receives message from Hope Taylor to request dioxin data for excavation samples.

1030 BG calls D. Spicuzza regarding action for drum of unknown contents. D. Spicuzza has had no success in locating field test method for determination of disposal options.

1130 BG calls Mike Durda (Dart) to inform M. Durda that BG will not need truck for 5/24/96. BG calls Bob Mitzel to get verbal dioxin results on post-ex samples. One sidewall sample from Ex. 3 is above performance standard.

1200 Neil (Ceimic) calls BG to inform BG that Isopropylether and flash not yet available for rolloff sample, and penta is estimated at about 0.8% in sample RO-1.

1215 B. Fisher calls BG to discuss action to handle drum with unknown contents, disposal of heat exchanger, procurement of additional rolloff for additional excavation in Ex. 3. BG informs B. Fisher that the analytical results for the rolloff sample are not yet available, however Ceimic estimates that the level of penta is near 1 percent. B. Fisher indicates that the contents of the drum should be mixed with portland cement or lime to stabilize the liquid, and placed as a solid into the rolloff with construction debris from the brick process building. B. Fisher suggests using a plastic kiddy pool, and throwing the pool and all into the rolloff. BG indicates laboratory data on rolloff

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| **Pay Quantities:**<br>Inco: Richard Shelton (foreman)<br>John Shelton (laborer)<br>Rust: Mike Taylor | **Project Changes/Unusual Observations:**<br>None |

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| **Weather Conditions:**<br>*a.m.* sunny, mid 70's<br>*p.m.* sunny, hi 80's | **Health and Safety PPE:**<br>Steel-toed boots, safety glasses, hd hats | **Air Monitoring Results:**<br>None |

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| **Field Representative:** [signature] | **Date:** 5/23/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 5/22/96 |
| Day of Week | Wednesday |
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| Sheet | 2 of 2 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Soil Exc. | |
| **Personnel On Site:** B. Geno, P. Womax | **Subcontractor:** WATEC, Rust |

**Description of Daily Activities and Events:**

of the contents of the metal cylinder from Ex. 3. BG indicates that he followed B. Fishers instructions by putting the contents of the metal cylinder into a truck, but that B. Fisher, in phone conv. 5/21/96, indicated he understood that the contents of the metal cylinder were to be placed into the rolloff. BG indicates that the truck would already be in Calvert City, KY. BG indicates PW left Raleigh this a.m. to return to DE office 5/23/96. BG to prepare table for summary of lab analytical results.

1600 B. Fisher calls BG to discuss analytical results and work activities. BG indicates that one sample from bottom of Ex. 3 failed performance standard for dioxin. BG indicates that results for remainder of Ex. 2 to be available 5/23/96, with remainder for Ex. 1 and Ex. 3 5/28/96. BG indicates that rolloff sample to be available 5/23/96. BG indicates that no trucks scheduled. BG indicates that rolloff contents could go onto truck, if dumped contents into a known impacted area, and then reloaded onto truck. B. Fisher agrees, but first need to know contents of rolloff. BG to call M. Durda (Dart) to alert that Beazer may need truck for 5/24/96.

1620 BG and M. Taylor tape off excavations and use level to take measurements to find state plane coordinates of Ex.1 thru Ex. 3.

1800 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 5/22/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 5/22/96 |
| Day of Week | Wednesday |
| No. | 137 |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Soil Exc. | |
| **Personnel On Site:** B. Geno, P. Womax | **Subcontractor:** WATEC, Rust |

**Description of Daily Activities and Events:**

0810 BG arrives on site. Inco has begun hauling processed fill material for backfilling of excavations, and cutting pressure vessels inside of brick building for disposal as demolition debris. WATEC's seeding subcontractor (Final Grade) has seeded Fire Pond dam area, and is adding lime/fertilizer to Fire Pond area. Inco has two dump trucks hauling processed fill from Wake Stone Quarry.

0900 BG calls K. Matteson (Black and Veach) and leaves message that Beazer is considering dropping requirement for Standard Proctor compaction testing of excavation backfill, due to number of different materials to be used as backfill. BG requests comments from K. Matteson.

0930 K. Matteson returns BG call. K. Matteson indicates he does not have any reservations about dropping compaction testing, as 90 % Proctor is typically easily attained, and contractor is going to use same method of compaction whether testing is required or not. K. Matteson indicates that the final decision is not his, and indicates a call to Cindy Gurly (USEPA) would be appropriate. K. Matteson indicates it is likely that C. Gurly will defer to K. Matteson. Final Grade workers are picking roots and limbs from fill surface in Fire Pond and placing the material into WATEC subtitle D dumpster.

1100 R. Shelton indicates that he will only have one truck hauling 5/23/96. BG indicates that R. Shelton should keep in mind that additional soil may need to be excavated depending on lab results, so that Inco should leave space to get to excavations and soil with equipment. BG indicatest that the earliest that Inco could begin to backfill would be 5/23/96 when dioxin results are to be available for remainder of Ex. 2. BG indicates earliest data would be available for Ex. 1 and Ex. 3 would be 5/28/96. BG indicates that the lab has warned that one sample from Ex. 3 may be above performance standard.

1300 BG receives fax from Alta Labs with dioxin results for samples sent 5/15/96. Sample EX3-PX5 is over performance standard of 7 ppb TEQ.

1400 BG calls B. Smith to discuss analytical results. BG indicates that one sample (EX3-PX5) has not passed performance standard. BG indicates discrepancy in total no. of samples sent for lab analysis reported 5/21/96. BG indicates that B. Fisher did not recall his instructions for handling

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| **Pay Quantities:**<br>WATEC: Joe Gunn (p.m.)<br>Inco: John Cutlip (asst. s.m.)<br>Richard Shelton (foreman)<br>Rust: John Shelton (laborer)<br>Mike Taylor | **Project Changes/Unusual Observations:**<br>None |

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| **Weather Conditions:**<br>*a.m.* sunny, mid 70's<br>*p.m.* sunny, hi 80's | **Health and Safety PPE:**<br>Steel-toed boots, safety glasses, hd hats | **Air Monitoring Results:**<br>None |
| **Field Representative:** Brian Geno | | **Date:** 5/22/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 5/21/96 |
| Day of Week | Tuesday |
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# FIELD ACTIVITY REPORT

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| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Soil Exc. | |
| **Personnel On Site:** B. Geno, P. Womax | **Subcontractor:** WATEC, Rust |

**Description of Daily Activities and Events:**

performance standard, an additional 3 in. should be removed from associated area, and sample not field screened, but resubmitted for lab analysis for both penta and dioxin. B. Fisher indicates that BG to make determination of whether additional soil requiring removal would fit into additional rolloff, with about 25% contents of existing rolloff, or if additional trucks would need to be ordered. B. Fisher indicates that BG should be ready to coordinate the effort to remove additional soil, if required. B. Fisher to call BG 5/22/96 p.m. for update on analytical results rec'd.

1730 BG and PW leave site the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |
| **Field Representative:** | | **Date:** 5/21/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 5/21/96 |
| Day of Week | Tuesday |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Soil Exc. | |
| **Personnel On Site:** B. Geno, P. Womax | **Subcontractor:** WATEC, Rust |

**Description of Daily Activities and Events:**

concentrations, especially octa and hexa congeners. BG indicates that he has not informed J. Cook of overall analytical budget, and is now much higher than initially estimated. BG indicates that J. Cook had informed BG earlier that total markup of $5,000 to $6,000 would be sufficient for Beazer to contract lab services directly. BG indicates that 41 penta samples and 31 dioxin samples have been sent for lab analysis so far. B. Smith to determine total anticipated lab costs and call J. Cook.

1630 BG receives call from B. Fisher. BG indicates total of 31 trucks have left site to date. BG indicates that no excavations have been cleared for dioxins. BG indicates that rolloff remaining on site with soil from Ex. 3 former sump is about 25 % overloaded based on judgement by Reggie Orr (Inco) who used to haul rolloffs for Envirochem. BG indicates that all excavations have passed field screening for penta, and that all lab data received to date has indicated satisfaction of penta performance standard. BG indicates that the last truck may have been a little heavy, but did not return to take material off. BG indicates that contents of metal container were dumped into excavation, exposed for about 30 min. in direct sun, and loaded onto last truck. In addition, the truck was held up for about 2 hrs. with tarp off in sun, while last samples were screened. B. Fisher indicates that B. Fisher had understood that the contents of the metal container were going to be put into rolloff. BG recalls B. Fisher instructing BG to place the metal container contents into truck. BG describes the actions taken to dispose of the metal drum contents with the same details expressed by B. Fisher to BG 5/17/96. BG indicates that the metal drum is resting on plastic, and that Inco will have to cut the container for placement into rolloff and disposal as construction debris. BG informs B. Fisher that Alta Analytical has indicated that levels of dioxins/furans in some bottom samples may exceed performance standard, and some samples have required several dilutions to determine concentrations of all congeners, primarily hexa and octa are driving the dilution requirements. B. Fisher indicates that if dioxin samples fail

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 5/21/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 5/21/96 |
| Day of Week | Tuesday |
| No. | 136 |
| Sheet | 2 of 4 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Soil Exc. | |
| **Personnel On Site:** B. Geno, P. Womax | **Subcontractor:** WATEC, Rust |

**Description of Daily Activities and Events:**

confirms that a possible organic interferance occured in the first analysis. Re-analysis less than 24 ppm. 1st Dart truck loaded. Envirochem arrives with rolloff for construction debris. BG indicates that rolloff containing soil from Ex. 3 will have to await analytical results before determining disposal requirements.

1100 BG warns J. Gunn to stay out of excavation work zone. J. Gunn agrees to notify subcontractors to stay away from excavation work zone.

1220 1st Dart truck returns to site 6,000 lb.s overwt. Inco to transfer soil from overwt. truck to 2nd Dart truck.

1240 First Dart truck leaves site again to be weighed.

1300 2nd Dart truck leaves site to be weighed.

1330 BG calls Miguel (Ceimic) to inform Ceimic that 2 samples sent today will need level IV data package.

1400 B. Smith calls BG. BG informs that excavations have been screened and that samples are being prepared for lab analysis. BG indicates that all Ex. 2 penta lab analysis is available and results were within cleanup goal of 95 ppm. BG indicates that B. Mitzel with Alta has informed BG that samples submitted for Ex. 2 and others have required several dilutions to determine dioxin/furan concentrations.

1430 BG calls Bob Mitzel (Alta) to inform Alta that 2 samples of the 31 samples sent for dioxin/furan analysis will need to have Level IV data package. B. Mitzel informs BG that samples from Ex. 2 and 3 sent 5/14/96 are due 5/22/96, however, due to high concentrations of dioxins in the samples, Alta has had to run several dilutions of the samples to determine concentrations. BG indicates that cleanup goal is 7 ppb TEQ. B. Mitzel indicates that so far, no samples should be over the cleanup goal level, but samples due 5/23/96 may have concentrations higher than cleanup level.

1500 BG calls B. Smith to inform B. Smith that J. Funk has indicated that B. Fisher has agreed that there will be no compaction testing of the excavation backfill. B. Smith indicates that BG should confirm with Kieth Matteson (Black and Veach). BG informs B. Smith that Alta has indicated levels of dioxin/furan congeners in some samples have required several dilutions to determine

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 5/21/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 5/21/96 |
| Day of Week | Tuesday |
| No. | 136 |
| Sheet | 1 of 4 |

# FIELD ACTIVITY REPORT

**Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55

**Field Activity:** Soil Exc.

**Personnel On Site:** B. Geno, P. Womax | **Subcontractor:** WATEC, Rust

**Description of Daily Activities and Events:**

0710 BG arrives on site. P. Womax (PW) is on site with Inco and Mike Taylor (Rust). Inco is placing unimpacted (lab data less than 95 ppm penta) stockpiled soil over screened bottom of north end of Ex. 3 to stage track loader in Ex. 3 to stockpile additional soil.

0820 Inco begins to remove soil from bottom of SW of Ex. 3 for PX2A sample. BG measures bckgnd dust with miniram monitor of 0.0 to 0.31 mg/m3.

0830 BG calls Miguel (Ceimic) to inform Miguel of possible error on COC in labelling EX1-PX8A as EX3-PX8A. Miguel to check COC and make correction, if needed. P Womax samples EX3-PX2A and EX3-2-4-34/35. Sample 34/35 is along southeast corner of excavation area 3. During analysis PW reported that the filter sample appeared yellow in color, possible interferance from organic content. Final Grade seeding subcontractor arrives for J. Gunn to begin seeding of Fire Pond dam area. J. Gunn provides seeding mix and rates to BG for Fire Pond/Medlin Pond seeding.

0850 2 of 2 Dart trucks arrive on site.

0925 Inco begins loading of first Dart truck with soil from 4 to 8.5 ft. depth from former sump area of Ex. 3. Dust monitor readings at excavation downwind 0.30 mg/m3. Wind is from west.

0940 Back of 1st Dart truck loaded and 2nd Dart truck backs up to be loaded with material from 4 to 8.5 ft. of Ex. 3 soil.

0950 J. Funk (Rust) arrives on site. J. Funk indicates he received call 5/20/96 from Bob Fisher (Beazer) regarding cutting of pressure vessels in brick building for disposal. Rust to have Inco inert the vessels with nitrogen before using torch to cut vessels. J. Funk indicates that B. Fisher has agreed there will be no compaction testing of backfill. P. Womax collects sample of south wall of former sump area in Ex. 3. PW contacts EnSys to confirm that an organic interferance will turn the filtered sample yellow. EnSys confirms that presence of hydrogen sulfide in the sample will turn the filtered sample yellow. To reduce interference of the hydrogen sulfide allow the sample to settle for a few minutes. PW will retest EX3-2-4-34/35 as EX3-2-4-34/35R.

1015 PW retests sample EX3-2-4-34/35R. After allowing the sample to settle for a few minutes PW notes that the yellow color of the filtered sample is not as strong. Re-analysis of the sample

**Pay Quantities:**

WATEC: Joe Gunn (p.m.)
Inco: John Cutlip (asst. s.m.)
Richard Shelton (foreman)
Rust: Reggie Orr (operator)
Mike Taylor

**Project Changes/Unusual Observations:**
None

**Weather Conditions:**
*a.m.* sunny, mid 70's
*p.m.* sunny, hi 80's

**Health and Safety PPE:**
Steel-toed boots, safety glasses, hd hats

**Air Monitoring Results:**
None

**Field Representative:** Bruce Dear | **Date:** 5/21/96

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 5/20/96 |
| Day of Week | Monday |
| No. | 135 |
| Sheet | 2 of 2 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Soil Exc. | |
| **Personnel On Site:** B. Geno, P. Womax | **Subcontractor:** WATEC, Rust |

**Description of Daily Activities and Events:**

chain of custody will be sent with the samples so the rolloff samples do not get confused with the post-excavation samples.

1100 Inco begins loading 2nd Dart truck with material from former sump of Ex. 3, 4 to 6 ft. Inco is able to load only back of truck due to space constraints. Dust conc. of 0.21 mg/m3 with miniram.

1125 Inco has loaded back of 2nd truck to capacity. Inco begins loading remaining portion of 2nd truck with material from Ex. 1 stockpiled at north end of Ex. 1.

1300 J. Gunn informs BG that surveyors are to get elevations along ditch to Medlin Pond to determine overall drop to try to grade the area north of Medlin Pond to drian.

1330 BG calls B. Smith to discuss bottom sampling in Ex. 1 and Ex. 3 where groundwater is coming into excavations. SW corner of Ex. 1 and area where concrete sump removed from Ex. 3 are approx. 8 ft. deep.

1400 R. Shelton and R. Orr leave site to look for borrow source to backfill excavations. Inco decons loader bucket used to transport mat'l from Ex. 3 to rolloff box.

1430 R. Shelton and R. Orr return from Wake Stone Quarry with sample of proposed backfill mat'l (processed fill) for Standard Proctor analysis. D. Hails calls to inform BG that he will not be able to seed Medlin Pond until 6/10/96.

1530 PW calls B. Smith to see if material screened at less than 24 ppm at 6 ft. and again at 8 ft. at SW corner of Ex. 1 needs to be removed off site. B. Smith indicates that Beazer has agreed this material was identified in Predesign as impacted and should be taken off site.

1600 B. Fisher calls BG to ask BG to transfer utilities from WATEC to Beazer as of 5/31/96. BG informs B. Fisher that Rust has mentioned they are preparing a memo to BG identifying out of scope work and associated costs. BG indicates that as of 5/17/96, Rust did not express concerns as to additional costs, but that John Funk has indicated that removal of the metal tank was not anticipated. Stan James (Inco) has also informed BG that Inco did not expect the job to go this long, and did not anticipate the quantity of mat'l.

1630 Inco leaves site for the day.

1900 BG and PW leave site for the day.

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|---|---|
| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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|---|---|
| **Field Representative:** | **Date:** 5/20/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 5/20/96 |
| Day of Week | Monday |
| No. | 135 |
| Sheet | 1 of 2 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Soil Exc. | |
| **Personnel On Site:** B. Geno, P. Womax | **Subcontractor:** WATEC, Rust |

**Description of Daily Activities and Events:**

0710 BG arrives on site. P. Womax (PW) is on site with Inco and Mike Taylor (Rust). Inco setting up to dewater Ex. 3. BG indicates that sample screening results for sidewall samples and bottom samples from Ex. 3 where sump removed were inconclusive, as standard was outside acceptable QC limits.

0740 BG informs R. Shelton that rolloff with material from Ex. 3 (former sump) may have to be manifested differently than other soil, so rolloff will not be scheduled for pickup today.

0845 BG measures background conc. dust with miniram dust monitor. No excavation occuring, dust readings of 0 to 0.21 mg/m3. Readings were taken around the perimeter of the excavations, upwind and downwind.

0900 BG calls B. Smith to get dimensions of area within Ex. 1 to be excavated from 6 to 8 ft. in weathered rock. B. Smith indicates dim.s were marked on sides of Ex. 1 with paint. B. Smith reminds BG that 5 percent of lab data to be Level 4 data package. Samples sent today may be divided into two groups, one for level 3 and the other for Level 4. BG to call B. Fisher to discuss sampling of rolloff contents.

0915 BG calls B. Fisher and indicates that 4 trucks to arrive today, with 2 trucks on way from Pinewood, SC this a.m. Last 2 trucks to arrive later this p.m. BG indicates that excavation may end today, depending on screening results. BG to sample rolloff contents for penta and isopropylether.

0920 First Dart truck arrives on site.

0925 PW collects sample of material from Ex. 3 staged in rolloff for penta and isopropylether analysis.

0940 Inco begins loading of first Dart truck.

1010 Inco has loaded first truck.

1045 P Womax contacts Miguel of Ciemic to confirm the volume necessary to analyze the rolloff samples for penta and isopropylether. Miguel informs P Womax that one (1) eight ounce sample container will be needed to perform the analysis. P Womax also informs Miguel that a separate

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| **Pay Quantities:**<br>WATEC: Joe Gunn (p.m.)<br>Inco: John Cutlip (asst. s.m.)<br>Richard Shelton (foreman)<br>John Shelton (operator)<br>Rust: Reggie Orr (operator)<br>Mike Taylor | **Project Changes/Unusual Observations:**<br>None |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.* sunny, mid 80's<br>*p.m.* sunny, mid 90's | **Health and Safety PPE:**<br>Steel-toed boots, safety glasses, hd hats | **Air Monitoring Results:**<br>None |
| **Field Representative:** [illegible] | | **Date:** 5/20/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 5/17/96 |
| Day of Week | Friday |
| No. | 134 |
| Sheet | 3 of 3 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Soil Exc. | |
| **Personnel On Site:** B. Geno, P. Womax, B. Smith | **Subcontractor:** WATEC, Rust |

**Description of Daily Activities and Events:**

1135 Joe Gunn and WATEC leave site for the day.

1145 BG calls Envirochem to see if rolloff is available. BG calls Mike Durda (Dart) to schedule 4 trucks for 5/20/96. Inco begins loading dark stained material into rolloff.

1300 BG observes dark-stained soil and liquid is apparently associated with a concrete sump in Ex. 3 area. Sump measures about 2 ft. by 2 ft. by 4 ft. deep. Concrete disposal to be determined by BG. BG estimates that only one rolloff needed to contain contents of sump. If rolloff is slightly overloaded, contents can be transferred to truck for LWD 5/20/96.

1345 BG calls B. Fisher. B. Fisher indicates concrete associated with vault should be disposed of with other concrete as construction/demolition debris stage in on-site rolloff.

1400 BG obtains perimeter air monitoring dust measurement of 0.07 to 0.10 $mg/m^3$ (background) downwind (north) of Ex. 3.

1415 PW leaves site for the day.

1500 Inco has removed all visual dark-stained soil from Ex.3 in former sump area. BG to take samples for field screening. BG call Alta and Ceimic to inform labs that samples will not be sent today, but will be sent 5/20/96.

1700 Inco leaves site for the day.

1800 BG checks with Alta to determine reporting units for dioxins. Dioxin levels reported in TEQ PPT.

1830 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 5/17/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 5/17/96 |
| Day of Week | Friday |
| No. | 134 |
| Sheet | 2 of 3 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Soil Exc. | |
| **Personnel On Site:** B. Geno, P. Womax, B. Smith | **Subcontractor:** WATEC, Rust |

**Description of Daily Activities and Events:**

make sure they can provide TEQ for sample results. BG indicates that B. Fisher would like to remove tank and send contents with truck to Calvert City, KY. B. Fisher would like to crush metal tank and place in rolloff as construction debris. BG indicates that Beazer is satisfied if CR is not present on site for final couple of weeks of WATEC's punchlist completion.

0915 BG calls Brad (Alta) to explain dioxin/furan results to be reported in TEQ. Brad to fax revised sample results for TEQ.

0930 J. Funk arrives on site. J. Funk indicates that Beazer's purchase order included some contingency funds, so that Rust should not be in excess of budget to date, or even if job extends through 5/20/96. J. Funk indicates Inco should have included pumps to dewater excavations in bid to Rust. J. Funk informs BG that he has tried to contact the safety officer for the town, as the safety officer will be making the determination if sampling is necessary for water meter installation. J. Funk indicates that the safety officer will not be available until 5/20/96. J. Funk to offer Rust's expertise to ensure safe working environment to the town workers to see if that will help expedite installation of meter.

1000 J. Funk leaves site for the day. Inco removes metal tank from Ex. 3 and exposes concrete sump adjacent to the tank. Tank is removed from Ex. 3 and wrapped in plastic and set to the north of brick building. The wall of the sump has partially fallen into the excavation upon removal of the tank, and has exposed dark stained soil and viscous liquid seeping into Ex. 3.

1010 BG calls B. Smith to discuss course of action for handling dark-stained soil in Ex.3. B. Smith suggests staging the soil in rolloff, or on plastic, outside the other ex. areas, and covering with plastic to keep separate from the soil. B. Smith indicates BG to confirm with Bob Fisher.

1030 BG calls B. Fisher regarding handling of dark-stained soil and associated viscous liquid. B. Fisher indicates that the material should be kept separate from the soil, as it may not fit waste profiling on manifest to LWD. B. Fisher indicates that the material should be staged in one of the rolloffs currently on site. BG also to check to see if Envirochem can deliver extra rolloff if needed.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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|---|---|
| **Field Representative:** | **Date:** 5/17/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 5/17/96 |
| Day of Week | Friday |
| No. | 134 |
| Sheet | 1 of 3 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Soil Exc. | |
| **Personnel On Site:** B. Geno, P. Womax | **Subcontractor:** WATEC, Rust |

**Description of Daily Activities and Events:**

0710 BG arrives on site. PW is on site. Inco is pumping water from Ex. 3 to decon pad and from decon pad into Beazer tank T-1. BG calibrates Miniram dust monitor and obtains background dust readings of 0.11 to 0.19 mg/m3. Site received approx. 0.75 in. rain 5/16/96. Approx. 1 to 1.5 ft standing water in the north and south ends of Ex. 3. WATEC is on site in WATEC trailer.

0830 Jim Cook and Bob Fisher (Beazer) call BG to discuss soil excavation program, analytical results, action for drum in brick building, budget for soil excavation work, and disposal issues for diesel and carbon in 55-gal. drums. BG indicates that BG is planning to leave when soil exc. is complete, and return for final inspection. BG indicates that Beazer has the option of having CR presence until WATEC leaves, either BG or PW, or leaving WATEC on site without oversight until inspections. J. Cook is concerned that PW has not dealt with WATEC and will have difficult time with WATEC. J. Cook indicates that inspections will be sufficient. BG informs J. Cook and B. Fisher that water line installation may be delayed due to town (Wayne Partin) desire to have sample collected near proposed water meter installation before excavation begins to set meter as part of contamination certification report. BG indicates that John Funk (Rust) was to follow up with town requirements. BG indicates that BG informed W. Partin of the work to date on site, extent and nature of contaminants and tried to alleviate town's concerns as far as contamination. BG indicates that schedule in soil excavation proposal by Rust was not specific as to schedule, so difficult to tell if Rust is within budget. BG to check with J. Funk. BG to check with J. Gunn for disposal of drummed diesel fuel and remaining carbon. BG to inform J. Gunn that off-site shipments of hazardous waste require agency notification. B. Fisher indicates that metal drum in Ex. 3 should be removed from Ex. 3, soil contents shipped to Calvert City, and metal tank crushed and disposed of with concrete and rail ties.

0900 B. Smith calls BG and PW. BG indicates that Dart truck has not arrived yet, and that Inco has spent the morning dewatering Ex. 3 before removing impacted material. BG to check with Alta to

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| **Pay Quantities:**<br>WATEC: Joe Gunn (p.m.)<br>John Cutlip (asst. s.m.)<br>One On-Site tech.<br>Inco: Richard Shelton (foreman)<br>Tim (asst. foreman)<br>Rust: Reggie Orr (operator)<br>Mike Taylor | **Project Changes/Unusual Observations:**<br>None |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.* ovrcst, hi 60's<br>*p.m.* ptly sunny, hi 80's | **Health and Safety PPE:**<br>Steel-toed boots, safety glasses, hd hats | **Air Monitoring Results:**<br>None |
| **Field Representative:** [signature] | | **Date:** 5/17/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 5/16/96 |
| Day of Week | Thursday |
| No. | 133 |
| Sheet | 2 of 2 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Soil Exc. | |
| **Personnel On Site:** B. Geno, P. Womax, B. Smith | **Subcontractor:** WATEC, Rust |

**Description of Daily Activities and Events:**

1400 Dart driver indicates he would like to be loaded 5/17/96 for offloading at LWD in Calvert City, KY on 5/18/96. BG calls LWD. John Walker (LWD) indicates that if driver can be at facility at 0700 5/18/96, he will be able to offload. CR agrees with Inco that it is too late in the day to begin pumping of excavations and excavation work. Inco to cover up excavations, place caution tape and return 5/17/96 0600 to begin work.

1430 Inco and Mike Taylor leave site for the day.

1530 BS leaves site for the day.

1540 BG receives call from Frank Russell (Envirochem) that he is on way to the site to pick up the last rolloff of carbon from surface water treatment system and will arrive on site between 1600 and 1630 today.

1610 F. Russell arrives on site to load last rolloff of carbon.

1730 PW leaves site for the day. Envirochem leaves with rolloff of carbon for delivery to Pinewood, SC.

1830 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:** a.m. | **Health and Safety PPE:** | **Air Monitoring Results:** |

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 5/16/96 |
| Day of Week | Thursday |
| No. | 133 |
| Sheet | 1 of 2 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Soil Exc. | |
| **Personnel On Site:** B. Geno, P. Womax, B. Smith | **Subcontractor:** WATEC, Rust |

**Description of Daily Activities and Events:**

0700 BG, PW, and BS arrive on site. Inco and Mike Taylor (Rust) are on site. BS collects sidewall samples from north end of Ex. 1 from excavator bucket. BG measures background dust concentrations with Miniram of 0.10 to 0.18 mg/m$^3$ upwind and downwind of excavation areas.

0720 Mike Taylor leaves site. Inco breaks due to rain.

0830 WATEC unloads lime and fertilizer for nutrient addition for Fire Pond, covers with plastic, and leaves site for the day due to rain.

0950 Mike Taylor returns to site. BG and PW collect sidewall samples from SW corner and W side of Ex. 3. Inco begins pumping of water from N end of Ex. 3 and from storm water structure to west of Fire Pond perimeter road to help prevent water from blocked culvert entering Ex. 3.

1030 Dart truck arrives on site. Dart truck cannot be loaded due to rain. Driver to wait until rain stops. BS calls Ceimic to place order for more bottles. Inco to have oxygen respiratory tanks delivered to site for use during cutting (torch) of pressure vessels inside brick building. Inco to prepare pressure vessels for disposal, since excavation cannot proceed with the rain.

1130 Inco replaces plastic over Ex. 3 and breaks for lunch.

1230 Inco returns from lunch and is preparing to cut pressure vessels for disposal. Mike Taylor informs BG that drum in brick building contains no solids, and liquid is viscous like oil, and has petroleum type odor. BG to ask Bob Fisher (Beazer) to determine appropriate action.

1240 Inco begins cutting vessels with torch. Torch operator has donned Level B personal protection.

1250 Inco ceases cutting of piping leading to pressure vessels due to leak in acetylene regulator.

1320 Bob Fisher calls BG and BS. BG indicates that drum contains liquid, which may be cutting oil. B. Fisher asks BS to check to see if characteristic hazards can be field determined. BS discusses cylindrical concrete structure exposed during excavation in Ex. Area 2. B. Fisher indicates that removal of the structure is unavoidable, but structure should not be lifted, to prevent bottom from falling out. B. Fisher indicates structure should be placed on plastic. BG indicates that Inco unable to load trucks today so far due to rain, but weather is supposed to clear this p.m.

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| **Pay Quantities:**<br>WATEC: Joe Gunn (p.m.)<br>John Cutlip (asst. s.m.)<br>Inco: Richard Shelton (foreman)<br>Tim (asst. foreman)<br>Rust: Reggie Orr (operator)<br>Mike Taylor | **Project Changes/Unusual Observations:**<br>None |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.* ovrcst, hi 50's, lgt rain<br>*p.m.* ovrcst, hi 60's, showrs | **Health and Safety PPE:**<br>Steel-toed boots, safety glasses, hd hats | **Air Monitoring Results:**<br>None |
| **Field Representative:** [signature] | | **Date:** 5/16/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 5/15/96 |
| Day of Week | Wednesday |
| No. | 132 |
| Sheet | 2 of 2 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Fire Pond Dam Erosion Control Install. and Soil Exc. | |
| **Personnel On Site:** B. Geno, P. Womax | **Subcontractor:** WATEC, Rust |

**Description of Daily Activities and Events:**

1400 18-in. RCP observed in Ex. 3 at north end. Water coming into Ex. 3 from culvert. Inco pumps out storm water structure that was blocked at the beginning of remediation activities by WATEC. Apparently the storm drain is feeding culvert, even though an attempt was made by WATEC to block the culvert at the inlet end.

1430 Truck 5 leaves site. Due to intermittent rain, dust montitoring not conducted.

1500 Bob Fisher leaves site for the day.

1645 Truck 6 leaves site. BG talks to K. Bird regarding data package levles. BG indicates that B. Smith had indicated level II sufficient for remediation project. BG to discuss duplicate samplingn and ms/msd requirements with B. Smith. Inco and Mike Taylor leave site for the day.

1730 B. Smith checks Field Sampling QAP and determines that equipment blanks need to be collected for sampling trowels, and MS/MSD's and sample duplicates need to be collected for Level 3 data package. B. Smith also determines that 5 percent of data should meet reporting requirements for Level 4. WATEC leaves site for the day.

1920 BG, B. Smith, and PW leave site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** | |
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |
| **Field Representative:** | | **Date:** 5/15/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 5/15/96 |
| Day of Week | Wednesday |
| No. | 132 |
| Sheet | 1 of 2 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Fire Pond Dam Erosion Control Install. and Soil Exc. | |
| **Personnel On Site:** B. Geno, P. Womax, B. Smith | **Subcontractor:** WATEC, Rust |

**Description of Daily Activities and Events:**

0700 BG arrives on site. B. Smith and P. Womax are on site. Inco is uncovering excavations. WATEC is on site and is preparing for additional grading work on former Medlin Property to restore natural grades. 5 of 6 Dart trucks have arrives and are awaiting load out.

0710 Inco places plastic on ground surface of soil stockpiling area to prepare for removal of unimpacted soil from 0 to 4 ft. in Ex. 1. Background dust 0.15 to 0.21 mg/m3 standing approx. 50 ft. west of Ex. 2 with no excavation.

0720 Inco removes unimpacted soil from 0 to 4 ft. in Ex. 1 to prepare for removal of impacted soil from 4 to 6 ft. depth.

0800 Inco begins to load first truck with material from Ex. 1 from 4 to 6 ft. depth.

0820 Inco has loaded first truck with mat'l from Ex. 1.

0900 Inco completes removal of mat'l from 4 to 6 ft in Ex. 1, loadout of truck 2 nearly complete. Inco removes impacted mat'l from NE corner from 0 to 2 ft. for loadout onto truck 2.

0930 First truck returns to site 6,000 lbs. overwt. Inco begins to remove material from truck 1 and stockpiles material in Ex. 2 where additional soil needs to be removed from 6 to 8 ft. depth.

0950 Inco completes loading of truck 2. Inco moves track hoe into Ex. 3 to remove impacted material from SE corner of Ex. 3. Material removed from SE corner is staged at north end of Ex. 3 for loading onto trucks.

1035 Inco has completed loading of truck 3 with material from Ex. 3.

1100 Bob Fisher arrives on site.

1300 Inco completes loading of truck 4 of 6. Samples collected from SW corner of Ex. 3 following removal of additional material from the bottom of the excavation to bring the excavation to about 18 in. below bottom-most layer of geogrid.

**Pay Quantities:**

WATEC: Joe Gunn (p.m.)
John Cutlip (asst. s.m.)
3 On-Site tech.s
Richard Shelton (foreman)
Inco: Tim (asst. foreman)
Rust: Reggie Orr (operator)
Mike Taylor

**Project Changes/Unusual Observations:**
None

| | | |
|---|---|---|
| **Weather Conditions:**<br>*a.m.* ovrcst, high 40's, lgt rain<br>*p.m.* ovrcst, hi 60's, intmt rain | **Health and Safety PPE:**<br>Steel-toed boots, safety glasses, hd hats | **Air Monitoring Results:**<br>None |
| **Field Representative:** | | **Date:** 5/15/96 |

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 5/14/96 |
| Day of Week | Tuesday |
| No. | 131 |
| Sheet | 2 of 2 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Fire Pond Dam Erosion Control Install. and Soil Exc. | |
| **Personnel On Site:** B. Geno, P. Womax | **Subcontractor:** WATEC, Rust |

**Description of Daily Activities and Events:**

1115 B. Smith explains to K. Matteson that the southwest corner of Ex. 1 where excavation was to be extended to 8 ft. depth was very hard material, and Rust will remove the blade on the track hoe bucket to go further. K. Matteson understands that track hoe teeth may not be successful in removing material to 8 ft. depth. K. Matteson agrees that the effort should be made to achieve 8 ft. depth. K. Matteson does not have any concerns or recommendations for soil excavation program, and indicates that he will probably return for Final Construction Inspection 6/6/96. Truck 4 returns to site 600 lbs over and requests material be removed from truck. B. Smith indicates that even though corner did not extend to 8 ft., bottom samples were collected which indicated penta levels of less than 25 ppm.

1130 BG calls Mike Durda (Dart Trucking) to schedule 6 trucks for 5/15/96. M. Durda indicates that Dart has arranged for 4 trucks and will broker for the other two, but Dart has Kopper's approval to broker the trucks. Kieth Matteson leaves site for the day. Truck 4 leaves site.

1200 BG faxes Prefinal Construction Inspection Report to Dave Lown, and prepares letter for distribution.

1300 BG, PW, and B. Smith break for lunch.

1340 BG, PW, and B. Smith return from lunch. Inco is completing decon of track hoe bucket.

1400 Inco begins excavation of unimpacted soil at SW side of Ex. 2 from 0 to 6 ft. and stockpiles on plastic sheeting. Excavation of impacted soil from SW corner of Ex.2 to be performed from 6 to 8 ft.

1530 John Funk (Rust) arrives on site.

1545 Mike Taylor leaves site for the day.

1600 Inco has staged track hoe in Fire Pond area to east of concrete slab for excavation of soil to be stockpiled from SW corner of Ex. 3 from 0 to 2 ft. depth. Soil to be laboratory analyzed for penta.

1640 Inco completes removal of soil from SW corner of Ex. 3 from 0 to 2 ft. for stockpiling and lab analysis. Inco begins covering open excavations with poly sheeting, and covering soil stockpiles, and covering rolloffs. John Funk leaves site for the day.

1700 Inco leaves site for the day. CR begins preparation of samples for off-site shipment for lab analysis.

1920 BG, PW, and B. Smith leave site for the day. W. Thompson (TGC) continues to grade Fire Pond for drainage.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

| | | |
|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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|---|---|
| **Field Representative:** | **Date:** 5/14/96 |

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 5/14/96 |
| Day of Week | Tuesday |
| No. | 131 |
| Sheet | 1 of 2 |

# FIELD ACTIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Fire Pond Dam Erosion Control Install. and Soil Exc. | |
| **Personnel On Site:** B. Geno, P. Womax, B. Smith | **Subcontractor:** WATEC, Rust |

**Description of Daily Activities and Events:**

0700 BG arrives on site. B. Smith and P. Womax are on site. Inco is on site and is finishing decon of track hoe bucket. WATEC is on site and is preparing for additional grading work on Fire Pond dam and installation of E&S controls.

0710 Inco places plastic on ground surface of soil stockpiling area to prepare for removal of unimpacted soil from 0 to 4 ft. in Ex. 1. Inco begins stockpiling soil on plastic from Ex. 1. BG informs Mike Taylor (Rust) that stockpiles of soil screened between 24 and 95 ppm should be covered to protect from precipitation.

0745 4 Dart trucks arrive on site. Inco to load from N end of Ex 3 for first couple of trucks, until perched water becomes obstacle to further excavation.

0820 Inco begins loading of first Dart truck with soil from Ex. 3 from 2 to 4 ft.

0835 Inco has loaded first truck with soil from Ex. 3 north end. Begin loading of truck 2. Upwind dust concentrations 0.11 to 0.17 mg/m3.

0910 Inco moves from Ex. 3 to Ex. 1 to begin loadout of soil for truck 2 from 4 to 6 ft. depth.

0920 Keith Matteson leaves site. Richard Shelton (Inco) to arrange to get bucket with teeth to facilitate excavation of weathered shale from Ex. 1 from 6 to 8 ft. depth at south corner.

0945 Inco has loaded 3rd truck with soil from Ex. 1 from 4 to 6 ft.

1010 Inco begins loading truck 4 with soil from Ex. 1.

1030 Kieth Matteson returns to site. Inco has loaded truck 4.

1100 BG receives OSHA excavation requirements indicating min. 1/2H:1V side slopes for Type A (cohesive soil) for excavations less than 20 ft. deep open for 24 hrs. or less. Sampling of excavations greater than 4 ft. in depth will be performed with excavator bucket.

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|---|---|
| **Pay Quantities:**<br>WATEC: Joe Gunn (p.m.)<br>John Cutlip (asst. s.m.)<br>3 On-Site tech.s<br>Inco: Richard Shelton (foreman)<br>Tim (asst. foreman)<br>Rust: Reggie Orr(operator)<br>Mike Taylor | **Project Changes/Unusual Observations:**<br>None |

| | | |
|---|---|---|
| **Weather Conditions:**<br>*a.m.* sunny, mid 50's<br>*p.m.* sunny, high 60's | **Health and Safety PPE:**<br>Steel-toed boots, safety glasses, hd hats | **Air Monitoring Results:**<br>None |
| **Field Representative:** | | **Date:** 5/14/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 5/13/96 |
| Day of Week | Monday |
| No. | 130 |
| Sheet | 4 of 4 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Fire Pond Dam Regrading, Soil Exc. | |
| **Personnel On Site:** B. Geno, P. Womax | **Subcontractor:** WATEC, Rust |

**Description of Daily Activities and Events:**

1600 BG leaves message for Mike Durda (Dart) for 6 trucks on 5/15/96 beginning 9 a.m. Hope Taylor and Kieth Matteson observe excavation operations. BG indicates excavations to remain open until lab results available. BG indicates health and safety monitoring performed for personnel by Rust using OVA and dust monitor. BG indicates perimeter dust monitoring performed by CR.

1615 Hope Taylor and Kieth Matteson leave site for the day. Downwind perimeter dust monitoring level of 0.19 mg/m3 (i.e., same as background).

1630 Inco places plastic sheeting in excavations and leaves site for the day.

1700 B. Smith and PW prepare samples and chain-of-custody for laboratory samples.

1900 B. Smith and PW leave site for the day to take samples to overnight courier. BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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|---|---|
| **Field Representative:** | **Date:** 5/13/96 |

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 5/13/96 |
| Day of Week | Monday |
| No. | 130 |
| Sheet | 3 of 4 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Fire Pond Dam Regrading, Soil Exc. | |
| **Personnel On Site:** B. Geno, P. Womax | **Subcontractor:** WATEC, Rust |

**Description of Daily Activities and Events:**

1310 Wayne Partin (Town of Morrisville) arrives on site to discuss water line and indicates town will need contamination certification report from Beazer before setting meter for water line to treatment building. W. Partin indicates that town will need sample of soil within 15 ft. of water meter installation work area analyzed before work begins. BG explains that the area where town to be working is not impacted, and that even if the soils were impacted, the levels of contaminants in the soil would not be at risk to humans. BG indicates that while groundwater is impacted, town will not be excavating into groundwater. W. Partin indicates that he will talk to his supervisor, and relay requirements to John Funk.

1325 Wayne Partin leaves site for the day.

1330 John Funk (Rust) arrives on site to meet with W. Partin. BG indicates that town will inform J. Funk of sampling requirements before work can begin. J. Funk indicates samples could be collected with hand auger, but understands preference not to sample.

1400 Truck 4 leaves site for Calvert City, KY. Inco decides to load truck 6 with soil from north end on Ex. Area 3 following removal of unimpacted material placed in the excavation to prevent contact of track hoe tracks with impacted material. B. Smith indicates that given difficulty of excavating material in Ex. Area 1 from 5 to 6 ft. depth, will sample current bottom to see if need to excavate deeper.

1450 J. Gunn indicates that Hope Taylor (Community tech. rep.) and Kieth Matteson (Black and Veach USEPA oversight contractor) are on site to take sediment samples from downstream of Medlin Pond. BG indicates that he knew USEPA had approved of sampling of sediments, but was not aware Kieth Matteson was on site. B. Smith and BG inspect filter berm installation. B. Smith indicates that permanent fabric should be cut into strips and shingled down Fire Pond outfall channel. B. Smith indicates that trees at top of slope of channel outfall from Fire Pond should be cut and removed. B. Smith indicates that erosion mat should be placed where the water is running to the ditch along the roadside. B. Smith indicates that the area of mounded sediments where fill is very soft should be graded to drain toward McCrimmon Pky. J. Gunn agrees and indicates that grading subcontractor will use excavator with I-beam attached to bucket.

1500 Truck 6 arrives on site.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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|---|---|
| **Field Representative:** | **Date:** 5/13/96 |

CUMMINGS RITE CONSULTANTS, INC.

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|---|---|
| Date | 5/13/96 |
| Day of Week | Monday |
| No. | 130 |
| Sheet | 2 of 4 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Fire Pond Dam Regrading, Soil Exc. | |
| **Personnel On Site:** B. Geno, P. Womax | **Subcontractor:** WATEC, Rust |

**Description of Daily Activities and Events:**

track hoe up to doors. WATEC had to place logs under tracks to get track hoe out of hole.

0900 Inco has removed unimpacted soil from 2 to 4 ft. at SE portion of Ex. Area 1, and has encountered rail tracks from abandoned rail spur. First Dart truck of 6 arrives on site for load out of impacted soil. Loadout of first truck with soil from Ex. Area 1 4 to 6 ft. begins.

0930 Trucks 2 and 3 arrive on site for loading impacted soil. J. Gunn asks BG how to dispose of water from last carbon vessel. WATEC has approximately 4-55 gal. drums with very fine carbon (silt size) and water. BG to check with Bob Fisher if water can be put in Beazer tank T-1 with decon water from soil excavation. J. Gunn indicates that he is waiting on shedule from Envirochem as to when rolloffs will be stabilized and hauled off site for disposal, as well as when Envirochem will remove drums with diesel fuel originally from pumphouse pump and staged behind WATEC storage trailer.

1000 OVA readings at interface between silt and clay at 4 ft. depth (interface between clean and impacted soil) are about 0.6 ppm. Slight wind from north. Observable odor from interface (assumed penta).

1100 B. Smith arrives on site. Inco has excavated to approx. 5 ft depth in Ex. Area 1, but is encountering saprolite, and is having difficulty excavating the material with the smooth edge of the track hoe bucket.

1150 First Dart truck leaves site. Second Dart truck loaded. Inco begins loading truck 3.

1220 Truck 3 loaded. Inco begins loading truck 4 with soil from Ex. Area 1.

1235 Inco begins loading of truck 5 with soil from Ex. Area 1. J. Gunn informs BG that Mike Eason (Enwood Structures) has called Joe Gunn and asked J. Gunn to replace traffic barricades on property boundary between Beazer East and Enwood Structures. J. Gunn indicates he is not aware of any traffic that has accessed or exited from Enwood Structures property, but WATEC has replaced the barricades.

1300 BG samples bottom of Ex. Area 1. Inco removes additional 6-in. from bottom of two of the 200 sq. foot areas sampled for Ex. Area 2 which indicated field screening results of greater than 95 ppm. Inco places approx. 4 cy of material from Ex. Area 2 on truck 5.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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|---|---|
| **Field Representative:** | **Date:** 5/13/96 |

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 5/13/96 |
| Day of Week | Monday |
| No. | 130 |
| Sheet | 1 of 4 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Fire Pond Dam Regrading, Soil Exc. | |
| **Personnel On Site:** B. Geno, P. Womax, B. Smith | **Subcontractor:** WATEC, Rust |

**Description of Daily Activities and Events:**

0700 BG and PW arrive on site. Inco is pumping off rain water from plastic sheeting placed in excavations. BG measures background dust conc. of 0.21 to 0.11 mg/m3 upwind and downwind of excavation areas.

0800 Inco begins removal of soil from sidewall and bottom of Ex. Area 1 which had concentrations of penta from field screening of between 24 ppm and 95 ppm, and stockpiling separately. Two stockpiles created, one from 6 in. additional from ex. bottom and one from additional material from 0 to 2 ft. from NW sidewall. Samples to be collected from soil stockpiles and submitted for lab analysis.

0845 BG and Joe Gunn inspect filter berm basin. WATEC had placed class 1 rip rap before storm on 5/11/96, but had not placed No. 57 stone around outside of berm. WATEC had covered outside wall of rip rap with silt fence to help filter sediment. WATEC had also unrolled permanent erosion control mat in channel for Fire Pond outfall. WATEC is now placing stone on outside of filter berm basin. BG indicates that filter berm basin looks to be satisfactory. BG indicates that top of slope for Fire Pond outfall has trees which have had roots exposed during regrading. BG indicates that the trees may not be stable in wind and should be cut, not pushed, as pushing will result in taking down more than one tree due to interlocking roots. J. Gunn agrees to take out trees at top of channel breakthrough. BG indicates that face of Fire Pond dam needs to be smooth graded to break up clods of soil and eliminate benches in slope. J. Gunn indicates that slopes will be fine graded and clods broken up before seeding. J. Gunn indicates that WATEC will remove roots and limbs larger than 1 in. before seeding. BG indicates that 2H:1V slopes on dam face need to be covered with temp. erosion control mat. J. Gunn indicates that he needs to order more, but understands that the contract required 2H:1V slopes to be covered with matting. J. Gunn indicates that WATEC had problems moving track hoe out of Fire Pond outfall area, and ended up burying

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| **Pay Quantities:**<br>WATEC: Joe Gunn (p.m.)<br>John Cutlip (asst. s.m.)<br>3 On-Site tech.s<br>Richard Shelton (foreman)<br>Inco: Tim (asst. foreman)<br>Rust: Reggie Orr(operator)<br>Mike Taylor | **Project Changes/Unusual Observations:**<br>None |

| | | |
|---|---|---|
| **Weather Conditions:**<br>*a.m.* sunny, mid 50's<br>*p.m.* sunny, high 60's | **Health and Safety PPE:**<br>Steel-toed boots, safety glasses, hd hats | **Air Monitoring Results:**<br>None |
| **Field Representative:** [signature] | | **Date:** 5/13/96 |

RUST ENVIRONMENT & INFRASTRUCTURE

**CALCULATION SHEET**

PAGE ____ OF ____
PROJECT NO. ____

CLIENT ____ SUBJECT ____ Prepared By ____ Date ____
PROJECT ____ Reviewed By ____ Date ____
Approved By ____ Date ____

| LOCATION | 5/9/96 ELEV. | 5/10/96 ELEV. | Δ ELEV |
|---|---|---|---|
| ~~N/108~~ | | | |
| N108/E770 | 369.59 | 367.75 | 1.84 |
| N108/E760 | 370.70 | 368.20 | 2.50 |
| N98/E770 | 369.34 | 367.30 | 2.04 |
| N98/E760 | 370.46 | 368.04 | 2.42 |
| N98/E750 | 370.66 | 368.49 | 2.17 |
| N088/E770 | 369.46 | 366.83 | 2.57 |
| N088/E760 | 369.92 | 367.88 | 2.04 |
| N088/E750 | 370.29 | 367.57 | 2.72 |
| N078/E770 | 369.12 | 366.23 | 2.89 |
| N078/E760 | 369.51 | 367.20 | 2.31 |
| N078/E750 | 369.46 | 367.58 | 1.88 |
| | | | 2.307' MEAN Δ ELEV |

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 5/10/96 |
| Day of Week | Friday |
| No. | 129 |
| Sheet | 4 of 4 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Fire Pond Dam Regrading, Soil Exc. | |
| **Personnel On Site:** B. Geno, P. Womax | **Subcontractor:** WATEC, Rust |

**Description of Daily Activities and Events:**

1350 Begin loading of truck 5.

1415 Truck 5 moves from Ex. Area 3 to Ex.Area 2 to remove additional soil from bottom (2-2.5 ft. depth) of excavation begining from the west end of Ex. Area 2.

1430 Truck 5 loaded.

1500 Inco decons excavator bucket in preparation of excavating unimpacted soil from 0-2 ft. in Ex. Area 1. Inco to place poly sheeting in excavations to keep storm water from saturating excavations. Storm water in excavations will be pumped off of excavations

1540 B. Smith and P. Womax leave site for the day. J. Gunn informs BG that WATEC to try to have filter berm installed before rain 5/11/96. J. Gunn indicates that R. Jones to be transferred to another site 5/12/96. J. Gunn indicates that base of filter berm is approx. 1-1.5 ft. stone placed over geogrid/geotextile. Geogrid and geotextile placed after removing soft soil near culvert inlet.

1620 J. Gunn leaves site for the day. BG, R. Shelton, and Reggie discuss trucks for 5/13/96 and 5/14/96. R. Shelton indicates that he believes would be better to have 4 trucks for Tuesday. BG calls Mike Darda to schedule 4 trucks for 5/14/95, beginning 0900. BG to call M. Darda before 1000 a.m. to confirm that only 4 trucks needed 5/14/96. Inco leaves site of the day. WATEC leaves site for the day.

1700 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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|---|---|
| **Field Representative:** | **Date:** 5/10/96 |

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 5/10/96 |
| Day of Week | Friday |
| No. | 129 |
| Sheet | 3 of 4 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Fire Pond Dam Regrading, Soil Exc. | |
| **Personnel On Site:** B. Geno, P. Womax | **Subcontractor:** WATEC, Rust |

**Description of Daily Activities and Events:**

1120 Water encounter in SW corner of Ex. Area 3 is running into excavation too quickly to be handled by in-place stabilization. B. Smith, BG, B. Fisher, and J. Funk discuss options for intercepting water before it reaches the excavation, and pumping water from the excavation. B. Fisher decides that the easiest way to handle the water is to pump to on-site Beazer storage tank T-1. Inco does not have enough hose to go directly from Ex. Area 3 to tank T-1, so must transfer into poly tank, dump onto plastic-lined decon pad, and pump into T-1.

1130 BG receives call from Ciemic that Ciemic did not receive samples. BG calls Jill (Ciemic) to explain that samples were not to be sent until end of day today, for receipt 5/11/96.

1150 B. Smith explains to J. Gunn that filter berm has 15 ft. radius measured at outside edge of rip rap, and that during construction of filter berm for culvert inlet, WATEC must remove soft soils near inlet to provide stable foundation for filter berm.

1200 Inco pumps water from Ex. Area 3 into poly tank for transfer to T-1. Sidewall screening samples collected at SE corner of Ex. Area 3 collected. Still waiting for trucks 4 and 5.

1220 Trucks 4 and 5 arrive on site. B. Smith indicates that Inco to not excavate unimpacted surface soils from 0-2 ft. in Exc. Area 1 due to anticipated rains 5/11/96.

1230 Inco places layer of black poly sheeting and clean soil over poly sheeting (8 in. thick layer) in north end of Ex. Area 3 to stage track hoe for loading of trucks 4 and 5, avoiding having to decon track hoe tracks. Excavation of soils from SW corner Ex. Area 3 0-4 ft. depth delayed until 5/13/96 when Inco better prepared to pump water. B. Smith indicates that Inco should build up soil near blocked storm water structure to prevent overflow from crossing Fire Pond perimeter road and ponding to west of brick building.

1325 Inco begins to load truck 4 of 5. BG and Mike Taylor observe dark brown liquid seeping from Ex. Area 3 botton near SE corner, believed to be associated with organic matter. Downwind OVA sustained greater than 2 ppm, M. Taylor instructs excavator operator to use respirator. Upwind less than 1 ppm.

1340 Apprx. 16 exc. buckets (3/4 cy) placed into truck 4 and truck is loaded. Wind has increased from south, OVA readings downwind of Ex. Area 3 less than 1 ppm threshold for level C protection. Water appears to have stopped seeping into SW corner of Ex. Area 3, having reached perched water level.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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|---|---|
| **Field Representative:** | **Date:** 5/10/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 5/10/96 |
| Day of Week | Friday |
| No. | 129 |
| Sheet | 2 of 4 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Fire Pond Dam Regrading, Soil Exc. | |
| **Personnel On Site:** B. Geno, P. Womax | **Subcontractor:** WATEC, Rust |

**Description of Daily Activities and Events:**

0840 First of 5 trucks loaded and prepares to leave site with soil taken from Ex. Area 3 0 to 2 ft. depth. BG places stake in Ex. Area 3 to mark edge of area where excavation must extend to 4 ft. depth at SW corner of Ex. Area 3. Stake placed 2 ft. to east edge of 4 ft. depth area. M. Taylor indicates that OVA readings are sustained at greater than 1ppm. M. Taylor, Reggie (ex. operator) and BG don full face respiratory protection (level C). No wind.

0900 B. Smith informs Joe Gunn that fill near Fire Pond dam which is saturated must be dried before trying to regrade the Fire Pond, rather that trying to place fill which is too wet. J. Gunn agrees that fill will be dried by aeration. Wind picking up slightly from north. Upwind perimeter dust readings 0.16 to 0.2 mg/m3. Downwind in Fire Pond area 0.14 to 0.18 mg/m3.

0915 M. Taylor indicates OVA readings less than 1 ppm sustained (0.2 to 0.5 ppm), gives permission to downgrade to level D protection. Wind picking up slightly from south.

0925 2nd of 5 trucks loaded. B. Fisher instructs BG to make sure to coordinate with Dart Trucking to have enough hauling capacity on the last day so that Beazer does not incur additional costs. B. Smith indicates that he will ask Beazer about extending B. Smith's time on site to possibly 5/15/96. Excavator encounters concrete block wall along SW edge of Ex. Area 3.

0945 BG talks to B. Fisher about arranging for more trucks 5/13/96 and 5/14/96. B. Fisher indicates would be good idea. BG arranges to have 2 more trucks for 5/13/96 and 5/14/96 with Mike Durda of Dart. John Funk (Rust) arrives on site. B. Fisher, John Funk, and Mike Taylor discuss drum in brick building. B. Fisher indicates that drum should contain soil cuttings from predesign investigation.

1000 Excavator encounters water in SW corner of Ex. Area 3 where excavation depth to be brought to 4 ft. M. Taylor agrees that lime will be added to soil in excavation to control free liquid. Concrete removed from the SW corner of Ex. Area 3 being staged in north end of Ex Area 3 already brought to about 2 ft. depth.

1030 BG calls Mike Durda (Dart) to determine scheduled arrival of trucks and demurage charges. M. Durda indicates trucks are scheduled for 0900, 1000, 1100, 1200, and 1300, and that demurage charges begin 2 hrs. after scheduled arrival. Trucks scheduled for 5/13/96 and 5/14/96 will also be on same pattern.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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|---|---|
| **Field Representative:** | **Date:** 5/10/96 |

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 5/10/96 |
| Day of Week | Friday |
| No. | 129 |
| Sheet | 1 of 4 |

# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Fire Pond Dam Regrading, Soil Exc. | |
| **Personnel On Site:** B. Geno, P. Womax, B. Smith | **Subcontractor:** WATEC, Rust |

**Description of Daily Activities and Events:**

0640 BG, B. Smith, P. Womax arrive on site. Inco is on site preparing to excavate soil from Ex. Area 3. P. Womax prepares to screen bottom samples from Ex. Area 2 and sidewall samples. Mike Taylor (Rust) holds tailgate safety meeting with Inco. Inco using Link Belt 2800 track hoe. Truck 1 of 5 is on site. BG measures background dust with Miniram: 0.10 to 0.25 mg/m$^3$ upwind and downwind.

0710 Inco finishes stockpiling additional 6 to 8 in. unimpacted soil from north end of Ex. Area 3.

0720 BG measures background dust concentrations approx. 75 ft. north of Ex. Area 3 (0.03 to 0.57 mg/m3). No wind. At south edge of concrete pad next to brick building, 0.17 to 0.35 mg/m3.

0730 Inco removes fill placed by WATEC over SE corner of Ex. Area 3. Clean fill was supposed to have been separated from native soil by geotextile fabric. BG encounters fabric and indicates that excavation of impacted soil from 0 to 2 ft. to begin. M. Taylor measures depth of unimpacted native material from north end of Ex. Area 3 at less than 2 ft.

0745 Inco removes additional 6 to 8 in. unimpacted material from north end of Ex. Area 3 where high. Bob Fisher arrives on site. Truck 2 of 5 arrives on site.

0800 M. Taylor indicates that cracking lid and measuring with OVA, readings on OVA are over 1,000 ppm. BG shows B. Fisher concrete cylinder, approx. 4 ft. in diameter encountered along west edge of Ex. Area 3 near center of excavation. Cylinder encountered at about 18. in. below ground surface. B. Fisher indicates cylinder may be indicative of buried tank. B. Fisher suggests exposing cyl. in Ex. Area 3 before removal of the cylinder. Track hoe staged on impacted soil at center of excavation over poly sheeting and tires placed to protect sheeting.

0810 Loading of first truck with impacted soil begins. Track hoe operator reports smelling organic vapors. M. Taylor measures 1 to 3 ppm with OVA. M. Taylor indicates level C needed.

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| **Pay Quantities:**<br>WATEC: Joe Gunn (p.m.)<br>Rodney Jones (s.m.)<br>John Cutlip (asst. s.m.)<br>3 On-Site tech.s<br>Inco: Richard Shelton (foreman)<br>Tim (asst. foreman)<br>Rust: Reggie Orr(operator)<br>Mike Taylor | **Project Changes/Unusual Observations:**<br>None |

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|---|---|---|
| **Weather Conditions:**<br>*a.m.* sunny, mid 70's<br>*p.m.* sunny, high 80's | **Health and Safety PPE:**<br>Steel-toed boots, safety glasses, hd hats | **Air Monitoring Results:**<br>None |
| **Field Representative:** [signature] | | **Date:** 5/10/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Fire Pond Dam Regrading, Soil Exc. | |
| **Personnel On Site:** B. Geno, P. Womax | **Subcontractor:** WATEC, Rust |

**Description of Daily Activities and Events:**

liability for carbon rolloff. B. Fisher indicates concrete in contact with potentially contaminated soil to be put with rr ties in separate rolloff from soil destined for incineration. RR ties and concrete to be landfilled. Pallet of lime arrives for Inco.

1200 Soil designated for removal from 0-2 ft. from exc. area 2 removed. Sidewall sample penta screening results are available which indicate soil in easterly and northerly directions from 0-2 ft. in exc. area 1 needs to be removed. Additional soil removed from exc. area 1 to finish loading 5th truck.

1230 B. Fisher finishes meeting with WATEC and Envirochem.

1300 5th truck loaded with soil from 0-2 ft from exc. areas 1 and 2. BG provides manifest to driver. P. Womax and BG collect sidewall screening samples from exc. areas 1 and 2. John Funk returns to site. BG calls Steve York (LWD) to inform S. York that last of 5 trucks with soil has left site.

1330 J. cook calls BG. BG indicates excavation activities progressing smoothly. BG to have B. Fisher call J. Cook. John Funk leaves site for the day. Dave Lown (NCDEHNR) arrives on site. P. Womax describes penta screening process to D. Lown. D. Lown to return to site tomorrow to see soil exc. activities. Inco begins decon of bucket over poly-lined decon pad. Decon water to be stabilized with lime and wrapped up in poly and put onto truck.

1400 BG and B. Smith measure dimensions of exc. area 2 exc. 0-2 ft. for dividing area for post ex. sampling. Inco begins exc. of unimpacted soil from 0-2 ft. depth at north end of exc. 3 for stockpiling.

1430 P. Womax collects post-ex. samples from exc. area 2 bottom at 2 ft depth. BG and B. Smith collect measurements of excavation areas 1, 2, and 3.

1500 M. Taylor obtains existing (pre-excavation) topo. of exc. area 3 for vol. calculations.

1630 Inco leaves site for the day.

1700 BG and M. Taylor measure depth of excavated unimpacted soil from exc. area 3. Average depth of clean soil excavated is 1.6 ft. B. Smith and BG decide that Inco should excavate addtnl 6-8 in. and stockpile before excavating impacted soil.

1800 B. Smith and P. Womax leave site for the day.

1830 WATEC leaves site for the day.

1920 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 5/9/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
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| Day of Week | Thursday |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Fire Pond Dam Regrading, Soil Exc. | |
| **Personnel On Site:** B. Geno, P. Womax | **Subcontractor:** WATEC, Rust |

**Description of Daily Activities and Events:**

0910 B. Smith calls Steve York with LWD in Calvert City, KY to see if portland cement or lime will interfere with incineration or waste profile. Answer is will not interfere.

0920 Loadout of first Dart truck begins from 0-2 ft. M. Taylor has staked exclusion zone 50 ft. from excavation perimeter. Upwind perimeter dust 0.04 to 0.1 mg/m3. Downwind perimeter dust measures 0.06 to 0.11 mg/m3. CR establishes bckgnd dust at 0.11 mg/m3, with action level for dust suppresion at 0.165 mg/m3.

0930 Rust downgrades PPE to level D based on OVA and dust monitor readings. Trucks to use pressure bag gages on trucks for approx. wt. measurements. Trucks can get actual wt measurements from Adams Products for $5. Drivers do not believe that portable scales provided by Inco will be accurate.

0950 First truck loaded. BG provides manifest to driver.

1000 Excavation of 0-2 ft. impacted soil from exc. area 1 completed. Begin excavation of impacted soil from area 2, 0-2 ft. During excavation of area 2, dwnwind dust concentrations measured of 0.08 to 0.12 mg/m3. P. O'Hara leaves site for the day.

1020 2nd of 5 trucks loaded. BG provides manifest to driver. Inco to use portland cement in exc. area 2 to stabilize water in exc area 2 which could not be pumped out of excavation before loading the material from the wet area. Some slight seepage observed along west wall of exc. area 2 from coarse gravel layer above clay. Appears to be an approx. 1 ft. thick layer of light grey coarse silt/fine sand continuous from exc. 1 to exc. 2 at depth of approx. 1-2 ft.

1035 Inco mixes portland cement in exc. area 2 to stabilize free liquid in the hole before loading into the truck. P. Womax collects sidewall samples from excavation area 1 for penta screening.

1045 John Funk (Rust) arrives on site to review excavation progress.

1100 WATEC begins pouring of concrete for inlet headwall. 3 of 5 trucks loaded. BG provides manifest to driver. J. Gunn informs B. Smith that J. Gunn to be site manager for rest of project, and R. Jones to be transfered to another WATEC site. J. Funk leaves site to return later.

1130 4 of 5 trucks loaded. BG provides manifest to driver. Bob Fisher (Beazer) arrives on site. B. Fisher to meet with Joe Gunn (WATEC) and Dave Milner (Envirochem) to resolve stabilization

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 5/9/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 5/9/96 |
| Day of Week | Thursday |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Fire Pond Dam Regrading, Soil Exc. | |
| **Personnel On Site:** B. Geno, P. Womax, B. Smith | **Subcontractor:** WATEC, Rust |

**Description of Daily Activities and Events:**

0640 BG, B. Smith, P. O'Hara, P. Womax arrive on site. 4 Dart trucks are on site to deliver soil to Calvert City, Ky for incineration. Inco is on site pumping water from Ex. Area 3 into poly tank for transfer into Beazer storage tank T-1 on site. WATEC has formed concrete inlet headwall for culvert crossing McCrimmon Road. BG and B. Smith to inspect before arrival of concrete at 11 a.m. today. BG calibrates (zeros) miniram dust monitor. Miniram registers dust concentrations using time weighted average over 10 sec. intervals.

0700 Mike Taylor conducts Health and Safety tailgate meeting. Excavation to begin in PPE level C with possible downgrading following air monitoring with dust monitor and OVA.

0710 B. Smith measures slight westerly wind. Perimeter dust monitoring results upwind of excavation prior to beginning excavation (background) at edge of concrete pad west of brick building of 0.06 mg/cu.meter. Downwind of excavation area 2 at well MW-C14B, dust background conc. measures 0.04 mg/cu. meter.

0730 BG,B. Smith and P. O'Hara inspect inlet headwall forms and rebar placement. WATEC to add additional rebar. BG to inform WATEC to increase frequency of stapling of erosion control mat placed in Medlin Pond outfall and key in upstream end 6 to 8 in. BG explains that R. Jones has agreed that berms need to be built back up approx. 1 ft. before replacing erosion control mat.

0900 B. Smith measures bckgnd dust upwind of exc. area 1of 0.03 to 0.05 mg/m3. Downwind of exc. area 1 prior to excavation (bckgnd) 0.02 to 0.09 mg/m3. Fifth Dart truck arrives for soil transport. First Dart truck moves into loading area next to excavation area 1 for load out. CR concerned with potential free liquids from soil taken from excavation area 2. CR decides to begin excavating impacted soil from exc. area 1 from 0-2 ft. depth due to least likelihood of encountering groundwater. Inco trying to arrange for delivery of load of kiln dust.

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| **Pay Quantities:**<br>WATEC: Joe Gunn (p.m.)<br>Rodney Jones (s.m.)<br>John Cutlip (asst. s.m.)<br>3 On-Site tech.s<br>Inco: Richard Shelton (foreman)<br>Tim (asst. foreman)<br>Rust: Reggie (operator)<br>Mike Taylor | **Project Changes/Unusual Observations:**<br>None |

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| **Weather Conditions:**<br>*a.m.* sunny, mid 70's<br>*p.m.* sunny, high 80's | **Health and Safety PPE:**<br>Steel-toed boots, safety glasses, hd hats | **Air Monitoring Results:**<br>None |
| **Field Representative:** | | **Date:** 5/9/96 |

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|---|---|
| Date | 5/8/96 |
| Day of Week | Wednesday |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Fire Pond Dam Regrading, Soil Exc. Mob. | |
| **Personnel On Site:** B. Geno, P. Womax | **Subcontractor:** WATEC, Rust |

**Description of Daily Activities and Events:**

transfer exc. water into Beazer storage tanks. J. Funk indicates no sampling of pressure vessels needed, since no residuals and no OVA readings. J. Funk recommends stockpiling impacted soil within an excavation onto other known impacted areas within same excavation to facilitate loading. Inco to place road base next to brick building to facilitate loading.

1700 B. Smith and P. Womax leave site for the day.

1730 R. Jones indicates that WATEC is having dispute over stabilization of rolloff. WATEC's position is Envirochem should provide labor. Envirochem has not admitted fault, and not willing to provide labor to stabilize rolloff with carbon. R. Jones asks to see signed manifest for rolloff of carbon. 2 trucks from Dart trucking arrive on site.

1850 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 5/8/96 |

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| Day of Week | Wednesday |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Fire Pond Dam Regrading, Soil Exc. Mob. | |
| **Personnel On Site:** B. Geno, P. Womax | **Subcontractor:** WATEC, Rust |

**Description of Daily Activities and Events:**

length of underdrain could be more if don't have to completely envelope the stone in geotextile.

1300 Bob Fisher and Jim Cook (Beazer) call to discuss soil excavation, WATEC progress, budget for monitoring and letter to EPA with punchlist. J. Cook approves sending QAPP directly from lab to NCDEHNR and USEPA with phone notification. Rust to separate rr ties larger than 12 in long for segregation from incineration mat'ls. B. Fisher indicates water in contact with impacted soil during excavation to be stored in Beazer tanks T-1 to T-3. BG to determine disposition of water from last carbon changeout from surface water treatment. BG to inform J. Gunn that B. Fisher wishes to meet with J. Gunn and Dave Milner (Envirochem) at 11 a.m. 5/9/96 to discuss carbon rolloff stabilization dispute. CRC to begin with Excavation Area 2 since first 2 ft. need to be incinerated, and then move to Exc. Area 1. 5 trucks to arrive from Dart beginning at 9 a.m. 5/9/96 at 1 hr. intervals. B. Smith indicates CRC oversight budget probably ok to end of May, but need money for reporting. BG indicates that WATEC finish by end of May too optomistic.

1330 BG informs J.Gunn that B. Fisher would like to meet with him to discuss rolloff of carbon at 11 a.m. 5/9/96. J. Gunn indicates that water from last carbon changeout was released and discharged as WATEC has consistently met discharge criteria. Consequently, Beazer tanks T-1 to T-3 are empty.

1340 B. Smith informs Beverly Hudson USEPA and Dave Lown (NCDEHNR) that Alta and Ceimic Lab QAPPs to be sent to USEPA and NCDEHNR directly by labs.

1420 BG calls J. Funk to see if J. Funk has scheduled delivery of kiln dust and whether the any solid residue in the pressure vessels inside the brick building has been sampled for HASP purposes and for cutting safety determination.

1530 Mike Taylor (Rust) arrives on site. M. Taylor indicates no sampling of vessels required as no residue detected in bottom of vessels. M. Taylor to take el. measurements of areas 2 and 3 today to establish existing topography. M. Taylor indicates Rust will have OVA and miniram dust monitor on site beginning 5/9/96. M. Taylor indicates that excavation to begin in level C, with downgrade to D.

1600 John Funk (Rust) arrives on site. J. Funk indicates that Inco to provide kiln dust and poly tanks to

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 5/8/96 |

CUMMINGS RITER CONSULTANTS, INC.

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| Date | 5/8/96 |
| Day of Week | Wednesday |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Fire Pond Dam Regrading, Soil Exc. Mob. | |
| **Personnel On Site:** B. Geno, P. Womax | **Subcontractor:** WATEC, Rust |

**Description of Daily Activities and Events:**

0730 BG arrives on site. WATEC is preparing culvert inlet for placement of new culvert section. BG returns message to Laura Faulconer (Wake Co) concerning E&S controls in place. BG indicates that WATEC is working on installing new culvert inlet section and will install filter berm inlet after the headwall is installed. WATEC should have filter berm in by next precipitation event. Inco is mobilizing additional equipment and materials for soil excavation. Rolloff boxes are scheduled for delivery this a.m. from Envirochem. BG informs Richard Shelton (Inco) that R. Shelton should determine best area to stage rolloffs. BG informs R. Shelton that rail ties excavated with soils should be segregated from soils destined for incineration. BG to determine what size of tie needs to be segregated.

0900 BG receives call from B. Smith that labs will be calling site. BG to have laboratories prepare 10 copies of QAPP for submittal to NCDEHNR and USEPA either directly or through CRC, depending on Beazer's preference. B. Smith and BG to call J. Cook to see if J. Cook approves of direct lab submittal of QAPP to agencies. BG calls Peg Marple (Ceimic 412-788-4404) and Bob Metzer (Alta 916-933-1630) to have labs prepare copies of QAPP.

1000 BG and P. Womax (PW) observe WATEC installation of new culvert section. BG agrees that existing culvert was installed with bell end at inlet, so that new section can be installed by joining with existing section. BG observes riprap apron on Adams Products property installed by WATEC. BG observes vertical cut along side of apron and at end of apron.

1200 BG talks to Joe Gunn (WATEC). BG indicates that riprap apron installation has left vertical cuts which should be cut back to 2H:1V max. and protected with riprap. J. Gunn understands additional work needed at culvert outlet for erosion protection. J. Gunn suggests tracking time and materials, and adding to purchase order for Fire Pond dam work. J. Gunn indicates that may be ok to have final inspection without underdrain, if put stakes where underdrain goes. J. Gunn indicates

| **Pay Quantities:** | **Project Changes/Unusual Observations:** |
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| WATEC: Joe Gunn (p.m.)<br>Rodney Jones (s.m.)<br>John Cutlip (asst. s.m.)<br>3 On-Site tech.s<br>Inco: Richard Shelton (foreman)<br>Tim (asst. foreman)<br>Rust: Reggie (operator)<br>Mike Taylor | None |

| **Weather Conditions:** | **Health and Safety PPE:** | **Air Monitoring Results:** |
|---|---|---|
| *a.m.* overcst, mid 60's<br>*p.m.* sunny, high 70's | Steel-toed boots, safety glasses, hd hats | None |

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| **Field Representative:** [illegible] | **Date:** 5/8/96 |

CUMMINGS RITER CONSULTANTS, INC.

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| Date | 5/7/96 |
| Day of Week | Tuesday |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Fire Pond Dam Regrading, Soil Exc. Mob. | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC, Rust |

**Description of Daily Activities and Events:**

noticed that the filter berm for the inlet of culvert beneath McCrimmon Pkwy is not installed, and would like return call from BG that sediment controls are in place. Digital pager no. 737-3155.

1630 BG and P. Womax return to site. Jack Lafoon and Tracy (Envirochem) are on site. Jack Lafoon indicates that WATEC has indicated Envirochem is responsible for stabilizing rolloff with carbon since the carbon was not wet when it left the site and the tarp was not properly secured which allowed rainwater into the rolloff.

1700 BG and PW leave site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 5/7/96 |

CUMMINGS RITER CONSULTANTS, INC.

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| Date | 5/7/96 |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Fire Pond Dam Regrading, Soil Exc. Mob. | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC, Rust |

**Description of Daily Activities and Events:**

0800 BG arrives on site. Post and Associates arrive on site. WATEC is grading Fire Pond dam area and setting grades for ditch next to McCrimmon Road. Post and Associates arrives on site to locate stakes delineating excavation areas. BG instructs Post and Associates to use state plane coord. system (as used on CRC design package). BG instructs surveyors to set several ref. el.s near excavation areas and determine actual coord.s of grid. R. Jones indicates that two trees next to break in Fire Pond dam will be removed to make room for channel outlet. Inco is on site mobilizing road base material for access to excavation areas.

0830 BG receives message from K. Bird that he has not received fax from Alta and does not know where to fax terms and conditions for signature. K. Bird to leave letter with D. Wiederstein for faxing. Mike Taylor (Rust) arrives on site.

0900 BG calls Martha Maier (Alta). BG to fax copy of draft terms and conditions to Bob Mitzer of Alta Analytical Laboratory. B. Mitzer to fax copy of proposal to BG and K. Bird.

1000 Paul Womax arrives on site. BG and P. Womax walk site.

1100 M. Taylor used hand auger to determine groundwater level near excavation areas. To north of excavation area 1, water not encountered at 5 ft (one auger flight length) in stiff brown clay. To east of exc. areas 2 and 3 near edge of Fire Pond, water encountered at approx. 3 ft. in brown med. stiff clay.

1400 BG and Paul Womax leave for Ensys training.

1500 BG calls B. Smith. BG to purchase repeater pipette from Ensys for penta screening. B. Smith and BG to call J. Cook 5/8/96 regarding schedule for final surface water inspection, and submittal of lab QAPPs to USEPA and NCDEHNR from Alta and Ceimic.

1620 BG receives message from Laura Faulconer (Wake Co.) that L. Faulconer drove by the site and noticed that the filter berm for the inlet of culvert beneath McCrimmon Pkwy is not installed, and

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| **Pay Quantities:**<br>WATEC: Rodney Jones (s.m.)<br>John Cutlip (asst. s.m.)<br>Dan Wise (tech.)<br>Dan Kitchen (tech.)<br>Inco: Tim (foreman)<br>2 operators<br>Rust: 1 laborer<br>Mike Taylor | **Project Changes/Unusual Observations:**<br>None |

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| **Weather Conditions:**<br>*a.m.* overcst, mid 50's<br>*p.m.* overcst, mid 70's | **Health and Safety PPE:**<br>Steel-toed boots, safety glasses, hd hats | **Air Monitoring Results:**<br>None |
| **Field Representative:** [signature] | | **Date:** 5/7/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
| Date | 5/6/96 |
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Fire Pond Dam Regrading, Wetlands Planting, Soil Exc. Precon. Meeting | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC, Rust |

**Description of Daily Activities and Events:**

Jones indicates that he called surveyors who explained that the cut can be determined by using culvert inlet invert as lowest elevation and forming ditch by rising 1 ft. in el. along centerline of ditch. BG explains that the slope of the ditch varies on either side of the culvert. R. Jones and BG review regrade dwg.

1300 BG and Mike Taylor finish setting sample/survey grid.

1600 BG faxes draft Prefinal Construction Inspection Rpt to B. Smith and J. Cook for review.

1630 BG inspects Medlin Pond area and WATEC progress on Fire Pond dam regrading. BG indicates that berms were not built back up to hold water before placing erosion mat. BG indicates that outfall sidewalls should be graded back to 3H:1V or less, as sides of outfall are too steep on south side. R. Jones agrees to make changes. R. Jones indicates that fine grading will be done when surface of Medlin Pond area dries sufficiently. R. Jones indicates that swale grading and cutting back of steep slope north of former Medlin Pond area will be done with fine grading. R. Jones indicates that rolloffs with carbon and filter socks will be stabilized on site before being transported to Pinewood, SC (Laidlaw) for disposal. Inco leaves site for the day. Inco has delivered approx. 35 tons of road base mat'l for access to exc. areas. Road base placed between exc.s 2 and 3 and next to exc. area 1. Inco has also graded area adjacent and east of Beazer field trailer for staging of excavated soils.

1740 BG leaves site for the day.

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| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

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| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

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| **Field Representative:** | **Date:** 5/6/96 |

CUMMINGS RITER CONSULTANTS, INC.

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|---|---|
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# FIELD ACTIVITY REPORT

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|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Fire Pond Dam Regrading, Soil Exc. Mob | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC, Rust |

**Description of Daily Activities and Events:**

0800 BG arrives on site. Mike Taylor (Rust) is on site setting up level for establishing grid system for pre-surveying of proposed exc. areas. WATEC is placing topsoil along northern edge of Fire Pond with bucket loader and back dragging. BG receives message from Walter Kleckly (Post and Associates) that surveyors will not be on site today but 5/7/96 instead.

0900 BG calls Denny Iceman (Triangle Labs) concerning Triangle Labs guarantee that Triangle will have lab results in 7 calendar days. D. Iceman indicates that technical staff recall receiving samples from Morrisville site which had white powder which created matrix interference problems with samples. D. Iceman indicates 7-day turn can be guaranteed if no matrix interference problems. J. Funk arrives on site.

0930 BG calls B. Smith to inform B. Smith that surveyors will arrive tomorrow and that Mike Taylor to assist BG today in setting up grid, but grid will not be lined up north south, as BG does not know local magnetic declination. B. Smith indicates that BG should check with Alta to see if Alta can match price of analyses for dioxins/furans. B. Smith indicates that BG should check with Jim Cook to see if Beazer wishes to contract directly with analytical lab. Stan James (Inco) indicates that Inco will intall geotextile and crush and run for access roads for truck loading. S. James indicates that concrete between excavation area 2 and 3 to be removed today and stockpiled for use as fill. J. Funk to coordinate with Bob Fisher (Beazer) for leaking drum in brick building. J. Funk indicates that Rust has opened vessels in brick building and did not measure Hnu above bckgnd. J. Funk indicates that solid redidue to be sampled for analysis.

0945 BG leaves message with Martha Maier of Alta to try to match price of $1,475/sample or will have Triangle do dioxin analyses. BG calls J. Cook. J. Cook indicates CRC should contact directly with analytical lab. J. Cook suggests reviewing Beazer contract terms with WATEC and incorporating some of same terms. J. Cook suggests using hand auger to check groundwater level near proposed excavation areas. BG calls Ken Bird to draft terms and conditions for contract with Triangle.

1000 Rodney Jones (WATEC) arrives on site. R. Jones asks BG to inspect former Medlin Pond area. R.

| | |
|---|---|
| **Pay Quantities:**<br>WATEC: Rodney Jones (s.m.)<br>John Cutlip (asst. s.m.)<br>Dan Wise (tech.)<br>Dan Kitchen (tech.)<br>Inco: Foreman<br>2 Operators | **Project Changes/Unusual Observations:**<br>None |

| | | |
|---|---|---|
| **Weather Conditions:**<br>*a.m.* sunny, mid 50's<br>*p.m.* sunny, mid 80's | **Health and Safety PPE:**<br>Steel-toed boots, safety glasses, hd hats | **Air Monitoring Results:**<br>None |
| **Field Representative:** | | **Date:** 5/6/96 |

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 5/3/96 |
| Day of Week | Friday |
| No. | 124 |
| Sheet | 3 of 3 |

# FIELD ACTIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Fire Pond Dam Regrading, Groundwater Treatment System Installation | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC, Rust |

**Description of Daily Activities and Events:**

grid system. John Funk was going to establish arbitrary grid system and use level to determine existing topography. BG indicates that CRC will have surveyor on site 5/6/96 a.m. to survey control points outside excavation areas. J. Funk suggests that surveyors establish a line tied in with site coords. and Rust and BG work together to use line to establish grid which will then be tied in with site coord. system.

1530 BG leaves message for Denny Iceman that CRC to use Triangle Labs for dioxin analysis, but not penta, if Triangle can guaratee 7 day turnaround. BG leaves message for Cheryll Mayer (Alta) that CRC to use Triangle Labs for dioxin analysis based on cost.

1600 J. Cook calls BG to ask for schedule revisions for Monthly Progress Report to USEPA. BG to fax anticipated schedule for soil excavation work to J. Cook, along with frac tank dioxin analytical results.

1800 BG leaves site for the day.

| | |
|---|---|
| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

| | | |
|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

| | |
|---|---|
| **Field Representative:** | **Date:** 5/3/96 |

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 5/3/96 |
| Day of Week | Friday |
| No. | 124 |
| Sheet | 2 of 3 |

# FIELD ACTIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Fire Pond Dam Regrading, Groundwater Treatment System Installation | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC, Rust |

**Description of Daily Activities and Events:**

upstream end of erosion control blanket to tie in. BG indicates that rip rap in Medlin Pond outfall should be placed at edge of disturbed area. BG indicates that trackhoe blocked existing drainage ditch next to McCrimon Pkwy and flow and mud is getting onto road. R. Jones agrees to clean off mud from McCrimmon Pkwy and clean out ditch. BG indicates that surface debris on Medlin Pond area should be picked up. R. Jones indicates that debris will be picked up after fine grading. BG indicates that steep area to north of Medlin Pond access road needs to be cut back to form 3H:1V max. slope. R. Jones agrees to cut back steep area. R. Jones agrees to clean up remaining PVC pipe fragments, and felled trees. BG indicates that area of former access road should be graded to drain by shaping the swale, and then sloping up from the bottom of the swale. R. Jones points out grade stakes placed for Fire Pond dam work. BG indicates that BG suspects that R. Jones cut no.s are too high. R. Jones asks BG to review calculation of cut.

1100 BG reviews R. Jones calculations of cuts for Fire Pond dam area. BG determines that R. Jones calculations are erroneous, and that R. Jones calculations result in too much cut.

1300 R. Jones leaves site for the day. BG receives fax from Denny Iceman of Triangle Labs for dioxin analytical cost quote of $1,475/soil sample with 7 day turnaround. BG calls B. Smith who suggests informing J. Cook of cost differential between Alta ($2,400/soil sample w/7 day turn) and Triangle.

1315 BG leaves message for J. Cook of cost differential of analytical labs.

1400 BG receives sample bottles from IEA. BG to use Ceimic for penta analysis due to laboratory capacity to perform 2-day ($275/sample)and 5-day ($200/sample) turn. BG calls B. Smith regarding need for surveyor. B. Smith indicates that Rust is paid for excavated soil based on pre and post excavation survey. BG to call Post and Associates to let them know additional survey work needed to develop pre-excavation surface topography of excavation areas. Rust needs to survey excavation areas prior to excavation. BG to call J. Funk to see if Rust has scheduled a surveyor, or if prefer to have CRC have survey done by Post and Associates and send invoice to Rust.

1500 J. Funk calls BG. J. Funk indicates that Rust was not planning on surveying grid system to known

| | |
|---|---|
| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

| | | |
|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

| | |
|---|---|
| **Field Representative:** | **Date:** 5/3/96 |

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 5/3/96 |
| Day of Week | Friday |
| No. | 124 |
| Sheet | 1 of 3 |

# FIELD ACTIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Fire Pond Regrading, Lift Thickness Checks | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC |

**Description of Daily Activities and Events:**

0800 BG arrives on site. On-Site techs. are using wheelbarrow to transport fill cut from Fire Pond dam and stockpiled near groundwater treatment building to fill low spots on northern side of Fire Pond. WATEC is using small excavator (Kimatsu FX4) to excavate through fill to geogrid/geotextile to determine fill thickness. WATEC is then using tape to measure fill thickness. WATEC to have surveyors determine el.s of fill surface at test pit locations. Locations are marked with pin flags.

0830 Jim Cook (Beazer) calls BG to inform BG that J. Cook will fax BG copy of draft Monthly Progress Report for review by BG. J. Cook indicates that no ramifications yet from Enwood regarding leak from rolloff with carbon, but Mike Eason (Enwood Structures) has told Bob Fisher (Beazer) that M. Eason has photos of leakage from rolloff falling on ground. J. Cook indicates that BG should talk with Rodney Jones (WATEC) to inform R. Jones that WATEC should take corrective measures for leakage of F032 on ground and document the measures to clean up the soil in the area of the spillage.

0900 BG talks to R. Jones concerning spillage from rolloffs. BG indicates that Enwood Structures has informed Beazer that they have pictures of waste leaking from rolloff onto ground. BG indicates that it is in WATEC's best interest to take corrective measures to clean up the soil in the vicinity of the spill, and document the cleanup, and may want to take photos. R. Jones indicates that the area of spillage was immediately cleaned up with backhoe bucket, that WATEC has taken necessary corrective measures, and that unless R. Jones sees something in writing, will not respond in writing. R. Jones indicates that WATEC did nothing wrong, as was prepared to take corrective measures before the liquid reached the ground. R. Jones indicates that if rainwater had not gotten into rolloff, WATEC would not have this problem

0930 BG receives message from Denny Iceman to call Triangle Labs regarding dioxin analytical work.

1000 R. Jones asks BG to visit Medlin Pond area for placement of erosion control matting in berm outfalls, location for silt fence, location for riprap placement. BG indicates that berm outfalls have eroded due to improper compaction and no protection. BG indicates that bottom of berm outfalls should be built back up before placing protective erosion control mat. R. Jones agrees to ditch

| | |
|---|---|
| **Pay Quantities:**<br>WATEC: Rodney Jones (s.m.)<br>John Cutlip (asst. s.m.)<br>3 On-Site tech.s<br>1 On-Site operator | **Project Changes/Unusual Observations:**<br>None |

| | | |
|---|---|---|
| **Weather Conditions:**<br>*a.m.* overcst, mid 50's, rain<br>*p.m.* overcst, mid 60's, shwrs | **Health and Safety PPE:**<br>Steel-toed boots, safety glasses, hd hats | **Air Monitoring Results:**<br>None |

| | |
|---|---|
| **Field Representative:** Bruce Geno | **Date:** 5/3/96 |

CUMMINGS RITER CONSULTANTS, INC.

| | |
|---|---|
| Date | 5/2/96 |
| Day of Week | Thursday |
| No. | 123 |
| Sheet | 2 of 2 |

# FIELD ACTIVITY REPORT

| | |
|---|---|
| **Project Name:** Beazer East Inc. - Koppers Superfund Site | **Project No.** 93-145.30.55 |
| **Field Activity:** Fire Pond Dam Regrading, Groundwater Treatment System Installation | |
| **Personnel On Site:** B. Geno | **Subcontractor:** WATEC, Rust |

**Description of Daily Activities and Events:**

dig to geogrid in Fire Pond area to check fill thickness. R. Jones informs BG that Mike Eason of Enwood Structures has called Joe Gunn due to observation of leakage from rolloff. R. Jones explains that the leakage from the rolloff was rainwater, and that R. Jones had decided to puncture liner in rolloff to allow rainwater that had gotten into carbon to drain when Mike Eason walked out of Enwood Structures office building and observed leakage. R. Jones insists that the water was from rain getting into rolloff due to poorly secured tarp, as the carbon was so dry that it was very difficult to vacuum out of vessel. R. Jones indicates that WATEC used backhoe to dig soil and load soil into backhoe bucket where leakage from rolloff landed. BG informs R. Jones that Enwood Structures have been very sensitive to WATEC operations, and that WATEC should know by now they need to be extremely careful to conduct operations in professional manner. R. Jones agrees that M. Eason has been watchful of WATEC. R. Jones insists WATEC did nothing wrong.

1330 BG calls B. Smith with WATEC anticipated schedule for finishing majority of work tasks by 5/17/95. BG informs B. Smith that WATEC spilled liquid contents of rolloff containing carbon onto Beazer property adjacent to Enwood Structures property, and that MikeEason observed spillage. BG indicates that M. Eason has called Joe Gunn, but not sure what was said. B. Smith instructs BG to inform J. Cook.

1345 BG calls J. Cook to inform J. Cook that WATEC opened tailgate of rolloff containing carbon and punctured liner, and leakage was observed by Mike Eason, and M. Eason then placed call to J. Gunn. BG informs J. Cook that USEPA oversight contractor (Kieth Matteson of Black and Veach) is planning on visiting site on 5/13/96.

1400 John Funk and Mike Taylor arrive on site to inspect Inco changes to groundwater treatment system.

1420 J. Cook calls BG to inform BG that Mike Eason called Beazer to obtain Beverly Hudson's (USEPA) phone number, and that Bob Fisher will be giving M. Eason a call to determine why.

1500 BG calls B. Smith to get information for laboratory contacts for soil excavation. BG calls Alta to order bottles for dioxin analysis. ($2,400/sample w/ 5 calendar day turn).

1600 BG calls Sheryl of IEA in Cary, NC for Method 8270 soil analysis. IEA does not have capacity to provide rushed turnaround of less than 10 business days.

1730 BG leaves site for the day.

| | |
|---|---|
| **Pay Quantities:** | **Project Changes/Unusual Observations:** |

| | | |
|---|---|---|
| **Weather Conditions:**<br>*a.m.*<br>*p.m.* | **Health and Safety PPE:** | **Air Monitoring Results:** |

| | |
|---|---|
| **Field Representative:** | **Date:** 5/2/96 |

# APPENDIX E

## SURFACE WATER CONSTRUCTION AS-BUILT DRAWINGS

WATEC
Waste Abatement Technology, L.P.
1300 Williams Drive, Suite B
Marietta, Georgia 30066-6299
(404) 427-1947, FAX (404) 427-1907

DATE: 6/7/96
PROJECT NUMBER: 50007
PROJECT NAME: Koppers

TRANSMITTAL TO:
Bruce Gero

RECEIVED
JUN 10 1996

Please find: ☑ Draft ☐ Final
☐ Originals ☐ Other

Sent via: ☐ Mail ☐ Same day Courier
☑ Overnight Courier ☐ Other

| QUANTITY | DESCRIPTION |
|---|---|
| 1 | Topo & Volume Comp - Fire Pond |
| 1 | Topo & Volume Comp - Medlin Pond |
| | |
| | |
| | |
| | |
| | |

☐ As Requested ☑ For Review and Comment
☐ For Your Use ☐
☐ For Review

COMMENTS:

Copy to: Signed:

WATEC
Waste Abatement Technology, L.P.
1300 Williams Drive, Suite B
Marietta, Georgia 30066-6299
(404) 427-1947, FAX (404) 427-1907

DATE: 6/13/96
PROJECT NUMBER: 50007
PROJECT NAME: Koppers Company Morrisville NC

TRANSMITTAL TO:
Jim Cook
Beazer East
436 Seventh Avenue
Pittsburgh PA 15219

Please find: ☑ Draft ☐ Final
☐ Originals ☐ Other

Sent via: ☐ Mail ☐ Same day Courier
☑ Overnight Courier ☐ Other

| QUANTITY | DESCRIPTION |
|---|---|
| 1 | Grid Locations - Fire Pond |
| 1 | Grid Locations - Medlin Pond |
| | |
| | |
| | |
| | |
| | |

☐ As Requested ☐ For Review and Comment
☑ For Your Use ☐
☐ For Review

COMMENTS:

Copy to: B. Gene - CRC
B. Smith - CRC

Signed:

U.S. EPA REGION IV

# SDMS

## Unscannable Material Target Sheet

DocID: 10569332 Site ID: NCD003200383

Site Name: Koppers (Morrisville Plant)

**Nature of Material:**

| | | | |
|---|---|---|---|
| Map: | ✓ | Computer Disks: | |
| Photos: | | CD-ROM: | |
| Blueprints: | | Oversized Report: | |
| Slides: | | Log Book: | |

Other (describe): Site Maps

Amount of material:

*Please contact the appropriate Records Center to view the material.*

# APPENDIX F

## SOIL EXCAVATION AS-BUILT DRAWINGS

**RUST** **Rust Environment & Infrastructure** *Letter of Transmittal*

TO: CUMMINGS / RITER
339 HAYMAKER RD
PARKWAY BLDG SUITE 201
MONROEVILLE PA 15146

| | |
|---|---|
| DATE 7/25/96 | PROJECT NO. 34321.200 |
| ATTENTION BRUCE GENO | |
| RE: | |

WE ARE SENDING YOU:

- [x] Attached
- [ ] Prints
- [ ] Under separate cover via _____ the following items:
- [ ] Shop drawings
- [ ] Change order
- [ ] Plans
- [ ] Samples
- [ ] Specifications
- [ ] Copy of letter
- [ ] _____

| COPIES | DATE | NO. | DESCRIPTION |
|---|---|---|---|
| 1 | | | AS BUILT DWG SOIL REMEDIATION |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

THESE ARE TRANSMITTED AS CHECKED BELOW:

- [ ] For approval
- [ ] Approved as submitted
- [ ] Resubmit _____ copies for approval
- [x] For your use
- [ ] Approved as noted
- [ ] Submit _____ copies for distribution
- [x] As requested
- [ ] Returned for corrections
- [ ] Return _____ corrected prints
- [ ] For review and comment
- [ ] _____
- [ ] For Bids Due _____ 19 _____
- [ ] Prints Returned After Loan to Us

REMARKS: IF YOU HAVE ANY QUESTIONS, PLEASE CALL ME

COPY TO: BOB FISHER - BEAZER EAST SIGNED: J. Funk

White Copy - Client Yellow Copy - Project File Pink Copy - Library File

If enclosures are not as noted, kindly notify us at once.

5510 Six Forks Road • Raleigh, North Carolina 27609 • (919) 676-5100 • Fax: (919) 676-5259

U.S. EPA REGION IV

# SDMS

## Unscannable Material Target Sheet

DocID: 10569332 Site ID: NCD003200383

Site Name: Koppers (Morrisville Plant)

**Nature of Material:**

| | | | |
|---|---|---|---|
| Map: | ✓ | Computer Disks: | |
| Photos: | | CD-ROM: | |
| Blueprints: | | Oversized Report: | |
| Slides: | | Log Book: | |

Other (describe): Site Maps (Soil Remediation Areas)

Amount of material:

*Please contact the appropriate Records Center to view the material.*

# APPENDIX G

## POST-EXCAVATION SAMPLE FIELD SCREENING RESULTS

# Data for PENTA RISC® Soil Test

Operator: P. WOMAX Date: 5/9/96 Location: BEAZER EAST, MORRISVILLE NC

| Sample ID | ΔOD Standards | OD sample 24 ppm | Interpretation | OD sample 95 ppm | Interpretation | OD sample ____ ppm | Interpretation | Comments |
|---|---|---|---|---|---|---|---|---|
| EX1-0-2-1/2 | 0.18 | -0.36 | >24 ppm | 0.07 | <95 ppm | | | STOCKPILE SOIL |
| EX1-0-2-3/4 | 0.18 | -0.28 | >24 ppm | 0.17 | <95 ppm | | | STOCKPILE SOIL |
| EX1-0-2-5/6 | 0.18 | -0.23 | >24 ppm | -0.14 | >95 ppm | | | REMOVE OFF SITE |
| EX1-0-2-7/8 | 0.18 | -0.34 | >24 ppm | -0.16 | >95 ppm | | | REMOVE OFF SITE |
| EX2-0-2-3/4 | 0.13 | 0.58 | <24 ppm | 0.61 | <95 ppm | | | SOIL CLEAN |
| EX2-0-2 5/6 | 0.13 | 0.27 | <24 ppm | 0.69 | <95 ppm | | | SOIL CLEAN |
| EX2-0-2 7/8 | 0.13 | 0.71 | <24 ppm | 0.93 | <95 ppm | | | SOIL CLEAN |
| EX2-0-2 13/14 | 0.13 | 0.01 | <24 ppm | 0.49 | <95 ppm | | | SOIL CLEAN |
| EX2-0-2 11/12 | 0.13 | -0.16 | >24 ppm | 0.19 | <95 ppm | | | STOCKPILE SOIL |
| EX2-0-2 9/10 | 0.13 | 0.09 | <24 ppm | 0.18 | <95 ppm | | | SOIL CLEAN |
| EX2-0-2 1/2 | 0.13 | 0.34 | <24 ppm | 0.47 | <95 ppm | | | SOIL CLEAN |
| PX2-4 | 0.30 | 0.49 | <24 ppm | -0.39 | >95 ppm | | | STANDARD NOT WITH IN ACCEPTABLE Δ |
| PX2-1 | 0.30 | -0.81 | >24 ppm | -0.35 | >95 ppm | | | WILL RERUN SAMPLES |
| PX2-2 | 0.30 | -0.86 | >24 ppm | -0.56 | >95 ppm | | | " " |
| PX2-3 | 0.30 | -1.02 | >24 ppm | -1.04 | >95 ppm | | | " " |

# Data for PENTA RISC® Soil Test

Operator: P. Womack Date: 5/10/96 Location: Deazer East, Morrisville, NC

| Sample ID | ΔOD Standards | OD sample 24 ppm | Interpretation | OD sample 95 ppm | Interpretation | OD sample ____ ppm | Interpretation | Comments |
|---|---|---|---|---|---|---|---|---|
| EX1-0-2-9/10 | 0.20 | 0.13 | <24 ppm | 0.26 | <95 ppm | | | SOIL CLEAN |
| EX1-0-2-11/12 | 0.20 | 0.11 | <24 ppm | 0.46 | <95 ppm | | | SOIL CLEAN |
| PX2-1R | 0.20 | -0.39 | >24 ppm | -0.06 | >95 ppm | | | REMOVE ADDITIONAL SOIL OFF SITE, |
| PX2-2R | 0.20 | 0.08 | <24 ppm | 0.33 | <95 ppm | | | SOIL CLEAN |
| PX2-3R | 0.20 | -0.49 | >24 ppm | -0.25 | >95 ppm | | | REMOVE AND SEND OFF-SITE |
| PX2-4R | 0.20 | -0.59 | >24 ppm | -0.53 | >95 ppm | | | REMOVE AND SEND OFF-SITE |
| EX3-0-2-2/3 | 0.01 | 0.40 | <24 ppm | 0.30 | <95 ppm | | | CLEAN SOIL |
| E3-0-2-4/5 | 0.01 | -0.40 | >24 ppm | -0.33 | >95 ppm | | | REMOVE AND SEND OFF-SITE |
| | | | | | | | | |
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# Data for PENTA RISC® Soil Test

Operator: P Womax  Date: 5/13/96  Location: BEAZER EAST, MORRISVILLE, NC

| Sample ID | ΔOD Standards | OD sample 24 ppm | Interpretation | OD sample 95 ppm | Interpretation | OD sample ___ ppm | Interpretation | Comments |
|---|---|---|---|---|---|---|---|---|
| EX1-4-6-1/2 | 0.04 | 0.02 | <24 ppm | 0.16 | <95 ppm | | | CLEAN SOIL |
| EX1-PX1 | 0.04 | 0.19 | <24 ppm | 0.35 | <95 ppm | | | CLEAN SOIL |
| EX1-PX2 | 0.04 | 0.26 | <24 ppm | 0.51 | <95 ppm | | | CLEAN SOIL |
| EX3-0-2-6/7 | 0.29 | -0.41 | >24 ppm | -0.09 | >95 ppm | | | REMOVE AND SEND OFF-SITE |
| EX1-PX4 | 0.29 | 0.38 | <24 ppm | 0.46 | <95 ppm | | | CLEAN SOIL |
| EX1-PX3 | 0.29 | 0.26 | <24 ppm | -0.08 | >95 ppm | | | LESS THAN 24 ppm |
| EX1-6-8-BTM | 0.29 | 0.39 | <24 ppm | -0.06 | >95 ppm | | | " " |
| EX1-6-8-BTMR | 0.24 | 0.20 | <24 ppm | 0.31 | <95 ppm | | | CLEAN SOIL RETEST FOR EX1-6-8 BTM |
| EX2-PX1R | 0.24 | -0.04 | >24 ppm | 0.07 | <95 ppm | | | STOCKPILE SOIL |
| EX2-PX3R | 0.24 | 0.14 | <24 ppm | 0.33 | <95 ppm | | | CLEAN SOIL |
| EX2-PX4R | 0.24 | 0.04 | <24 ppm | 0.54 | <95 ppm | | | CLEAN SOIL |
| EX3-0-2-8/9 | 0.10 | -0.21 | >24 ppm | 0.14 | <95 ppm | | | STOCK PILE SOIL |
| EX3-0-2-10/11 | 0.10 | -0.44 | >24 ppm | -0.45 | >95 ppm | | | REMOVE AND SEND OFF-SITE |
| EX3-2-4-3 | 0.10 | 0.20 | <24 ppm | 0.31 | <95 ppm | | | CLEAN SOIL |

# Data for PENTA RISC® Soil Test

Operator: P. Womax Date: 5/14/96 Location: BEAZER EAST, MORRISVILLE, NC

| Sample ID | ΔOD Standards | OD sample 24 ppm | Interpretation | OD sample 95 ppm | Interpretation | OD sample ____ ppm | Interpretation | Comments |
|---|---|---|---|---|---|---|---|---|
| EX3-PX1 | 0.01 | 0.21 | <24 PPM | 0.38 | <95 PPM | | | CLEAN SOIL |
| EX3-2-4-1/5 | 0.01 | 0.18 | <24 PPM | 0.18 | <95 PPM | | | CLEAN SOIL |
| EX3-2-4-1/2 | 0.01 | 0.41 | <24 PPM | 0.49 | <95 PPM | | | CLEAN SOIL |
| EX3-2-4-6A/6B | 0.01 | 0.29 | <24 PPM | 0.53 | <95 PPM | | | CLEAN SOIL |
| EX3-PX5 | 0.05 | 0.52 | <24 PPM | 0.54 | <95 PPM | | | CLEAN SOIL |
| EX3-PX6 | 0.05 | 0.10 | <24 PPM | 0.30 | <95 PPM | | | CLEAN SOIL |
| EX3-2-4-7 | 0.05 | -0.48 | >24 PPM | -0.30 | >95 PPM | | | REMOVE OFF-SITE |
| EX3-2-4-8 | 0.05 | 0.33 | <24 PPM | 0.41 | <95 PPM | | | CLEAN SOIL |
| EX3-0-2-12/13 | 0.05 | -0.54 | >24 PPM | -0.54 | >95 PPM | | | REMOVE OFF-SITE |
| EX3-PX7 | 0.05 | 0.42 | <24 PPM | 0.54 | <95 PPM | | | CLEAN SOIL |
| EX1-PX7 | 0.11 | 0.31 | <24 PPM | 0.56 | <95 PPM | | | CLEAN SOIL - SLIGHT ODOR |
| EX1-4-6-4 | 0.11 | 0.31 | <24 PPM | 0.34 | <95 PPM | | | CLEAN SOIL - SLIGHT ODOR |
| EX1-PX5 | 0.11 | 0.50 | <24 PPM | 0.55 | <95 PPM | | | CLEAN SOIL - SLIGHT ODOR |
| EX1-4-6-3 | 0.11 | -0.36 | >24 PPM | -0.12 | >95 PPM | | | REMOVE OFF-SITE - STRONG ODOR |
| EX1-PX6 | 0.11 | 0.11 | <24 PPM | 0.18 | <95 PPM | | | CLEAN SOIL - SLIGHT ODOR |

# Data for PENTA RISC® Soil Test

Operator: P WOMAX Date: 5/14/96 Location: BEAZER EAST, MORRISVILLE NC

| Sample ID | ΔOD Standards | OD sample 24 ppm | Interpretation | OD sample 95 ppm | Interpretation | OD sample ____ ppm | Interpretation | Comments |
|---|---|---|---|---|---|---|---|---|
| EX3-0-2-14/15 | 0.05 | 0.40 | <24 PPM | 0.58 | <95 PPM | | | CLEAN SOIL |
| EX3- PX4 | 0.05 | 0.01 | <24 PPM | 0.28 | <95 PPM | | | CLEAN SOIL |
| EX3- PX2 | 0.05 | -0.03 | >24 PPM | 0.15 | <95 PPM | | | STOCK PILE SOIL |
| EX2- PX5 | 0.05 | 0.28 | <24 PPM | 0.28 | <95 PPM | | | CLEAN SOIL |
| EX3-2-4-9 | 0.05 | 0.45 | <24 PPM | 0.22 | <95 PPM | | | CLEAN SOIL |
| EX2-0-2-15/16 | 0.05 | -0.48 | >24 PPM | -0.09 | >95 PPM | | | REMOVE OFF-SITE |
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# Data for PENTA RISC® Soil Test

Operator: P WOMAX Date: 5/15/96 Location: DEAZER EAST, MONROVILLE NC.

| Sample ID | ΔOD Standards | OD sample 24 ppm | Interpretation | OD sample 95 ppm | Interpretation | OD sample ____ ppm | Interpretation | Comments |
|---|---|---|---|---|---|---|---|---|
| EX1-4-6-9/10 | 0.04 | -0.25 | >24 ppm | 0.02 | <95 ppm | | | STOCKPILE SOIL - SLIGHT ODOR |
| EX1-4-6-7/8 | 0.04 | -0.37 | >24 ppm | -0.20 | >95 ppm | | | REMOVE OFF-SITE |
| EX1-4-6-5/6 | 0.04 | 0.20 | <24 ppm | 0.29 | <95 ppm | | | CLEAN SOIL |
| EX3-0-2-16/17 | 0.28 | 0.13 | <24 ppm | 0.29 | <95 ppm | | | CLEAN SOIL |
| EX2-PX2A | 0.14 | -0.45 | >24 ppm | -0.23 | >95 ppm | | | REMOVE OFF SITE |
| EX2-0-2-17/18 | 0.14 | 0.09 | <24 ppm | 0.36 | <95 ppm | | | CLEAN SOIL |
| EX2-6-8-3/4 | 0.23 | 0.00 | >24 ppm | -0.01 | >95 ppm | | | REMOVE OFF SITE |
| EX2-PX6 | 0.23 | 0.37 | <24 ppm | 0.22 | <95 ppm | | | CLEAN SOIL |
| EX2-6-8-1/2 | 0.23 | 0.30 | <24 ppm | 0.29 | <95 ppm | | | CLEAN SOIL |
| EX2-6-8-5/6 | 0.23 | -0.38 | >24 ppm | -0.29 | >95 ppm | | | REMOVE OFF SITE |
| EX2-6-8-7/8 | 0.14 | 0.33 | <24 ppm | 0.11 | <95 ppm | | | CLEAN SOIL |
| EX3-0-2-18/19 | 0.08 | -0.31 | >24 ppm | 0.04 | <95 ppm | | | STOCKPILE SOIL |
| EX3-PX3 | 0.08 | 0.39 | <24 ppm | 0.37 | <95 ppm | | | CLEAN SOIL |
| EX3-PX8 | 0.08 | 0.26 | <24 ppm | 0.60 | <95 ppm | | | CLEAN SOIL |

# Data for PENTA RISC® Soil Test

Operator: P. Womax Date: 5/15/96 Location: BEAZER EAST, MORGANTON, NC

| Sample ID | ΔOD Standards | OD sample 24 ppm | Interpretation | OD sample 95 ppm | Interpretation | OD sample ____ ppm | Interpretation | Comments |
|---|---|---|---|---|---|---|---|---|
| EX3-PX9 | 0.19 | -0.25 | >24 ppm | 0.13 | <95 ppm | | | STOCKPILE |
| EX3-2-4-12/13 | 0.19 | -0.22 | >24 ppm | 0.38 | <95 ppm | | | STOCKPILE |
| EX3-2-4-14/17 | 0.19 | 0.55 | <24 ppm | 0.47 | <95 ppm | | | CLEAN SOIL |
| EX3-2-4-19/11 | 0.19 | -0.53 | >24 ppm | -0.35 | >95 ppm | | | REMOVE OFF SITE |
| EX3-2-4-14/15 | 0.19 | -0.22 | >24 ppm | 0.11 | <95 ppm | | | STOCKPILE |
| EX2-6-8-11/12 | 0.20 | 0.24 | <24 ppm | 0.39 | <95 ppm | | | CLEAN SOIL |
| EX2-6-8-9/10 | 0.20 | 0.45 | <24 ppm | 0.49 | <95 ppm | | | CLEAN SOIL |
| EX2-PX2B | 0.29 | 0.18 | <24 ppm | 0.32 | <95 ppm | | | CLEAN SOIL |
| EX4-4-6-11/12 | 0.14 | -0.23 | >24 ppm | 0.50 | <95 ppm | | | STOCKPILE |
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# Data for PENTA RISC® Soil Test

Operator: Puromax Date: 5/16/96 Location: BEAZER EAST, MORRISVILLE, NC

| Sample ID | ΔOD Standards | OD sample 24 ppm | Interpretation | OD sample 95 ppm | Interpretation | OD sample ____ ppm | Interpretation | Comments |
|---|---|---|---|---|---|---|---|---|
| EX1-4-6-17/18 | 0.09 | 0.03 | <24 ppm | 0.21 | <95 ppm | | | CLEAN SOIL |
| EX1-4-6-16 | 0.09 | 0.01 | <24 ppm | 0.25 | <95 ppm | | | CLEAN SOIL |
| EX1-PX8 | 0.09 | -0.08 | >24 ppm | -0.08 | >95 ppm | | | SLIGHT ODOR REMOVE OFF-SITE |
| EX1-4-6-13 | 0.09 | -0.25 | >24 ppm | 0.23 | <95 ppm | | | STOCKPILE |
| EX1-4-6-14/15 | 0.09 | 0.14 | <24 ppm | -0.30 | >95 ppm | | | WILL RE-RUN as EX1-4-6-14/15 R |
| EX1-4-6-14/15 R | 0.24 | 0.12 | <24 ppm | 0.15 | <95 ppm | | | CLEAN SOIL |
| EX3-0-2-22/23 | 0.05 | 0.16 | <24 ppm | 0.07 | <95 ppm | | | CLEAN SOIL. |
| EX3-0-2-20/21 | 0.05 | 0.13 | <24 ppm | 0.02 | <95 ppm | | | CLEAN SOIL |
| EX3-0-2-24/25 | 0.05 | -0.58 | >24 ppm | -0.57 | >95 ppm | | | REMOVE OFF-SITE |
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# Data for PENTA RISC® Soil Test

Operator: PWOMAX, B. GENO  Date: 5/17/96  Location: BEAZER EAST, MORRISVILLE, NC

| Sample ID | ΔOD Standards | OD sample 24 ppm | Interpretation | OD sample 95 ppm | Interpretation | OD sample ___ ppm | Interpretation | Comments |
|---|---|---|---|---|---|---|---|---|
| EX3-0-2-26/27 | 0.19 | 0.23 | <24 PPM | 0.18 | <95 PPM | | | CLEAN SOIL |
| EX3-2-4-18/19 | 0.06 | 0.36 | <24 PPM | 0.54 | <95 PPM | | | CLEAN SOIL |
| EX3-PX10 | 0.33 | -0.30 | >24 ppm | 0.12 | <95 ppm | | | stock pile |
| EX3-4-6-1/2 | 0.33 | -0.56 | >24 ppm | -0.25 | >95 ppm | | | loadout |
| EX3-4-6-3/4 | 0.33 | -0.23 | >24 ppm | 0.09 | <95 ppm | | | stock pile |
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# Data for PENTA RISC® Soil Test

Operator: PWOMAX Date: 5/20/96 Location: BEAZER EAST, MORRISVILLE, NC

| Sample ID | ΔOD Standards | OD sample 24 ppm | Interpretation | OD sample 95 ppm | Interpretation | OD sample ____ ppm | Interpretation | Comments |
|---|---|---|---|---|---|---|---|---|
| EX3-4-6-3/4 | 0.05 | -0.61 | >24 PPM | -0.51 | >95 PPM | | | REMOVE OFF SITE |
| EX3-PX10 | 0.05 | -0.10 | >24 PPM | 0.45 | <95 PPM | | | STOCKPILE |
| EX3-4-6-1/2 | 0.05 | -0.03 | >24 PPM | -0.00 | >95 PPM | | | REMOVE OFF SITE |
| EX3-4-6-5/6 | 0.04 | -0.25 | >24 PPM | 0.19 | <95 PPM | | | STOCKPILE |
| EX3-4/6-7/8 | 0.04 | -0.48 | >24 PPM | -0.05 | >95 PPM | | | REMOVE OFF SITE |
| EX3-2-4-30/31 | 0.06 | 0.45 | <24 PPM | 0.32 | <95 PPM | | | CLEAN SOIL |
| EX3 2-4-28/29 | 0.06 | 0.81 | <24 PPM | 0.78 | <95 PPM | | | CLEAN SOIL |
| EX3-2-4-32/33 | 0.29 | 0.41 | <24 PPM | 0.22 | <95 PPM | | | CLEAN SOIL |
| EX3-PX9A | 0.11 | 0.41 | <24 PPM | 0.57 | <95 PPM | | | CLEAN SOIL |
| EX3-4-6-9/10 | 0.26 | 0.28 | <24 PPM | 0.22 | <95 PPM | | | CLEAN SOIL |
| EX3-PX10A | 0.26 | 0.01 | <24 PPM | 0.31 | <95 PPM | | | CLEAN SOIL |
| EX1-PX9 | 0.04 | 0.71 | <24 PPM | 0.77 | <95 PPM | | | CLEAN SOIL |
| EX1-4-6-19/20 | 0.04 | 0.53 | <24 PPM | 0.71 | <95 PPM | | | CLEAN SOIL |
| EX1-PX8A | 0.16 | 0.59 | <24 PPM | 0.67 | <95 PPM | | | CLEAN SOIL |
| EX1-4-6-23 | 0.16 | -0.99 | >24 PPM | -0.86 | >95 PPM | | | REMOVE OFF SITE |

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# Data for PENTA RISC® Soil Test

Operator: PWOMAX Date: 5/21/96 Location: DEAKER EAST MORGANTOWN NC

| Sample ID | ΔOD Standards | OD sample 24 ppm | Interpretation | OD sample 95 ppm | Interpretation | OD sample ____ ppm | Interpretation | Comments |
|---|---|---|---|---|---|---|---|---|
| EX3-PXZA | 0.19 | 0.39 | <24PPM | 0.32 | <95PPM | | | CLEAN SOIL |
| EX3-2-4-34/35 | 0.19 | -0.25 | >24PPM | 0.19 | <95PPM | | | MAY HAVE BEEN INTERFERENCE IN SAMPLE, WILL RE-RUN |
| EX3-2-4-34/35R | 0.01 | 0.59 | <24 PPM | 0.29 | <95PPM | | | CLEAN SOIL |
| EX3-4-6-11/12 | 0.01 | 0.56 | <24 PPM | 0.19 | <95 PPM | | | CLEAN SOIL |
| EX3-4-6-13/14 | 0.25 | 0.09 | <24 PPM | 0.48 | <95 PPM | | | CLEAN SOIL |
| EX1-4-6-24 | 0.12 | 0.39 | <24 PPM | 0.13 | <95PPM | | | CLEAN SOIL |
| EX1-2-4-21/22 | 0.29 | 0.35 | <24 PPM | 0.44 | <95 PPM | | | CLEAN SOIL |
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# APPENDIX H

## POST-EXCAVATION SAMPLE LABORATORY RESULTS

QUALITY SPECIALISTS & ENVIRONMENTAL ANALYSTS, INC.

*Prepared For*
*Cummings/Riter Consultants, Inc.*

# *Data Validation Report*
# *Organic Sample Delivery Groups 900, EX1PX5, EX2025, EX3PX2, EX3PX5 and EX3PX9*
# *Generated by CEIMIC Corporation*

# *Organic Sample Delivery Groups 2481, 2488, 2492, 2503, 2508 and 2524*
# *Generated by Alta Analytical Laboratory Inc.*

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*Beazer Superfund Site*
*Morrisville, NC*
*Project No. 93-145*

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*Prepared by QSEA, Inc.*
*July, 1996*

QSEA
113 Goff Mountain Road, Suite 2
Charleston, West Virginia 25313
Phone: 304/776-0400 Fax: 304/776-0403

# INDEX

CEIMIC SDG 900/ALTA SDG 2492 Report. Narrative. . . . . .

CEIMIC SDG EX1PX5/ALTA SDG 2488 Report. Narrative. . . . . .

CEIMIC SDG EX2025/ALTA SDG 2481 Report. Narrative. . . . . .

CEIMIC SDG EX3PX2/ALTA SDG 2508 Report. Narrative. . . . . .

CEIMIC SDG EX3PX5/ALTA SDG 2524 Report. Narrative. . . . . .

CEIMIC SDG EX3PX9/ALTA SDG 2503 Report. Narrative. . . . . .

Data Summary Tables . . . . . .

Edited Form 1s . . . . . .

Support Documentation . . . . . .

## *VALIDATION REPORT NARRATIVE*

### *Data Package Overview*

QSEA, Inc. performed validation of data package 900 generated by CEIMIC Corporation of Narragansett, Rhode Island, and data package 2492 generated by Alta Analytical Laboratory Inc. Results for nine soil samples were validated in accordance with applicable method criteria and validation guidelines *(formal references provided)*. Semivolatile data was subject to a thorough review of raw data, while dioxin/furan data was evaluated for summary information only. Sample matrices, analyses, parameters and associated quality control samples for these data packages is summarized below.

| Entry # | SDG # CEIMIC/Alta | Laboratory ID CEIMIC/Alta | Client Sample ID | QC | Matrix Aq | Matrix Soil | Analyses 8270B SVOAs | Analyses 8290 PCDD/PCDF |
|---|---|---|---|---|---|---|---|---|
| 1 | 900/2492 | 960380-01/2492-0004-SA | 900 | FD | | X | X | X |
| 2 | " | 960380-02/2492-0006-SA | EX2-02-2-17/18 | | | X | X | X |
| 3 | " | 960380-03/2492-0003-SA | EX2-PX6 | | | X | X | X |
| 4 | " | 960380-04/2492-0005-SA | EX2-6-8-1/2 | | | X | X | X |
| 5 | " | 960380-05/2492-0002-SA | EX2-PX2B | FD | | X | X | X |
| 6 | " | 960380-06/2492-0007-SA | EX3-PX3 | | | X | X | X |
| 7 | " | 960380-07/2492-0008-SA | EX3-PX8 | MS/MSD | | X | X | X |
| 8 | " | 960380-08/2492-0009-SA | EX3-2-4-16/17 | | | X | X | X |
| 9 | " | /2492-0001-SA | EX2-0-2-5 | | | X | | X |
| | | | | | | Total Analyses: | 8 | 9 |

**Legend:**

Quality Control

MS/MSD = Matrix Spike/Matrix Spike Duplicate

FD = Field Duplicate

Analyses and Parameters

SVOAs = Pentachlorophenol Semivolatile by SW-846 Method 8270B

PCDD/PCDF = Dioxins and Furans by SW-846 Method 8290

### *Summary of Validation Results and Unsuccessful Analyses*

Semivolatile and dioxin/furan validation performed for data packages 900 and 2492 resulted in data qualification and modification. Validator actions were required based on the following:

Semivolatiles:

Sample results are qualified based on dilutions only.

Dioxins and Furans:

Results are qualified based on dilutions, interferences, and low-level detections. Sample results are modified due to blank contamination.

## *Semivolatile Validation Notes*

Data evaluation was based on review of the following quality control parameters:

- data completeness
- holding times
- GC/MS tuning
- blanks
- internal standards
- field duplicates
- sample handling
- method and parameters
- calibrations
- surrogate recoveries
- matrix spike/matrix spike duplicates
- compound identification, quantitation and detection limits

Results of these evaluations follow, with presentation of validation criteria, package results and required actions.

- *Data Completeness:*

A request for a formal method citation was placed by the validator and this information was provided verbally. Also requested were revised Form 1s, an explanation regarding 10g sample aliquots, and copies of raw data for all calibrations. With these resubmittals, the data package is complete for requirements under a CLP-type deliverable.

- *Sample Handling:*

Sample coolers were confirmed as received intact by the laboratory with a documented receiving temperature of 3° C. Bottles were received in good condition, without breakage or labeling problems. Limited sample volume was provided from the field for sample analysis (1 4-oz jar).

- *Holding Times:*

Sample holding times are summarized in the table below.

| | Dates | | | | |
|---|---|---|---|---|---|
| Sample # | Collection | Shipping | Lab Receipt | Preparation Semivolatiles | Analysis Semivolatiles |
| 900 | 5/15/96 | 5/15/96 | 5/16/96 | 5/16/96 | 5/17/96 |
| EX2-0-2-17/18 | 5/15/96 | 5/15/96 | 5/16/96 | 5/16/96 | 5/17/96 |
| EX2-PX6 | 5/15/96 | 5/15/96 | 5/16/96 | 5/16/96 | 5/17/96 |
| EX2-6-8-1/2 | 5/15/96 | 5/15/96 | 5/16/96 | 5/16/96 | 5/25, 6/01/96 |
| EX2-PX2B | 5/15/96 | 5/15/96 | 5/16/96 | 5/16/96 | 5/17/96 |
| EX3-PX3 | 5/15/96 | 5/15/96 | 5/16/96 | 5/16/96 | 5/17/96 |
| EX3-PX8 | 5/15/96 | 5/15/96 | 5/16/96 | 5/16/96 | 5/17/96 |
| EX3-2-4-16/17 | 5/15/96 | 5/15/96 | 5/16/96 | 5/16/96 | 5/17/96 |

Package samples were collected 5/15/96, with semivolatile preparation performed 5/16/96 and analyses performed by 6/01/96. Samples were prepared and analyzed within the method criteria of 14 days for extraction and 40 days for analysis. Qualification of data was not required based on holding times.

- *Methods and Parameters:*

The field chain of custody references "Pentachlorophenol" under analyses and does not provide a specific method reference. The laboratory employed SW-846 method 8270B to report this analyte only. Tentatively identified compounds (TICs) were not reported nor requested. The client has confirmed the method and reporting procedure to be acceptable.

- *GC/MS Tuning:*

Tune reports for performance check solutions associated with initial and continuing calibrations were provided in the data package (seven tunes for three instruments). All ion abundance criteria were acceptable with the correct peak used for normalization. All samples associated with a given tune were injected and the runs completed within a 12-hour window. Qualification was not required based on tunings.

- *Calibrations:*

Initial calibration and continuing calibration data was provided as associated with package samples and QC samples. Five concentrations (10, 20, 50, 80, 120 and 160 ug/L) were analyzed to generate the initial curve. Five levels of response factors for pentachlorophenol were reported.

Initial calibration results were evaluated in terms of pentachlorophenol RRF values and %RSD results. Results were within the method criteria with acceptable responses and linearity. The lowest average RRF associated was 0.134 and the highest RSD was 11.89%.

Continuing calibrations were evaluated for RRF values and precision. The lowest RRF was 0.125 and the greatest %D was 18.8%. The continuing calibrations were not used for result quantification, rather the response factors applied were from the initial curve. The continuing calibrations served to demonstrate stability and were acceptable.

Calibration frequency criteria was met, with each standard associated with samples run within 12 hours. Recalculations were performed for RRF, RSD and %D values with results documented on validation forms attached. Qualification was not applied based on calibrations.

- *Blanks:*

The batch method blank was identified as SBLKAC (S0516-B1). This blank was non-detect for pentachlorophenol and acceptable. Field blanks were not identified by the client for this data package. Modification of project data was not necessary based on this blank review.

- *Surrogates:*

Method-recommended surrogates were added to each sample, QC sample, blank and standard, as required. Surrogates were within limits for recovery and acceptable. Qualification was not applied to the samples based on surrogate results.

- *Internal Standards:*

Internal standard results were reported for each analysis. Results for phenanthrene-d10 were reviewed for adherence to retention time shift criteria (<30 seconds) and response difference (-50 to +100%). All results were acceptable.

- *Matrix Spike/Matrix Spike Duplicate:*

Matrix spike sets were analyzed as follows: EX3-PX8MS/MSD. All results were within limits for recovery and precision. The sample was a field sample and representative of the batch matrix. Results are unqualified based on matrix spike review.

- *Laboratory Control Samples:*

A low-level soil laboratory control sample was prepared and analyzed with this batch. All results were acceptable with a recovery range of 60.88-85.14%.

- *Field Duplicate:*

Field duplicates were identified as field samples 900 and EX2-PX2B. Results for each sample were non-detect for pentachlorophenol. Field duplicates are not required by the method, and project requirements for field duplicate collection frequency and precision are not known by the validator.

- *Compound Identification, Quantitation and Detection Limits:*

All samples were run as low-level determinations utilizing only 10g of sample. Laboratory-reported quantitation limits and positive results have been appropriately corrected for moisture and sample weight. Sample EX2-0-2-17/18 required a 2x dilution due to the concentration exceeding the calibrated range. This result is qualified as estimated.

Total ion chromatograms and scans were reviewed to confirm detections. Recalculation of positive pentachlorophenol results was performed for each sample. The recalculated results agreed with laboratory-reported detections.

## *Dioxin and Furan Validation Notes*

Data evaluation was based on review of the following quality control parameters:

- data completeness
- holding times
- blanks
- internal standards
- field duplicates
- compound detection limits
- sample handling
- method and parameters
- surrogate recoveries
- laboratory control sample and duplicate
- matrix spike and duplicate

Results of these evaluations follow, with presentation of validation criteria, package results and required actions.

- *Data Completeness:*

Data package 2492 was complete for all required laboratory deliverables under a QC Summary-type package.

- *Sample Handling:*

Samples were received with a documented cooler temperature of 1° C. Containers were received intact and properly labeled.

- *Holding Times:*

Sample holding times are summarized in the table below.

| | Dates | | | | |
|---|---|---|---|---|---|
| Sample # | Collection | Shipping | Lab Receipt | Preparation PCDD/PCDF | Analysis PCDD/PCDF |
| 900 | 5/15/96 | 5/15/96 | 5/16/96 | 5/17/96 | 5/21/96 |
| EX2-0-2-17/18 | 5/15/96 | 5/15/96 | 5/16/96 | 5/17/96 | 5/21, 5/22/96 |
| EX2-PX6 | 5/15/96 | 5/15/96 | 5/16/96 | 5/17/96 | 5/21/96 |
| EX2-6-8-1/2 | 5/15/96 | 5/15/96 | 5/16/96 | 5/17/96 | 5/21/96 |
| EX2-PX2B | 5/15/96 | 5/15/96 | 5/16/96 | 5/17/96 | 5/20, 5/21/96 |
| EX3-PX3 | 5/15/96 | 5/15/96 | 5/16/96 | 5/17/96 | 5/21/96 |
| EX3-PX8 | 5/15/96 | 5/15/96 | 5/16/96 | 5/17/96 | 5/21, 5/22, 5/23/96 |
| EX3-2-4-16/17 | 5/15/96 | 5/15/96 | 5/16/96 | 5/17/96 | 5/21, 5/22/96 |
| EX2-0-2-5 | 5/15/96 | 5/15/96 | 5/16/96 | 5/17/96 | 5/20, 5/21, 5/22/96 |

Package samples were extracted and analyzed within method holding time criteria which dictates extraction within 30 days and complete analysis within 45 days. Qualification was not necessary based on holding time review.

- *Methods and Parameters:*

The field chain of custody references method 8290. The laboratory employed the referenced method of SW-846 8290.

- *Calibrations:*

Calibration data was not available for review of this reduced deliverable package.

- *Blanks:*

Method blanks are the only type of blanks associated with this data package. Method blank 2491-0001-MB was prepared the same day as batch samples. This solid blank was appropriate for the batch matrix and was prepared with a similar sample size. Method blank results and action limits are summarized in the table below.

| Blank ID | Blank Detections | Blank Conc (ppb) | Action Limit | Associated Samples | Action |
|---|---|---|---|---|---|
| 2492-0001 | 1,2,3,4,6,7,8-HpCDD | 22 pg/g | 110 pg/g | All | Modify |
| | Total HpCDD | 35 pg/g | 175 pg/g | All | Modify |
| | OCDD | 130 pg/g | 650 pg/g | All | None |
| | 1,2,3,4,6,7,8-HpCDF | 2.6 pg/g | 13 pg/g | All | Modify |
| | Total HpCDF | 14 pg/g | 70 pg/g | All | Modify |
| | OCDF | 6.7 pg/g | 33.5 pg/g | All | Modify |

Method blank frequency was acceptable, with a blank prepared with the extraction batch. Blank internal standards and recovery standards ranged from 69-90% and were within the required limits of 40-135%. Sample detections less than the action limit are modified for five analytes based on method blank review.

- *Internal Standards:*

Internal standards were added to each sample, QC sample and blank, as required. Results were reviewed for overall recovery. Results ranged from 40-134% and were within the tolerance limits of 40-135%.

- *Laboratory Control Sample and Duplicate:*

The batch LCS and LCS duplicate are identified as laboratory identification numbers 2492-0001-LCS1/LCS2. Overall LCS recoveries ranged from 80-111%, and overall LCS duplicate recoveries ranged from 82-168%. Precision results were 44RPD or less in all cases. The method requirement for RPD values of 25 or less was met with these analyte RPDs being 2.5% or less.

- *Field Duplicate:*

Field duplicates were identified by the client as samples 900 and EX2-PX2B. Results are summarized below.

| Analyte | Sample Conc. | Duplicate Conc. | RPD |
|---|---|---|---|
| 2,3,7,8-TCDD | ND | 0.87 | NC |
| Total TCDD | 0.9 | 6.6 | 1.52 |
| 1,2,3,7,8-PeCDD | 2.7 | 5.4 | 66 |
| Total PeCDD | 11 | 35 | 104 |
| 1,2,3,4,7,8-HxCDD | 6.2 | 11 | 56 |
| 1,2,3,6,7,8-HxCDD | 33 | 51 | 43 |
| 1,2,3,7,8,9-HxCDD | 8.8 | 20 | 78 |
| Total HxCDD | 120 | 200 | 50 |
| 1,2,3,4,6,7,8-HpCDD | 1100 | 1400 | 24 |
| Total HpCDD | 2100 | 2200 | 4.6 |
| OCDD | 21000 | 19000 | 1.0 |
| Total TCDF | 3.2 | 6.4 | 67 |
| 1,2,3,7,8-PeCDF | 0.32 | 0.74 | 79 |
| 2,3,4,7,8-PeCDF | 0.7 | 3.2 | 128 |
| Total PeCDF | 23 | 62 | 92 |
| 1,2,3,4,7,8-HxCDF | 4.6 | 8.6 | 61 |
| 1,2,3,6,7,8-HxCDF | 1.5 | 3.9 | 89 |
| 2,3,4,6,7,8-HxCDF | 4.2 | 8.4 | 67 |
| 1,2,3,7,8,9-HxCDF | 1.2 | 1.5 | 22 |
| Total HxCDF | 190 | 370 | 64 |
| 1,2,3,4,6,7,8-HpCDF | 160 | 220 | 32 |
| 1,2,3,4,7,8,9-HpCDF | 9.8 | 12 | 20 |
| Total HpCDF | 920 | 1200 | 26 |
| OCDF | 1800 | 760 | 81 |

Field duplicates are not required by the method, and project requirements for field duplicate collection frequency and precision are not known by the validator. The precision data is provided for informational purposes, however qualification has not been applied to the project data.

- *Matrix Spike and Duplicate:*

The batch matrix spike was performed using sample EX3-PX8. Recovery values ranged from 82-112% for the matrix spike and from 84-135% for the matrix spike duplicate. Precision values were 25RPD or less in all cases. Recoveries were not determined for 1,2,3,4,6,7,8-HpCDD, OCDD, 1,2,3,4,6,7,8-HpCDF or OCDF due to high native concentrations of these analytes in the sample. The method requirement for MS/MSD RPD values of 20% or less for 2,3,7,8 analytes was met with these analyte precision values being 2.4% or less.

- *Compound Detection Limits:*

Results were reported for each sample for analysis. Correlation between specific analyte detections and total analyte results were good. Laboratory-reported quantitation levels were elevated due to extraction of a 10g sample. Qualification is applied to batch data due to dilutions, low-level detections and interferences. Result modification is applied due to blank contamination.

## *VALIDATION REPORT NARRATIVE*

### *Data Package Overview*

QSEA, Inc. performed validation of data package EX1PX5 generated by CEIMIC Corporation of Narragansett, Rhode Island, and data package 2488 generated by Alta Analytical Laboratory Inc. Results for 16 soil samples were validated in accordance with applicable method criteria and validation guidelines *(formal references provided)*. Both fractions were subject to a review of summarized data only. Sample matrices, analyses, parameters and associated quality control samples for these data packages is summarized below.

| Entry # | SDG # CEIMIC/Alta | Laboratory ID CEIMIC/Alta | Client Sample ID | QC | Matrix Aq | Matrix Soil | Analyses 8270B SVOAs | Analyses 8290 PCDD/PCDF |
|---|---|---|---|---|---|---|---|---|
| 1 | EX1PX5/2488 | 960378-01/2488-0001-SA | EX1-PX5 | | | X | X | X |
| 2 | " | 960378-02/2488-0002-SA | EX1-PX6 | MS/MSD | | X | X | X |
| 3 | " | 960378-03/2488-0003-SA | EX1-PX7 | | | X | X | X |
| 4 | " | 960378-04/2488-0004-SA | EX2-PX3R | | | X | X | X |
| 5 | " | 960378-05/2488-0005-SA | EX2PX4R – EX2-PX4R | | | X | X | X |
| 6 | " | 960378-06/2488-0006-SA | EX2-PX5 | | | X | X | X |
| 7 | " | 960378-07/ | STP-3 | | | X | X | |
| 8 | " | 960378-08/2488-0007-SA | EX3-PX1 | | | X | X | X |
| 9 | " | 960378-09/2488-0008-SA | EX3-PX4 | | | X | X | X |
| 10 | " | 960378-10/2488-0009-SA | EX3-PX5 | | | X | X | X |
| 11 | " | 960378-11/2488-0010-SA | EX3-PX6 | | | X | X | X |
| 12 | " | 960378-12/2488-0011-SA | EX3-PX7 | | | X | X | X |
| 13 | " | 960378-13/ | STP-4 | | | X | X | |
| 14 | " | 960378-14/ | STP-5 | | | X | X | |
| 15 | " | 960378-15/2488-0012-SA | EX1-4-6-4 | | | X | X | X |
| 16 | " | 960378-16/2488-0013-SA | EX3-0-2-14/15 | | | X | X | X |
| | | | | | | Total Analyses: | 16 | 13 |

**Legend:**

Quality Control

MS/MSD = Matrix Spike/Matrix Spike Duplicate

Analyses and Parameters

SVOAs = Pentachlorophenol Semivolatile by SW-846 Method 8270B

PCDD/PCDF = Dioxins and Furans by SW-846 Method 8290

### *Summary of Validation Results and Unsuccessful Analyses*

Semivolatile and dioxin/furan validation performed for data packages EX1PX5 and 2488 resulted in data qualification. Result estimations were required based on the following:

Semivolatiles:

Sample results are qualified due to outlying internal standards.

Dioxins and Furans:

Results are qualified due to dilutions, interference and low-level detections.

## *Semivolatile Validation Notes*

Data evaluation was based on review of the following quality control parameters:

- data completeness
- holding times
- GC/MS tuning
- blanks
- internal standards
- field duplicates
- sample handling
- method and parameters
- calibrations
- surrogate recoveries
- matrix spike/matrix spike duplicates
- compound detection limits

Results of these evaluations follow, with presentation of validation criteria, package results and required actions.

- *Data Completeness:*

A request was placed by the validator for a specific method reference. This information was provided in a timely manner. This data package was complete for minimal requirements under a QC Summary-type deliverable.

- *Sample Handling:*

Sample coolers were confirmed as received intact by the laboratory with a documented receiving temperature of 5° C. Bottles were received in good condition, without breakage or labeling problems. Limited sample volume was provided from the field for sample analysis (1 4-oz jar).

- *Holding Times:*

Sample holding times are summarized in the table below.

| | Dates | | | | |
|---|---|---|---|---|---|
| Sample # | Collection | Shipping | Lab Receipt | Preparation Semivolatiles | Analysis Semivolatiles |
| EX1-PX5 | 5/14/96 | 5/14/96 | 5/15/96 | 5/15/96 | 5/16/96 |
| EX1-PX6 | 5/14/96 | 5/14/96 | 5/15/96 | 5/15/96 | 5/16/96 |
| EX1-PX7 | 5/14/96 | 5/14/96 | 5/15/96 | 5/15/96 | 5/16/96 |
| EX2-PX3R | 5/13/96 | 5/14/96 | 5/15/96 | 5/15/96 | 5/16/96 |
| EX2-PX4R | 5/13/96 | 5/14/96 | 5/15/96 | 5/15/96 | 5/16/96 |
| EX2-PX5 | 5/14/96 | 5/14/96 | 5/15/96 | 5/15/96 | 5/16/96 |
| STP-3 | 5/14/96 | 5/14/96 | 5/15/96 | 5/15/96 | 5/16/96 |
| EX3-PX1 | 5/13/96 | 5/14/96 | 5/15/96 | 5/15/96 | 5/16, 5/17/96 |
| EX3-PX4 | 5/14/96 | 5/14/96 | 5/15/96 | 5/15/96 | 5/16/96 |
| EX3-PX5 | 5/14/96 | 5/14/96 | 5/15/96 | 5/15/96 | 5/16/96 |
| EX3-PX6 | 5/14/96 | 5/14/96 | 5/15/96 | 5/15/96 | 5/16/96 |
| EX3-PX7 | 5/14/96 | 5/14/96 | 5/15/96 | 5/15/96 | 5/16/96 |
| STP-4 | 5/14/96 | 5/14/96 | 5/15/96 | 5/15/96 | 5/16, 5/17/96 |
| STP-5 | 5/14/96 | 5/14/96 | 5/15/96 | 5/15/96 | 5/16/96 |
| EX1-4-6-4 | 5/14/96 | 5/14/96 | 5/15/96 | 5/15/96 | 5/16/96 |
| EX3-0-2-14/15 | 5/14/96 | 5/14/96 | 5/15/96 | 5/15/96 | 5/16/96 |

Package samples were collected 5/13 and 5/14/96, with semivolatile preparation performed 5/15/96 and analysis performed by 5/17/96. Samples were prepared and analyzed within the method criteria of 14 days for extraction and 40 days for analysis. Qualification of data was not required based on holding times.

- *Methods and Parameters:*

The field chain of custody references "Pentachlorophenol" under analyses and does not provide a specific method reference. The laboratory employed SW-846 method 8270B to report this analyte only. Tentatively identified compounds (TICs) were not reported nor requested. The client has confirmed this method and reporting procedure to be acceptable.

- *GC/MS Tuning:*

Tune reports for performance check solutions associated with initial and continuing calibrations were provided in the data package (10 tunes for four instruments). All ion abundance criteria were acceptable with the correct peak used for normalization. All samples associated with a given tune were injected and the runs completed within a 12-hour window. Qualification was not required based on tunings.

- *Calibrations:*

Initial calibration and continuing calibration data was provided as associated with package samples and QC samples. Five concentrations (10, 20, 50, 80, 120 and 160 ug/L) were analyzed to generate the initial curve. Five levels of response factors for pentachlorophenol were reported.

Initial calibration results were evaluated in terms of pentachlorophenol %RSD results and RRFs. The highest RSD was 11.89% and the lowest RRF was 0.134 acceptable.

Continuing calibrations were evaluated for RRF values and precision. The lowest RRF was 0.141 and the greatest %D was 18.7%. The continuing calibrations were not used for result quantification, rather the response factors applied were from the initial curve. The continuing calibrations served to demonstrate stability and were acceptable.

Calibration frequency criteria was met, with each standard associated with samples run within 12 hours. Qualification was not applied based on calibrations.

- *Blanks:*

Method blanks are identified as SBLKIQ for soils and SBLKAC for waters. Both blanks were non-detect for pentachlorophenol. Field blanks were not identified by the client for this package.

- *Surrogates:*

Method-recommended surrogates were added to each sample, QC sample, blank and standard, as required. All recoveries were within specified limits. Qualification was not applied to the samples based on surrogate results.

- *Internal Standards:*

Internal standard results were reported for each analysis. Phenanthrene-d10 results were reviewed for adherence to retention time shift criteria (<30 seconds) and response difference (-50 to +100%). Outlying results are summarized below.

| Sample | IS <LL | Action |
|---|---|---|
| EX3-PX7 | PHN | J, UJ |

Results for sample EX3-PX7 are qualified as estimated based on the low result for the associated internal standard.

- *Matrix Spike/Matrix Spike Duplicate:*

Matrix spike sets were analyzed as follows: EX1-PX7MS/MSD. This matrix spike is a field sample which is appropriate for use as a matrix spike. All recovery and precision results were within acceptable limits.

- *Laboratory Control Samples:*

Low-level soil LCSs were analyzed with each batch. These quality control checks are identified as S0516-LCS1 (5/16/96) and S0515-LCS2 (5/15/96). Results were within limits for recovery in all cases.

- *Field Duplicate:*

Field duplicates were not identified by the client for this package. Field duplicates are not required by the method, and project requirements for field duplicate collection frequency and precision are not known by the validator.

- *Compound Detection Limits:*

All samples were run as low-level determinations. Sample EX3-PX1 required a 5x dilution and sample STP-4 required a 10x dilution. These results are reported as estimated. Sample EX3-PX7 is qualified due to poor recovery of the internal standard used to quantify pentachlorophenol. Laboratory-reported quantitation limits and positive results have been appropriately corrected for moisture and 10g sample preparation aliquots.

## *Dioxin and Furan Validation Notes*

Data evaluation was based on review of the following quality control parameters:

- data completeness
- holding times
- blanks
- internal standards
- field duplicates
- compound detection limits
- sample handling
- method and parameters
- surrogate recoveries
- laboratory control sample and duplicate
- matrix spike and duplicate

Results of these evaluations follow, with presentation of validation criteria, package results and required actions.

- *Data Completeness:*

Data package 2488 was complete for all required laboratory deliverables under the QC Summary-type deliverable format.

- *Sample Handling:*

Samples were received with a documented cooler temperature of 1° C. Samples were received intact and properly labeled.

- *Holding Times:*

Sample holding times are summarized in the table below.

| | Dates | | | | |
|---|---|---|---|---|---|
| Sample # | Collection | Shipping | Lab Receipt | Preparation PCDD/PCDF | Analysis PCDD/PCDF |
| EX1-PX5 | 5/14/96 | 5/14/96 | 5/15/96 | 5/16/96 | 5/19/96 |
| EX1-PX6 | 5/14/96 | 5/14/96 | 5/15/96 | 5/16/96 | 5/19/96 |
| EX1-PX7 | 5/14/96 | 5/14/96 | 5/15/96 | 5/16/96 | 5/19/96 |
| EX2-PX3R | 5/13/96 | 5/14/96 | 5/15/96 | 5/16/96 | 5/19, 5/20/96 |
| EX2-PX4R | 5/13/96 | 5/14/96 | 5/15/96 | 5/16/96 | 5/19, 5/20/96 |
| EX2-PX5 | 5/14/96 | 5/14/96 | 5/15/96 | 5/16/96 | 5/19/96 |
| EX3-PX1 | 5/13/96 | 5/14/96 | 5/15/96 | 5/16/96 | 5/20/96 |
| EX3-PX4 | 5/14/96 | 5/14/96 | 5/15/96 | 5/16/96 | 5/20, 5/21/96 |
| EX3-PX5 | 5/14/96 | 5/14/96 | 5/15/96 | 5/16/96 | 5/20, 5/21, 5/22/96 |
| EX3-PX6 | 5/14/96 | 5/14/96 | 5/15/96 | 5/16/96 | 5/20, 5/21/96 |
| EX3-PX7 | 5/14/96 | 5/14/96 | 5/15/96 | 5/16/96 | 5/21/96 |
| EX1-4-6-4 | 5/14/96 | 5/14/96 | 5/15/96 | 5/16/96 | 5/21/96 |
| EX3-0-2-14/15 | 5/14/96 | 5/14/96 | 5/15/96 | 5/16/96 | 5/20, 5/21/96 |

Package samples were extracted and analyzed within method holding time criteria which dictates extraction within 30 days and complete analysis within 45 days. Qualification was not necessary based on holding time review.

- *Methods and Parameters:*

The field chain of custody references method 8290. The laboratory employed SW-846 method 8290.

- *Calibrations and Tunes:*

The data package did not have calibration or tune data included.

- *Blanks:*

Method blanks are the only type of blanks associated with this data package. Method blank 2488-0001-MB was prepared with batch samples 5/16/96 and analyzed 5/19/96. The appropriate sample matrix (soil) was represented by the associated method blank. Method blank results, limits and actions are summarized in the table below.

| Blank ID | Blank Detections | Blank Conc (ppb) | Action Limit | Associated Samples | Action |
|---|---|---|---|---|---|
| 2488-0001 | OCDD | 0.56 pg/g | 2.8 pg/g | All | None |

Method blank frequency was acceptable, with one blank prepared with the batch. Blank internal standards and recovery standards were within control limits with values of 64-100%. Field blanks were not identified by the client for this package. Qualification is not necessary based on blank review.

- *Internal Standards:*

Internal standards were added to each sample, QC sample and blank, as required. Results were reviewed for adherence to response criteria. The range for all internal standards was 36-129%; however, the range for 2,3,7,8-substituted compounds was 72-99% and within the method required range of 40-135%. Results are not qualified based on internal standard review.

- *Laboratory Control Sample and Duplicate:*

The batch LCS and LCS duplicate are identified as laboratory identification numbers 2488-0001-LCS1 and 2488-0001-LCS2. LCS recoveries ranged from 87-111%, and LCS duplicate recoveries ranged from 86-111%. Precision results were 2.8RPD or less in all cases. All results were within the method limit of 25RPD.

- *Field Duplicate:*

Field duplicates were not identified for this package. Field duplicates are not required by the method and project requirements for field duplicate collection frequency and precision are not known by the validator.

- *Matrix Spike and Duplicate:*

The batch matrix spike was performed using sample EX1-PX5. Recovery values ranged from 80-134% for the matrix spike and from 81-117% for the matrix spike duplicate. Precision values were 38RPD or less in all cases. Recoveries were not determined for 1,2,3,4,6,7,8-HpCDD and OCDD due to high native concentrations of these analytes in the sample. The method requirement for MS/MSD RPD values of 20% or less for 2,3,7,8 analytes was met with these analyte precision values being 11% or less.

- *Compound Detection Limits:*

Results were reported for each sample for analysis. Correlation between specific analyte detections and total analyte results were good. Laboratory-reported quantitation levels were good in comparison to method recommendations. Data is reported with qualification based on low-level detections, interference, and dilutions.

## *VALIDATION REPORT NARRATIVE*

### *Data Package Overview*

QSEA, Inc. performed validation of data package EX2025 generated by CEIMIC Corporation of Narragansett, Rhode Island, and data package 2481 generated by Alta Analytical Laboratory Inc. Results for 7 soil samples were validated in accordance with applicable method criteria and validation guidelines *(formal references provided)*. Both fractions were subject to review of summarized data only. Sample matrices, analyses, parameters and associated quality control samples for these data packages is summarized below.

| Entry # | SDG # CEIMIC/Alta | Laboratory ID CEIMIC/Alta | Client Sample ID | QC | Matrix Aq | Matrix Soil | Analyses 8270B SVOAs | Analyses 8290 PCDD/PCDF |
|---|---|---|---|---|---|---|---|---|
| 1 | EX2025/2481 | 960375-01/ | EX2-0-2-5/6 | | | X | X | |
| 2 | " | 960375-02/ | EX1-4-6-1/2 | MS/MSD | | X | X | |
| 3 | " | 960375-03/2481-0001-SA | EX1-PX2 | | | X | X | X |
| 4 | " | 960375-04/2481-0002-SA | EX1-PX3 | | | X | X | X |
| 5 | " | 960375-05/2481-0003-SA | EX1-PX4 | | | X | X | X |
| 6 | " | 960375-07/ | STP-1 | | | X | X | |
| 7 | " | 960375-08/ | STP-2 | | | X | X | |
| 8 | " | /2481-0004-SA | EX1-6-8-BTM* | | | X | | |
| | | | | | | Total Analyses: | 7 | 3 |

**Legend:**

Quality Control
MS/MSD = Matrix Spike/Matrix Spike Duplicate

Other
* = Analysis Cancelled by Client

Analyses and Parameters
SVOAs = Pentachlorophenol Semivolatile by SW-846 Method 8270B
PCDD/PCDF = Dioxins and Furans by SW-846 Method 8290

### *Summary of Validation Results and Unsuccessful Analyses*

Semivolatile and dioxin/furan validation performed for data packages EX2025 and 2481 resulted in data qualification. Validator actions were required based on the following:

Semivolatiles:
Sample results are unqualified based on validator review.

Dioxins and Furans:
Sample results are estimated due to interferences and low-level detections.

## *Semivolatile Validation Notes*

Data evaluation was based on review of the following quality control parameters:

- data completeness
- holding times
- GC/MS tuning
- blanks
- internal standards
- field duplicates
- sample handling
- method and parameters
- calibrations
- surrogate recoveries
- matrix spike/matrix spike duplicates
- compound detection limits

Results of these evaluations follow, with presentation of validation criteria, package results and required actions.

- *Data Completeness:*

A request was placed by the validator for a specific method reference only. This information was provided in a timely manner. With this notation, the data package was complete in accordance with a QC Summary-type package.

- *Sample Handling:*

Sample coolers were confirmed as received intact by the laboratory with a documented receiving temperature of 4° C. Bottles were received in good condition, without breakage or labeling problems. Sample volumes were limited with only a single 4-oz jar submitted for each sampling location.

- *Holding Times:*

Sample holding times are summarized in the table below.

| | Dates | | | | |
|---|---|---|---|---|---|
| Sample # | Collection | Shipping | Lab Receipt | Preparation Semivolatiles | Analysis Semivolatiles |
| EX2-0-2-5/6 | 5/9/96 | 5/13/96 | 5/14/96 | 5/14/96 | 5/15/96 |
| EX1-4-6-1/2 | 5/9/96 | 5/13/96 | 5/14/96 | 5/14, 5/16/96 for MS | 5/15, 5/17/96 |
| EX1-PX2 | 5/13/96 | 5/13/96 | 5/14/96 | 5/14/96 | 5/15/96 |
| EX1-PX3 | 5/13/96 | 5/13/96 | 5/14/96 | 5/14/96 | 5/15/96 |
| EX1-PX4 | 5/13/96 | 5/13/96 | 5/14/96 | 5/14/96 | 5/15/96 |
| STP-1 | 5/13/96 | 5/13/96 | 5/14/96 | 5/14/96 | 5/15/96 |
| STP-2 | 5/13/96 | 5/13/96 | 5/14/96 | 5/14/96 | 5/15/96 |

Package samples were collected 5/9 and 5/13/96, with semivolatile preparation performed 5/14 and 5/16/96, and analysis performed by 5/17/96. Samples were prepared and analyzed within the method criteria of 14 days for extraction and 40 days for analysis. Qualification of data was not required based on holding times.

- *Methods and Parameters:*

The field chain of custody references the analyte to be reported and not the method of analysis to be employed. The laboratory utilized method SW-846 8270B for analysis of pentachlorophenol only. The client has confirmed this method and reporting procedure to be acceptable.

- *GC/MS Tuning:*

Tune reports for performance check solutions associated with initial and continuing calibrations were provided in the data package (five tunes for two instruments). All ion abundance criteria were acceptable with the correct peak used for normalization. All samples associated with a given tune were injected and the runs completed within a 12-hour window. Qualification was not required based on tunings.

- *Calibrations:*

Initial calibration and continuing calibration data was provided as associated with package samples and QC samples. Five concentrations (10, 20, 50, 80, 120 and 160 ug/L) were analyzed to generate the initial curve. Five levels of pentachlorophenol were reported on the initial calibration summary form with RSD and RRF values provided.

Initial calibration results were evaluated in terms of the RRF and RSD values for pentachlorophenol. The RSD results were acceptable with values of 11.89 or less. The RRF results were also acceptable with a minimum value of 0.134.

Continuing calibrations were also evaluated for RRF and %D values. Percent difference values were 16.3% or less in all cases, and response factors were 0.159 or greater.

The quantitations were performed utilizing the average response factor from the initial curve, rather than the daily response factor. The continuing calibrations served to verify initial calibration curve validity. Calibration frequency was acceptable with a standard run within 12-hours of the sample run completion. Results are not qualified based on calibration review.

- *Blanks:*

The method blanks associated with this data package are identified as SBLKDC and SBLKAC. These method blanks were solid matrix which is consistent with the batches prepared. Both blanks were non-detect for pentachlorophenol. Field blanks were not identified by the client for this package. Modification of project data was not necessary based on this blank review.

- *Surrogates:*

Method-recommended surrogates were added to each sample, QC sample, blank and standard, as required. Outliers are summarized below.

| Sample | Surrogate | Recovery |
|---|---|---|
| SLCS01 | PHL | 0% |

All sample, blank and other quality control results were acceptable for surrogate recovery. This outlying LCS was prepped with all package samples except the MS/MSD. All spike recoveries for this LCS (including pentachlorophenol) were acceptable, with the exclusion of the single acid surrogate. All samples are positive for pentachlorophenol and qualification was not applied based on the single surrogate.

- *Internal Standards:*

Internal standard results were reported for each analysis. Results were reviewed for adherence to retention time shift criteria (<30 seconds) and response difference (-50 to +100%). All results were within tolerance limits for recovery.

- *Matrix Spike/Matrix Spike Duplicate:*

Matrix spike sets were analyzed as follows: EX1-4-6-1/2MS/MSD. This sample is a field sample of solid matrix and appropriate for use as a matrix spike. All results were within limits for precision and recovery with ranges of 59-81% for recovery, and RPDs of 6 or less.

- *Laboratory Control Samples:*

Laboratory control samples were identified as S0514-LCS3 and S0516-LCS1. All results were within recovery specifications with ranges of 33-56% for S0514-LCS3, and 60-85% for S0516-LCS1.

- *Field Duplicate:*

Field duplicates were not identified by the client for this package.

- *Compound Detection Limits:*

All samples were run as low-level determinations without dilution. Laboratory-reported quantitation limits and positive results have been appropriately corrected for sample size (10g) and moisture. Data is unqualified based on validator review.

***Dioxin and Furan Validation Notes***

Data evaluation was based on review of the following quality control parameters:

- data completeness
- holding times
- blanks
- internal standards
- field duplicates
- compound detection limits
- sample handling
- method and parameters
- surrogate recoveries
- laboratory control sample and duplicate
- matrix spike and duplicate

Results of these evaluations follow, with presentation of validation criteria, package results and required actions.

- *Data Completeness:*

Data package 2481 was complete for all required laboratory deliverables under the QC Summary-type format.

- *Sample Handling:*

Samples were received from the field with a documented cooler temperature of 5° C. Samples were received intact and properly labeled.

- *Holding Times:*

Sample holding times are summarized in the table below.

| | Dates | | | | |
|---|---|---|---|---|---|
| Sample # | Collection | Shipping | Lab Receipt | Preparation PCDD/PCDF | Analysis PCDD/PCDF |
| EX1-PX2 | 5/13/96 | 5/13/96 | 5/14/96 | 5/14/96 | 5/16/96 |
| EX1-PX3 | 5/13/96 | 5/13/96 | 5/14/96 | 5/14/96 | 5/16/96 |
| EX1-PX4 | 5/13/96 | 5/13/96 | 5/14/96 | 5/14/96 | 5/16/96 |

Package samples were extracted and analyzed within method holding time criteria which dictates extraction within 30 days and complete analysis within 45 days. Qualification was not necessary based on holding time review.

- *Methods and Parameters:*

The field chain of custody references method 8290 for analysis. The laboratory employed SW-846 method 8290.

- *Calibrations and Tunes:*

Calibration and tune data was not included in the data package.

- *Blanks:*

Method blank extracted with package samples was 2481-0001-MB. This blank was solid and appropriate for the batch matrix. All results were non-detect for the method blank and internal standards ranged from 67-112%. Field blanks were not identified by the client for this package. Sample data is unchanged based on blank review.

- *Internal Standards:*

Internal standards were added to each sample, QC sample and blank, as required. Results were reviewed for adherence to response criteria. Overall recoveries ranged from 46-129%; however, 2,3,7,8-substituted analytes were within method criteria with values of 70-93%.

- *Laboratory Control Sample and Duplicate:*

The batch LCS and LCS duplicate are identified as laboratory identification numbers 2481-0001-LCS1 and 2488-0001-LCS2. LCS recoveries ranged from 87-111%, and LCS duplicate recoveries ranged from 86-111%. Precision results were 2.8RPD or less in all cases. All results were within the method limit of 25RPD.

- *Field Duplicate:*

Field duplicates were not identified for this package.

- *Compound Detection Limits:*

Results were not reported for sample EX1-6-8-BTM (laboratory identification number 2481-0004-SA). This sample was submitted from the field but cancelled after being logged in by the laboratory. Correlation between specific analyte detections and total analyte results were good. Laboratory-reported quantitation levels were good in comparison to method recommendations. Data is qualified due to low-level detections and interferences.

## *VALIDATION REPORT NARRATIVE*

### *Data Package Overview*

QSEA, Inc. performed validation of data package EX3PX2 generated by CEIMIC Corporation of Narragansett, Rhode Island, and data package 2508 generated by Alta Analytical Laboratory Inc. Results for four soil samples were validated in accordance with applicable method criteria and validation guidelines *(formal references provided)*. Sample matrices, analyses, parameters and associated quality control samples for these data packages is summarized below.

| Entry # | SDG # CEIMIC/Alta | Laboratory ID CEIMIC/Alta | Client Sample ID | QC | Matrix Aq | Matrix Soil | Analyses 8270B SVOAs | Analyses 8290 PCDD/PCDF |
|---|---|---|---|---|---|---|---|---|
| 1 | EX3PX2/2508 | 960393-01/2508-0001-SA | EX3-PX2A | | | X | X | X |
| 2 | " | 960393-02/ | STP-10 | MS/MSD | | X | X | |
| 3 | " | 960393-03/ | STP-11 | | | X | X | |
| 4 | " | 960393-04/ | STP-12 | | | X | X | |
| | | | | | | Total Analyses: | 4 | 1 |

**Legend:**

Quality Control

MS/MSD = Matrix Spike/Matrix Spike Duplicate

Analyses and Parameters

SVOAs = Pentachlorophenol Semivolatile by SW-846 Method 8270B

PCDD/PCDF = Dioxins and Furans by SW-846 Method 8290

### *Summary of Validation Results and Unsuccessful Analyses*

Semivolatile and dioxin/furan validation performed for data packages EX3PX2 and 2508 resulted in data qualification and modification. Validator actions were required based on the following:

Semivolatiles:

Sample results are qualified due to outlying dilutions. Results are modified due to contaminated blanks.

Dioxins and Furans:

Data is qualified due to low-level detections and poor LCS precision.

## *Semivolatile Validation Notes*

Data evaluation was based on review of the following quality control parameters:

- data completeness
- holding times
- GC/MS tuning
- blanks
- internal standards
- field duplicates
- sample handling
- method and parameters
- calibrations
- surrogate recoveries
- matrix spike/matrix spike duplicates
- compound detection limits

Results of these evaluations follow, with presentation of validation criteria, package results and required actions.

- *Data Completeness:*

A request was placed by the validator for a specific method reference. This information was provided in a timely manner. With this notation, the package is complete for minimal requirements under a QC Summary-type deliverable.

- *Sample Handling:*

Sample coolers were confirmed as received intact by the laboratory with a documented receiving temperature of $10^{o}$ C. Bottles were received in good condition, without breakage or labeling problems. Limited sample volume was provided from the field for analysis (1 4-oz jar).

- *Holding Times:*

Sample holding times are summarized in the table below.

| | Dates | | | | |
|---|---|---|---|---|---|
| Sample # | Collection | Shipping | Lab Receipt | Preparation Semivolatiles | Analysis Semivolatiles |
| EX3-PX2A | 5/21/96 | 5/21/96 | 5/22/96 | 5/22/96 | 5/23/96 |
| STP-10 | 5/21/96 | 5/21/96 | 5/22/96 | 5/22/96 | 5/23, 6/01/96 |
| STP-11 | 5/21/96 | 5/21/96 | 5/22/96 | 5/22/96 | 5/23, 6/01/96 |
| STP-12 | 5/21/96 | 5/21/96 | 5/22/96 | 5/22/96 | 5/23, 6/01/96 |

Package samples were collected 5/21/96, with semivolatile preparation performed 5/22/96 and analysis performed by 6/01/96. Samples were prepared and analyzed within the method criteria of 14 days for extraction and 40 days for analysis. Qualification of data was not required based on holding times.

- *Methods and Parameters:*

The field chain of custody references "Pentachlorophenol" under analyses and does not provide a specific method reference. The laboratory employed SW-846 method 8270B to report this analyte only. Tentatively identified compounds (TICs) were not reported nor requested. The client has confirmed this method and reporting procedure to be acceptable.

- *GC/MS Tuning:*

Tune reports for performance check solutions associated with initial and continuing calibrations were provided in the data package (five tunes for two instruments). All ion abundance criteria were acceptable with the correct peak used for normalization. All samples associated with a given tune were injected and the runs completed within a 12-hour window. Qualification was not required based on tunings.

- *Calibrations:*

Initial calibration and continuing calibration data was provided as associated with package samples and QC samples. Five concentrations (10, 20, 50, 80, 120 and 160 ug/L) were analyzed to generate the initial curve. Five levels of response factors for pentachlorophenol were reported.

Initial calibration results were evaluated in terms of pentachlorophenol %RSD results and RRFs. The highest RSD was 6.32% and the lowest RRF was 0.134 and acceptable.

Continuing calibrations were evaluated for RRF values and precision. The lowest RRF was 0.124 and the greatest %D was 18.8%. The continuing calibrations were not used for result quantification, rather the response factors applied were from the initial curve. The continuing calibrations served to demonstrate stability and were acceptable.

Calibration frequency criteria was met, with each standard associated with samples run within 12 hours. Qualification was not applied based on calibrations.

- *Blanks:*

Method blank results, action limits and required changes are summarized in the table below.

| Blank ID | Blank Detections | Blank Conc (ppb) | Action Limit | Associated Samples | Action |
|---|---|---|---|---|---|
| SBLKIB | Pentachlorophenol | 310 J | 1550 | All except MS/MSD | Modify |
| SBLKAP | None | NA | NA | MS/MSD | None |

Results are modified for samples EX3-PX2A and STP-10 due to method blank contamination. Field blanks were not identified by the client for this package.

- *Surrogates:*

Method-recommended surrogates were added to each sample, QC sample, blank and standard, as required. All results were acceptable.

- *Internal Standards:*

Internal standard results were reported for each analysis. Phenanthrene-d10 results were reviewed for adherence to retention time shift criteria (<30 seconds) and response difference (-50 to +100%). Outlying results are summarized below.

| Sample | IS <LL | Action |
|---|---|---|
| SLCS02 | PHN | None |
| STP-10MS | PHN | None |

The internal standard responses were evaluated for possible impact on project samples. The internal standards were acceptable for all batch samples and other quality control. These outlying samples were analyzed on the MS1 instrument and the problem may be instrument specific. Sample results were not qualified based on the outlying internal standards in the LCS and MS. The laboratory had confirmed their policy not to perform reanalysis for SW-846 samples based on outlying internal standard results.

- *Matrix Spike/Matrix Spike Duplicate:*

Matrix spike sets were analyzed as follows: STP-10MS/MSD. Outlying spike recoveries and precision values are shown below.

| Analyte | MS/MSD %Recovery | RPD |
|---|---|---|
| Pentachlorophenol | 96/-231 | 69 |

Additional outliers were found for spiked compounds other than pentachlorophenol. These results would warrant qualification of the STP-10 sample; however, the result for this sample have been modified due to blank contamination. Further qualification was not applied.

- *Laboratory Control Samples:*

LCS samples were prepared with each extraction batch. Results were within recovery limits in all cases.

- *Field Duplicate:*

Field duplicates were not identified by the client for this package. Field duplicates are not required by the method, and project requirements for field duplicate collection frequency and precision are not known by the validator.

- *Compound Detection Limits:*

All samples were run as low-level determinations. Dilutions were required for samples STP-10 (10x), STP-11 (20x), and STP-12 (5x). Laboratory-reported quantitation limits or positive results have been appropriately corrected for 10g sample size, dilutions and solid weight. All results are estimated due to dilutions, or modified based on blank detections.

## *Dioxin and Furan Validation Notes*

Data evaluation was based on review of the following quality control parameters:

- data completeness
- holding times
- blanks
- internal standards
- field duplicates
- compound detection limits
- sample handling
- method and parameters
- surrogate recoveries
- laboratory control sample and duplicate
- matrix spike and duplicate

Results of these evaluations follow, with presentation of validation criteria, package results and required actions.

- *Data Completeness:*

Data package 2508 was complete for all required laboratory deliverables under the QC Summary-type format. The report cover page and chain of custody incorrectly identified the package as 2503, rather than 2508.

- *Sample Handling:*

Samples were received from the field with a documented cooler temperature of 2° C. Samples were received intact and properly labeled.

- *Holding Times:*

Sample holding times are summarized in the table below.

| | Dates | | | | |
|---|---|---|---|---|---|
| Sample # | Collection | Shipping | Lab Receipt | Preparation PCDD/PCDF | Analysis PCDD/PCDF |
| EX3-PX2A | 5/21/96 | 5/21/96 | 5/22/96 | 5/22/96 | 5/24/96 |

Package samples were extracted and analyzed within method holding time criteria which dictates extraction within 30 days and complete analysis within 45 days. Qualification was not necessary based on holding time review.

- *Methods and Parameters:*

The field chain of custody references method 8290 and the laboratory employed SW-846 method 8290.

- *Calibrations and Tunes:*

Raw data review was not scheduled for this data package.

- *Blanks:*

The method blank associated with this data package is 2508-0001-MB. The appropriate sample matrix (soil) was represented by the associated method blank. Method blank results, limits and required actions are summarized in the table below.

| Blank ID | Blank Detections | Blank Conc | Action Limit | Associated Samples | Action |
|---|---|---|---|---|---|
| 2508-0001 | OCDD | 2.6 pg/g | 13 pg/g | All | None |

The single sample detection of OCDD greatly exceeded the action limit; therefore, modification of data was not required. Field blanks were not identified by the client for this package.

- *Internal Standards:*

Internal standards were added to each sample, QC sample and blank, as required. Results were reviewed for adherence to response criteria. Overall batch values ranged from 72-139%, and 2,3,7,8-substituted values ranged from 84-118%. All values were within the tolerance limits for each criteria.

- *Laboratory Control Spike and Laboratory Control Spike Duplicate:*

The batch LCS and LCS duplicate are identified as laboratory identification numbers 2508-0001-LCS1 and 2508-0001-LCS2. LCS recoveries ranged from 70-90%, and LCS duplicate recoveries ranged from 86-112%. Precision results were 25RPD or less in all cases except 2,3,7,8-TCDF (27RPD). Results for this analyte are qualified as estimated.

- *Matrix Spike and Duplicate:*

A batch matrix spike was not reported with the data package.

- *Field Duplicate:*

A field duplicate was not submitted with the single field sample.

- *Compound Detection Limits:*

Results were reported for the single sample submitted and batched as SDG 2508. Correlation between specific analyte detections and total analyte results were good. Laboratory-reported quantitation levels were elevated based on the five gram sample weight. Data is qualified due to low-level detections and poor LCS precision.

## *VALIDATION REPORT NARRATIVE*

### *Data Package Overview*

QSEA, Inc. performed validation of data package EX3PX5 generated by CEIMIC Corporation of Narragansett, Rhode Island, and data package 2524 generated by Alta Analytical Laboratory Inc. Results for two soil samples were validated in accordance with applicable method criteria and validation guidelines *(formal references provided)*. Sample matrices, analyses, parameters and associated quality control samples for these data packages is summarized below.

| Entry # | SDG # CEIMIC/Alta | Laboratory ID CEIMIC/Alta | Client Sample ID | QC | Matrix | | Analyses | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Aq | Soil | 8270B SVOAs | 8290 PCDD/PCDF |
| 1 | EX3PX5 | 960408-01/2524-0001-SA | EX3-PX5A | | | X | X | X |
| 2 | " | 960408-02/2524-0002-SA | EX3-2-4-34/35 | | | X | X | X |
| | | | | | | Total Analyses: | 2 | 2 |

**Legend:**

Analyses and Parameters

SVOAs = Pentachlorophenol Semivolatile by SW-846 Method 8270B

PCDD/PCDF = Dioxins and Furans by SW-846 Method 8290

### *Summary of Validation Results and Unsuccessful Analyses*

Semivolatile and dioxin/furan validation performed for data packages EX3-PX5 and 2524 resulted in data qualification. Validator actions were required based on the following:

Semivolatiles:

Sample results were reported unchanged following validator review.

Dioxins and Furans:

Laboratory-reported quantitation levels were elevated in comparison to method recommendations due to the 5g sample size. Data is qualified due to dilutions, interferences and low-level detections.

## *Semivolatile Validation Notes*

Data evaluation was based on review of the following quality control parameters:

- data completeness
- holding times
- GC/MS tuning
- blanks
- internal standards
- field duplicates
- sample handling
- method and parameters
- calibrations
- surrogate recoveries
- matrix spike/matrix spike duplicates
- compound detection limits

Results of these evaluations follow, with presentation of validation criteria, package results and required actions.

- *Data Completeness:*

A request was placed by the validator for a specific method reference and this information was provided. With this notation, the package is complete for minimal requirements under a QC Summary-type deliverable.

- *Sample Handling:*

Sample coolers were confirmed as received intact by the laboratory with a documented receiving temperature of 4° C. Bottles were received in good condition, without breakage or labeling problems. Limited sample volume was provided from the field for analysis (1 4-oz jar).

- *Holding Times:*

Sample holding times are summarized in the table below.

| | Dates | | | | |
|---|---|---|---|---|---|
| Sample # | Collection | Shipping | Lab Receipt | Preparation Semivolatiles | Analysis Semivolatiles |
| EX3-2-4-34/35 | 5/29/96 | 5/29/96 | 5/30/96 | 5/30/96 | 5/30/96 |
| EX3-PX5A | 5/29/96 | 5/29/96 | 5/30/96 | 5/30/96 | 5/30/96 |

Package samples were collected 5/29/96, with semivolatile preparation performed 5/30/96 and analysis performed 5/30/96. Samples were prepared and analyzed within the method criteria of 14 days for extraction and 40 days for analysis. Qualification of data was not required based on holding times.

- *Methods and Parameters:*

The field chain of custody references "Pentachlorophenol" under analyses and does not provide a specific method reference. The laboratory employed SW-846 method 8270B to report this analyte only. Tentatively identified compounds (TICs) were not reported nor requested. The client has confirmed this method and reporting procedure to be acceptable.

- *GC/MS Tuning:*

Tune reports for performance check solutions associated with initial and continuing calibrations were provided in the data package (two tunes for instrument MS9). All ion abundance criteria were acceptable with the correct peak used for normalization. All samples associated with a given tune were injected and the runs completed within a 12-hour window. Qualification was not required based on tunings.

- *Calibrations:*

Initial calibration and continuing calibration data was provided as associated with package samples and QC samples. Five concentrations (10, 20, 50, 80, 120 and 160 ug/L) were analyzed to generate the initial curve. Five levels of response factors for pentachlorophenol were reported.

The initial calibration was evaluated in terms of pentachlorophenol %RSD and RRF results. The RSD was 6.32 and the lowest RRF was 0.139 and acceptable.

The continuing calibration was evaluated for the RRF value and precision. The RRF for pentachlorophenol was 0.134 and the %D value was 12.5%. The continuing calibration was not used for result quantification, rather the response factor applied was from the initial curve. The continuing calibration served to demonstrate stability only.

Calibration frequency criteria was met, with each standard associated with samples run within 12 hours. Qualification was not applied based on calibrations.

- *Blanks:*

The batch method blank was identified as SBLKIJ and was prepared with package samples. This blank was free of pentachlorophenol detection. Field blanks were not identified for this package.

- *Surrogates:*

Method-recommended surrogates were added to each sample, QC sample, blank and standard, as required. All recoveries were acceptable; therefore, data qualification was not necessary based on validator review.

- *Internal Standards:*

Internal standard results were reported for each analysis. Results were reviewed for adherence to retention time shift criteria (<30 seconds) and response difference (-50 to +100%). Outlying results are summarized below.

| Sample | IS <LL | Action |
|---|---|---|
| EX3-PX5A | CRY | None |

The low recovery for Chrysene-d12 was inconsequential to the pentachlorophenol analyte of interest. Data is unqualified based on this outlier.

- *Matrix Spike/Matrix Spike Duplicate:*

A matrix spike set was not reported with this data package.

- *Laboratory Control Samples:*

A low-level soil laboratory control sample was prepared and analyzed with this batch. This sample was identified as SLCS01 (laboratory identification number S0530-LCS1). Outlying results are shown below.

| Analyte | %Recovery |
|---|---|
| Phenol | 91.63% |
| 2,4-Dinitrotoluene | 89.58% |

Both outlying surrogates were slightly above the upper recovery limit. The pentachlorophenol detection was within range and qualification was not deemed necessary for batch samples.

- *Field Duplicate:*

A field duplicate was not identified for this package. Field duplicates are not required by the method, and project requirements for field duplicate collection frequency and precision are not known by the validator.

- *Compound Detection Limits:*

Both samples were analyzed as low-level determinations without dilution, and results were within the calibrated range. Laboratory-reported quantitation limits are raised due to use of 10g samples for extraction. Sample EX3-PX5A was flagged as estimated by the laboratory due to reporting of the pentachlorophenol below the quantitation limit. Additional qualification of data was not performed by the validator.

## *Dioxin and Furan Validation Notes*

Data evaluation was based on review of the following quality control parameters:

- data completeness
- holding times
- blanks
- internal standards
- field duplicates
- compound detection limits
- sample handling
- method and parameters
- surrogate recoveries
- laboratory control sample and duplicate
- matrix spike and duplicate

Results of these evaluations follow, with presentation of validation criteria, package results and required actions.

- *Data Completeness:*

Data package 2524 was complete for all required laboratory deliverables under the QC Summary-type format.

- *Sample Handling:*

Samples were received from the field with a documented cooler temperature of 1° C. Samples were received intact and properly labeled. Only five grams of sample were prepared and analyzed. Preparation and cleanup steps were documented on laboratory process sheets provided in the data package.

- *Holding Times:*

Sample holding times are summarized in the table below.

| | Dates | | | | |
|---|---|---|---|---|---|
| Sample # | Collection | Shipping | Lab Receipt | Preparation PCDD/PCDF | Analysis PCDD/PCDF |
| EX3-PX5A | 5/29/96 | 5/29/96 | 5/30/96 | 6/2/96 | 6/3, 6/5/96 |
| EX3-2-4-34/35 | 5/29/96 | 5/29/96 | 5/30/96 | 6/2/96 | 6/3, 6/5/96 |

Package samples were extracted and analyzed within method holding time criteria which dictates extraction within 30 days and complete analysis within 45 days. Qualification was not necessary based on holding time review.

- *Methods and Parameters:*

The field chain of custody references 8290; the laboratory employed SW-846 method 8290.

- *Calibrations and Tunes:*

Calibration and tune raw data review was not scheduled for this package.

- *Blanks:*

Method blank 2524-0001-MB is associated with batch 2524. The appropriate sample matrix (soil) was represented by the associated method blank. Detections, action limits and required flags are summarized in the table below.

| Blank ID | Blank Detections | Blank Conc | Action Limit | Associated Samples | Action |
|---|---|---|---|---|---|
| 2524-0001 | OCDD | 3.8 pg/g | 19 pg/g | All | None |

Associated sample detections greatly exceeded the action limit for the blank contaminant. Modification of data was not necessary based on blank review. Field blanks were not identified by the client for data package 2524.

- *Internal Standards:*

Internal standards were added to each sample, QC sample and blank, as required. Results were reviewed for adherence to recovery criteria. Overall values ranged from 81-113%, and 2,3,7,8-substituted compounds ranged from 90-108%. All values were within the tolerance limits for recovery.

- *Laboratory Control Spike and Laboratory Control Spike Duplicate:*

The batch LCS and LCS duplicate are identified as laboratory identification numbers 2524-0001-LCS1 and 2524-0001-LCS2. Recoveries ranged from 92-114 for LCS1, and from 90-114% for LCS2. RPD values were 4.9 or less and within the method specification.

- *Field Duplicate:*

A field duplicate was not identified by the client for this package.

- *Compound Detection Limits:*

Results were reported for each sample submitted. Correlation between specific analyte detections and total analyte results were good. Laboratory-reported quantitation levels were elevated in comparison to method recommendations due to the 5g sample size. Data is qualified due to dilutions, interferences and low-level detections.

## *VALIDATION REPORT NARRATIVE*

### *Data Package Overview*

QSEA, Inc. performed validation of data package EX3PX9 generated by CEIMIC Corporation (CEIMIC) of Narragansett, Rhode Island, and data package 2503 generated by Alta Analytical Laboratory Inc. (Alta). Results for one aqueous and 10 soil samples were validated in accordance with applicable method criteria and validation guidelines *(formal references provided)*. The dioxin/furan data was subject to a thorough validation as defined in the EPA functional guidelines, and semivolatile data was reviewed for a reduced set of validation criteria, as defined in the project quality assurance plan. Sample matrices, analyses, parameters and associated quality control samples for these data packages is summarized below.

| Entry # | SDG # CEIMIC/Alta | Laboratory ID CEIMIC/Alta | Client Sample ID | QC | Matrix Aq | Matrix Soil | Analyses 8270B SVOAs | Analyses 8290 PCDD/PCDF |
|---|---|---|---|---|---|---|---|---|
| 1 | EX3PX9/2503 | 960390-01/2503-0001-SA | EX3-PX9A | MS/MSD | | X | X | X |
| 2 | EX3PX9/2503 | 960390-02/2503-0003-SA | 901 | FD | | X | X | X |
| 3 | EX3PX9/2503 | 960390-03/2503-0004-SA | EX1-PX9 | | | X | X | X |
| 4 | EX3PX9/2503 | 960390-04/2503-0006-SA | EX1-4-6-19/20 | | | X | X | X |
| 5 | EX3PX9/2503 | 960390-05/2503-0002-SA | EX1-PX8A | | | X | X | X |
| 6 | EX3PX9/2503 | 960390-06/2503-0005-SA | EX3-PX10A | FD | | X | X | X |
| 7 | EX3PX9/ | 960390-07/ | STP-6 | | | X | X | |
| 8 | EX3PX9/ | 960390-08/ | STP-7 | | | X | X | |
| 9 | EX3PX9/ | 960390-09/ | STP-8 | | | X | X | |
| 10 | EX3PX9/ | 960390-10/ | STP-9 | | | X | X | |
| 11 | EX3PX9/2503 | 960390-11/2503-0007-SA | EQB-1 | EB | X | | X | X |
| | | | | | | Total Analyses: | 11 | 7 |

**Legend:**

Quality Control
EB = Equipment Blank
MS/MSD = Matrix Spike/Matrix Spike Duplicate
FD = Field duplicate

Analyses and Parameters
SVOAs = Pentachlorophenol Semivolatile by SW-846 Method 8270B
PCDD/PCDF = Dioxins and Furans by SW-846 Method 8290

### *Summary of Validation Results and Unsuccessful Analyses*

Semivolatile and dioxin/furan validation performed for CEIMIC EX3PX9 and Alta 2503 data packages resulted in data qualification and modification. Validator actions were required based on the following:

Semivolatiles:
Sample data is qualified based on outlying internal standards, dilutions and low-level reporting.

Dioxins and Furans:
Results for dioxins and furans are qualified as estimated based on dilutions, low-level detections and interferences.

## *Semivolatile Validation Notes*

Data evaluation was based on review of the following quality control parameters:

- data completeness
- holding times
- GC/MS tuning
- blanks
- internal standards
- field duplicates
- sample handling
- method and parameters
- calibrations
- surrogate recoveries
- matrix spike/matrix spike duplicates
- compound detection limits

Results of these evaluations follow, with presentation of validation criteria, package results and required actions.

- *Data Completeness:*

Requests were placed by the validator for a specific method reference. This information was provided in a timely manner With this notation, the package is complete for minimal requirements under a QC Summary-type deliverable.

- *Sample Handling:*

Sample coolers were confirmed as received intact by the laboratory with a documented receiving temperature of 13° C. Bottles were received in good condition, without breakage or labeling problems Sample volumes provided from the field were single 4-oz jars for each sampling point.

- *Holding Times:*

Sample holding times are summarized in the table below.

| | Dates | | | | |
|---|---|---|---|---|---|
| Sample # | Collection | Shipping | Lab Receipt | Preparation Semivolatiles | Analysis Semivolatiles |
| EX3-PX9A | 5/20/96 | 5/20/96 | 5/21/96 | 5/21/96 | 5/22/96 |
| 901 | 5/20/96 | 5/20/96 | 5/21/96 | 5/21/96 | 5/24/96 |
| EX1-PX9 | 5/20/96 | 5/20/96 | 5/21/96 | 5/21/96 | 5/22/96 |
| EX1-4-6-19/20 | 5/20/96 | 5/20/96 | 5/21/96 | 5/21/96 | 5/22/96 |
| EX1-PX8A | 5/20/96 | 5/20/96 | 5/21/96 | 5/21/96 | 5/22/96 |
| EX3-PX10A | 5/20/96 | 5/20/96 | 5/21/96 | 5/21/96 | 5/22, 5/24/96 |
| STP-6 | 5/20/96 | 5/20/96 | 5/21/96 | 5/21/96 | 5/22, 6/01/96 |
| STP-7 | 5/20/96 | 5/20/96 | 5/21/96 | 5/21/96 | 5/22, 6/01/96 |
| STP-8 | 5/20/96 | 5/20/96 | 5/21/96 | 5/21/96 | 5/22, 6/01/96 |
| STP-9 | 5/20/96 | 5/20/96 | 5/21/96 | 5/21/96 | 5/22/96 |
| EQB-1 | 5/20/96 | 5/20/96 | 5/21/96 | 5/21/96 | 5/24/96 |

Package samples were collected 5/20/96, with semivolatile preparation performed 5/21/96 and analyses performed by 6/01/96. Samples were prepared and analyzed within the method criteria of 14 days for extraction and 40 days for analysis. Qualification of data was not required based on holding times.

- *Methods and Parameters:*

The field chain of custody references the analyte to be reported and not the method of analysis. The laboratory employed method 8270B and the client has confirmed this method to be acceptable. The only analyte reported by this method was pentachlorophenol, without non-target analytes. This reporting procedure also was in accordance with client specifications.

- *GC/MS Tuning:*

Tune reports for performance check solutions associated with initial and continuing calibrations were provided in the data package (eight tunes for three instruments). All ion abundance criteria were acceptable with the correct peak used for normalization. All samples associated with a given tune were injected and the runs completed within a 12-hour window. Qualification was not required based on tunings.

- *Calibrations:*

Initial calibration and continuing calibration data was provided as associated with package samples and QC samples. Five concentrations (20, 50, 80, 120 and 160 ug/L) were analyzed to generate the initial curve for pentachlorophenol. Five levels of response factors were also reported for this analyte.

Initial calibration results were evaluated in terms of the RRF values and %RSD results. Results for pentachlorophenol were within limits with RRF values of 0.138 or greater and RSDs of 11.89% or less.

Continuing calibrations were also evaluated for RRF values and %D results. A maximum %D of 20.9% was calculated for the MS10 instrument. Although it is favorable to have all percent difference values at 20 or less, this slight exceedances does not qualify data. The daily calibration factors were not used for quantitation; instead, the initial calibration average response factor was applied to all sample quantitations.

- *Blanks:*

Method blanks were identified as SBLKIZ (solid) and SBLKIK (aqueous). Both package matrices were represented by these blanks and the method blanks were free of pentachlorophenol detections.

A field blank was submitted with batch samples and is identified as EQB-1. This aqueous sample was also free of pentachlorophenol detection. Modification of project data was not necessary based on this blank review.

- *Surrogates:*

Method-recommended surrogates were added to each sample, QC sample, blank and standard, as required. Outliers are summarized below.

| Sample | Surrogate | Recovery |
|---|---|---|
| STP-7 | TBP | 148% |

The sample run with the outlying surrogate was not used for data reporting by the validator since the detected analyte exceeded the curve and diluted run data was available. Qualification was not applied to the samples based on surrogate results.

- *Internal Standards:*

Internal standard results were reported for each analysis. Results were reviewed for adherence to retention time shift criteria (<30 seconds) and response difference (-50 to +100%). Outlying results are summarized below.

| Sample | IS <LL | Action |
|---|---|---|
| EX1-PX8A | PHN | Flag |
| SLCS01 | PHN | None |
| SBLKIZ | PHN | None |
| STP-7DL | PHN | Flag |

Samples EX1-PX9 and STP-7DL are qualified due to outlying internal standards which are associated with the reported pentachlorophenol analyte of interest. All remaining sample internal standards were acceptable; therefore, qualification was not applied based on LCS and blank outliers.

- *Matrix Spike/Matrix Spike Duplicate:*

Matrix spike sets were analyzed as follows: EX3-PX9AMS/MSD. This matrix spike is a true field sample and therefore appropriate for use. All results were acceptable for recovery and precision with ranges of 58-89% for recovery and RPD values of 21 or less.

- *Laboratory Control Samples:*

Low-level soil and aqueous laboratory control samples were prepared and analyzed with each respective batch. The soil LCS is identified as S0521-LCS3 and the aqueous LCS is identified as S0521-LCS5. Outlying results for the aqueous LCS are shown below.

| Analyte | %Recovery |
|---|---|
| 1,2,4-Trichlorobenzene | 52.90% |

The outlying LCS value did not qualify data since the pentachlorophenol spikes were acceptable in all cases.

- *Field Duplicate:*

Field duplicates were identified as field samples 901 and EX3-PX10A. Results are summarized below.

| Analyte | Sample Conc. | Duplicate Conc. | RPD |
|---|---|---|---|
| Pentachlorophenol | 11000 | 75000 J | 149 |

Field duplicates are not required by the method, and project requirements for field duplicate collection frequency and precision are not known by the validator. The precision data is provided for informational purposes, however qualification has not been applied to the project data.

- *Compound Detection Limits:*

All samples were run as low-level determinations, however dilutions were required for most solid samples: 901 (2x), EX3-PX10ADL (10x), STP-6DL (400x), STP-7DL (400x), and STP-8DL (200x). All samples were prepared using approximately 10 gram sample weights which served to raise the quantitation limits. Sample data is qualified based on outlying internal standards, dilutions and low-level reporting.

## *Dioxin and Furan Validation Notes*

Data evaluation was based on review of the following quality control parameters:

- data completeness
- holding times
- calibrations
- internal standards
- field duplicates
- sample handling
- method and parameters
- blanks
- laboratory control spike and duplicate
- compound identification, quantitation and detection limits

Results of these evaluations follow, with presentation of validation criteria, package results and required actions.

- *Data Completeness:*

Data package 2503 was complete for all required laboratory deliverables under the requested CLP-type format.

- *Sample Handling:*

Samples were received from the field with a documented cooler temperature of 10° C. Samples were received intact and properly labeled. A single 4-oz jar was provided for each solid sample. Samples were prepared using five gram aliquots rather than the customary 10 grams due to the possibility of high detections and limited sample availability. Sample extracts were subject to partitioning, silica, alumina and carbon column cleanup. All steps of sample preparation are documented and initialed on the extraction and cleanup form. All concentration equipment and glassware was purposefully isolated to avoid laboratory contamination.

- *Holding Times:*

Sample holding times are summarized in the table below.

| | Dates | | | | |
|---|---|---|---|---|---|
| Sample # | Collection | Shipping | Lab Receipt | Preparation PCDD/PCDF | Analysis PCDD/PCDF |
| EX3-PX9A | 5/20/96 | 5/20/96 | 5/21/96 | 5/21/96 | 5/24/96 |
| EX1-PX8A | 5/20/96 | 5/20/96 | 5/21/96 | 5/21/96 | 5/24/96 |
| 901 | 5/20/96 | 5/20/96 | 5/21/96 | 5/21/96 | 5/24/96 |
| EX1-PX9 | 5/20/96 | 5/20/96 | 5/21/96 | 5/21/96 | 5/24/96 |
| EX3-PX10A | 5/20/96 | 5/20/96 | 5/21/96 | 5/21/96 | 5/24, 5/25 & 5/28/96 |
| EX1-4-6-19/20 | 5/20/96 | 5/20/96 | 5/21/96 | 5/21/96 | 5/24/96 |
| EQB-1 | 5/17/96 | 5/20/96 | 5/21/96 | 5/21/96 | 5/24/96 |

Package samples were extracted and analyzed within method holding time criteria which dictates extraction within 30 days and complete analysis within 45 days. Qualification was not necessary based on holding time review.

- *Methods and Parameters:*

The field chain of custody references method 8290, specifically, and the report narrative confirms this method as being employed for batch samples. The aqueous batch extraction log references an EPA 1613A method of preparation, however this notation is not of consequence.

- *Calibrations:*

Initial calibration raw data files were provided for the 04/29/96 calibration of instrument VG-3 column DB-5 for all reported analytes, as well as the 05/28/96 calibration of instrument VG-3 column DB-225 for TCDF analytes. Raw calibration verification files were provided for two runs performed 05/24/96 on the DB-5 column, and one run performed 05/28/96 on the DB-225 column. Initial calibration RSD values, calculated for six levels of calibration standards, did not exceed 7.94%. All response factors were 0.70 or greater. Routine calibration procedures were evaluated in terms of the method frequency requirements and were found to be acceptable. All samples and quality control were processed within the required time frame, relative to standardization.

- *Blanks:*

Method blanks and a field blank are associated with this data package. The solid method blank is identified as laboratory identification number 2503-0001-MB of QC lot LC0522S; and the aqueous method blank is identified as lab ID number 2503-007-MB of QC lot LC0523A.

Method blank results, action limits and required actions are summarized in the table below.

| Blank ID | Blank Detections | Blank Conc | Action Limit | Associated Samples | Action |
|---|---|---|---|---|---|
| 2503-0001-MB | OCDD | 2.6 pg/g | 13 pg/g | All SDG Soils | None |
| 2503-0007-MB | OCDD | 12 pg/l | 60 pg/l | EQB-1 | Modify |

Field blank results, action limits and required actions are summarized in the table below.

| Blank ID | Blank Detections | Blank Conc | Action Limit | Associated Samples | Action |
|---|---|---|---|---|---|
| EQB-1 | OCDD | 21 pg/l | 105 pg/l | All | Negated |

Method blank frequency was acceptable, with one blank prepared with each extraction batch. Field blank collection requirements are not known by the validator. Method and field blank internal standards and recovery standards were within control limits. The aqueous method blank detection of OCDD negated the field blank detection; the field blank result is modified to "concentration found U". All other field sample detections greatly exceeded the action limit for qualification. The solid method blank internal standard recovery for 1,2,3,6,7,8-HxCDD exceeded the upper limit of 135% with a value of 139%. This sample was non-detect for associated analytes and further qualification of data was not necessary.

- *Internal Standards:*

Internal standards were added to each sample, QC sample and blank, as required. Results were reviewed for area response differences. All values were within the tolerance limits of 40-135% with the exception of the following:

| Sample | IS >UL | Action |
|---|---|---|
| 2503-0001-MB | 13C-1,2,3,6,7,8-HxCDD | None |

Qualification of non-detect results was not warranted based on this high standard recovery. Cleanup recovery standard results were acceptable with a range of 78-96%. Data is unqualified based on internal standard review.

- *Laboratory Control Spike and Laboratory Control Spike Duplicate:*

Lab control samples were prepared and analyzed for soil and aqueous matrices, as required. The solid LCS is identified as laboratory identification number 2503-0001-LCS1/LCS2 for QC lot LC0522S. The aqueous LCS is identified as lab ID number 2503-0007-LCS1/LCS2 for QC lot LC0523A. Recoveries ranged from 70-112% for the solid LCS, and from 81-111% for the aqueous LCS. Precision results were 27RPD or less for the solid, and 3.7RPD or less for the aqueous determinations. Only TCDF exceeded the 25RPD tolerance limit established in the method. Qualification was not warranted based on the five gram sample size and high concentrations.

- *Field Duplicate:*

Field duplicates are identified as samples 901 and EX3-PX10A. Results are summarized below.

| Analyte | Sample Conc. | Duplicate Conc. | RPD |
|---|---|---|---|
| 2,3,7,8-TCDD | 1.9 | 1.0 | 63 |
| Total TCDD | 7.6 | 1.0 | 153 |
| 1,2,3,7,8-PeCDD | 27 | 8.4 | 106 |
| Total PeCDD | 90 | 18 | 133 |
| 1,2,3,4,7,8-HxCDD | 59 | 20 | 99 |
| 1,2,3,6,7,8-HxCDD | 480 | 170 | 95 |
| 1,2,3,7,8,9-HxCDD | 120 | 36 | 108 |
| Total HxCDD | 1400 | 490 | 96 |
| 1,2,3,4,6,7,8-HpCDD | 13000 | 4700 | 94 |
| Total HpCDD | 19000 | 6900 | 93 |
| OCDD | 100000 | 43000 | 80 |
| 2,3,7,8-TCDF | 1.2 | 0.45 | 91 |
| Total TCDF | 30 | 12 | 86 |
| 1,2,3,7,8-PeCDF | 4.1 | 1.3 | 104 |
| 2,3,4,7,8-PeCDF | 6.5 | 2.2 | 99 |
| Total PeCDF | 260 | 79 | 107 |
| 1,2,3,4,7,8-HxCDF | 51 | 17 | 100 |
| 1,2,3,6,7,8-HxCDF | 30 | 10 | 100 |
| 2,3,4,6,7,8-HxCDF | 53 | 18 | 99 |
| 1,2,3,7,8,9-HxCDF | 7.6 | 2.5 | 101 |
| Total HxCDF | 2100 | 780 | 92 |
| 1,2,3,4,6,7,8-HpCDF | 2500 | 890 | 95 |
| 1,2,3,4,7,8,9-HpCDF | 140 | 46 | 101 |
| Total HpCDF | 13000 | 4400 | 99 |
| OCDF | 13000 | 4900 | 91 |

Project requirements for field duplicate collection frequency and precision are not known by the validator; however the overall agreement between these field samples is poor. The precision data is provided for informational purposes and qualification has not been applied to the project data.

- *Compound Identification, Quantitation and Detection Limits:*

Results were reported for each sample submitted for analysis. Sample EX3PX10A was analyzed three times due to high detections. Diluted run results were recombined with original run data and reported as a single data set for the sample. Concentrations detected but below the method calibration limit were reported by the laboratory. Interference by chlorinated diphenyl ether was also noted by the laboratory. These results may be biased high and have been qualified as estimated by the validator. Diluted and low-level detections are also qualified as estimated.

Correlation between specific analyte detections and total analyte results were good. Laboratory-reported quantitation levels were good in comparison to method recommendations. Quantitation limits were elevated due to the limited sample size, however the project reporting requirements were met.

# DATA SUMMARY TABLES

# GLOSSARY OF VALIDATION CODES

**Per 1994 National Functional Guidelines**

## *ORGANIC CODES*

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

N - The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification".

NJ - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

UR/R - The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

## *INORGANIC CODES*

U - The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

J - The associated value is an estimated quantity.

UR/R - The data is unusable. (Note: Analyte may or may not be present.)

UJ - The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

## *QSEA COLOR CODES*

[ ] - Positive Detect

[ ] - Changed by Validator

[ ] - Positive Detect Changed by Validator

SDG 900/2492

TABLE 900/2492 - A
SEMIVOLATILES by SW-846 METHOD 8270B
DATA SUMMARY TABLE

VALIDATED DATA FOR
CUMMINGS/RITER CONSULTANTS, INC.
BEAZER SUPERFUND SITE

SAMPLE DATA PACKAGE 900
CEIMIC CORPORATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | SAMPLE ID | 900 | | EX2-0-2-17/18 | | EX2-6-8-1/2DL | | EX2-PX2B | |
| | LAB SAMPLE ID | 960380-01 | | 960380-02 | | 960380-04DL | | 960380-05 | |
| | DATE COLLECTED | 05/15/96 | | 05/15/96 | | 05/15/96 | | 05/15/96 | |
| | DATE EXTRACTED | 05/16/96 | | 05/16/96 | | 05/16/96 | | 05/16/96 | |
| | DATE ANALYZED | 05/17/96 | | 05/17/96 | | 06/01/96 | | 05/17/96 | |
| | SAMPLE MATRIX | SOIL | | SOIL | | SOIL | | SOIL | |
| | DILUTION FACTOR | 1.0 | | 1.0 | | 2.0 | | 1.0 | |
| | PERCENT SOLIDS | 74 | | 76 | | 76 | | 72 | |
| | SAMPLE WEIGHT (g) | 10.3 | | 10.2 | | 10.2 | | 10.1 | |
| CAS # | COMPOUND | CONC (UG/KG) | Q | CONC (UG/KG) | Q | CONC (UG/KG) | Q | CONC (UG/KG) | Q |
| 87-86-5 | Pentachlorophenol | 1300 | U | 4100 | | 13000 | J | 1400 | U |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | SAMPLE ID | EX2-PX6 | | EX3-2-4-16/17 | | EX3-PX3 | | EX3-PX8 | |
| | LAB SAMPLE ID | 960380-03 | | 960380-08 | | 960380-06 | | 960380-07 | |
| | DATE COLLECTED | 05/15/96 | | 05/15/96 | | 05/15/96 | | 05/15/96 | |
| | DATE EXTRACTED | 05/16/96 | | 05/16/96 | | 05/16/96 | | 05/16/96 | |
| | DATE ANALYZED | 05/17/96 | | 05/17/96 | | 05/17/96 | | 05/17/96 | |
| | SAMPLE MATRIX | SOIL | | SOIL | | SOIL | | SOIL | |
| | DILUTION FACTOR | 1.0 | | 1.0 | | 1.0 | | 1.0 | |
| | PERCENT SOLIDS | 85 | | 86 | | 79 | | 81 | |
| | SAMPLE WEIGHT (g) | 10.1 | | 10.2 | | 10.4 | | 10.5 | |
| CAS # | COMPOUND | CONC (UG/KG) | Q | CONC (UG/KG) | Q | CONC (UG/KG) | Q | CONC (UG/KG) | Q |
| 87-86-5 | Pentachlorophenol | 130 | J | 6700 | | 1200 | U | 1200 | U |

TABLE 900/2492 - B

DIOXINS AND FURANS BY SW-846 METHOD 8290

DATA SUMMARY TABLE

VALIDATED DATA FOR

CUMMINGS/RITER CONSULTANTS, INC.

BEAZER SUPERFUND SITE

SAMPLE DATA PACKAGE 2492

ALTA ANALYTICAL LABORATORY INC.

| SAMPLE ID | EX2-0-2-5 | | EX2-PX2B | | EX2-PX6 | | 900 | |
|---|---|---|---|---|---|---|---|---|
| LAB SAMPLE ID | 2492-0001-SA | | 2492-0002-SA | | 2492-0003-SA | | 2492-0004-SA | |
| DATE COLLECTED | 05/15/96 | | 05/15/96 | | 05/15/96 | | 05/15/96 | |
| DATE EXTRACTED | 05/17/96 | | 05/17/96 | | 05/17/96 | | 05/17/96 | |
| DATE ANALYZED | 05/20/96 | | 05/20/96 | | 05/21/96 | | 05/21/96 | |
| SAMPLE MATRIX | SOIL | | SOIL | | SOIL | | SOIL | |
| DILUTION FACTOR | 1.0 | | 1.0 | | 1.0 | | 1.0 | |
| PERCENT SOLIDS | 82 | | 78 | | 80 | | 79 | |
| SAMPLE WEIGHT (g) | 9.97 | | 10.02 | | 10.00 | | 10.06 | |
| COMPOUND | CONC (PG/G) | Q | CONC (PG/G) | Q | CONC (PG/G) | Q | CONC (PG/G) | Q |
| 2,3,7,8-TCDD | 73 | | 0.87 | | 0.18 | U | 0.30 | U |
| Total TCDD | 250 | | 6.6 | | 0.18 | U | 0.90 | |
| 1,2,3,7,8-PeCDD | 960 | | 5.4 | | 1.2 | U | 2.7 | |
| Total PeCDD | 2600 | | 35 | | 1.2 | U | 11 | |
| 1,2,3,4,7,8-HxCDD | 1800 | | 11 | | 1.6 | U | 6.2 | |
| 1,2,3,6,7,8-HxCDD | 9200 | | 51 | | 1.8 | U | 33 | |
| 1,2,3,7,8,9-HxCDD | 3000 | | 20 | | 1.5 | U | 8.8 | |
| Total HxCDD | 30000 | | 200 | | 1.8 | U | 120 | |
| 1,2,3,4,6,7,8-HpCDD | 190000 | J | 1400 | | 39 | U | 1100 | |
| Total HpCDD | 290000 | J | 2200 | | 65 | U | 2100 | |
| OCDD | 1200000 | J | 19000 | J | 980 | | 21000 | |
| 2,3,7,8-TCDF | 20 | | 0.26 | U | 0.11 | U | 0.23 | U |
| Total TCDF | 760 | J | 6.4 | | 0.11 | U | 3.2 | |
| 1,2,3,7,8-PeCDF | 79 | | 0.74 | J | 0.15 | U | 0.32 | J |
| 2,3,4,7,8-PeCDF | 170 | | 3.2 | | 0.15 | U | 0.70 | J |
| Total PeCDF | 6900 | J | 62 | J | 0.15 | U | 23 | J |
| 1,2,3,4,7,8-HxCDF | 1300 | | 8.6 | | 0.35 | U | 4.6 | |
| 1,2,3,6,7,8-HxCDF | 890 | J | 3.9 | J | 0.33 | U | 1.5 | J |
| 2,3,4,6,7,8-HxCDF | 940 | J | 8.4 | J | 0.53 | U | 4.2 | J |
| 1,2,3,7,8,9-HxCDF | 230 | | 1.5 | J | 0.38 | U | 1.2 | J |
| Total HxCDF | 44000 | J | 370 | J | 4.6 | | 190 | J |
| 1,2,3,4,6,7,8-HpCDF | 30000 | J | 220 | J | 5.0 | U | 160 | J |
| 1,2,3,4,7,8,9-HpCDF | 2200 | | 12 | | 0.71 | U | 9.8 | |
| Total HpCDF | 170000 | J | 1200 | J | 20 | U | 920 | J |
| OCDF | 240000 | J | 760 | | 24 | U | 1800 | |

TABLE 900/2492 - B
DIOXINS AND FURANS BY SW-846 METHOD 8290
DATA SUMMARY TABLE

VALIDATED DATA FOR
CUMMINGS/RITER CONSULTANTS, INC.
BEAZER SUPERFUND SITE

SAMPLE DATA PACKAGE 2492
ALTA ANALYTICAL LABORATORY INC.

| SAMPLE ID | EX2-6-8-1/2 | | EX2-0-2-17/18 | | EX3-PX3 | | EX3-PX8 | |
|---|---|---|---|---|---|---|---|---|
| LAB SAMPLE ID | 2492-0005-SA | | 2492-0006-SA | | 2492-0007-SA | | 2492-0008-SA | |
| DATE COLLECTED | 05/15/96 | | 05/15/96 | | 05/15/96 | | 05/15/96 | |
| DATE EXTRACTED | 05/17/96 | | 05/17/96 | | 05/17/96 | | 05/17/96 | |
| DATE ANALYZED | 05/21/96 | | 05/21/96 | | 05/21/96 | | 05/21/96 | |
| SAMPLE MATRIX | SOIL | | SOIL | | SOIL | | SOIL | |
| DILUTION FACTOR | 1.0 | | 1.0 | | 1.0 | | 1.0 | |
| PERCENT SOLIDS | 79 | | 74 | | 79 | | 82 | |
| SAMPLE WEIGHT (g) | 10.08 | | 10.07 | | 10.00 | | 9.95 | |
| COMPOUND | CONC (PG/G) | Q | CONC (PG/G) | Q | CONC (PG/G) | Q | CONC (PG/G) | Q |
| 2,3,7,8-TCDD | 0.35 | U | 94 | | 0.34 | U | 0.69 | |
| Total TCDD | 0.35 | U | 570 | | 0.34 | U | 12 | |
| 1,2,3,7,8-PeCDD | 3.1 | | 1100 | | 0.73 | U | 3.5 | |
| Total PeCDD | 6.3 | | 3800 | | 0.73 | U | 26 | |
| 1,2,3,4,7,8-HxCDD | 6.1 | | 2300 | | 1.7 | U | 7.7 | J |
| 1,2,3,6,7,8-HxCDD | 25 | | 10000 | | 1.9 | U | 30 | J |
| 1,2,3,7,8,9-HxCDD | 12 | | 3800 | | 1.6 | U | 12 | J |
| Total HxCDD | 97 | | 39000 | | 13 | | 170 | J |
| 1,2,3,4,6,7,8-HpCDD | 650 | | 180000 | J | 51 | U | 840 | |
| Total HpCDD | 1100 | | 260000 | J | 91 | U | 1400 | |
| OCDD | 20000 | | 970000 | J | 1600 | | 23000 | J |
| 2,3,7,8-TCDF | 0.19 | U | 30 | | 0.22 | U | 1.0 | |
| Total TCDF | 1.5 | | 940 | J | 1.7 | U | 23 | |
| 1,2,3,7,8-PeCDF | 0.34 | J | 110 | | 0.22 | U | 2.4 | J |
| 2,3,4,7,8-PeCDF | 0.66 | J | 190 | | 0.23 | U | 3.1 | |
| Total PeCDF | 17 | J | 6700 | J | 3.6 | J | 51 | |
| 1,2,3,4,7,8-HxCDF | 4.2 | | 1400 | | 0.64 | J | 7.0 | J |
| 1,2,3,6,7,8-HxCDF | 3.9 | J | 660 | J | 0.32 | J | 5.4 | J |
| 2,3,4,6,7,8-HxCDF | 3.7 | J | 1200 | | 0.70 | J | 5.8 | J |
| 1,2,3,7,8,9-HxCDF | 1.2 | J | 260 | | 0.23 | U | 2.0 | J |
| Total HxCDF | 130 | J | 46000 | J | 19 | J | 160 | J |
| 1,2,3,4,6,7,8-HpCDF | 110 | J | 28000 | J | 13 | UJ | 130 | J |
| 1,2,3,4,7,8,9-HpCDF | 8.1 | | 2100 | | 0.51 | U | 7.8 | J |
| Total HpCDF | 540 | J | 150000 | J | 32 | UJ | 560 | J |
| OCDF | 400 | | 230000 | J | 18 | U | 490 | |

TABLE 900/2492 - B

DIOXINS AND FURANS BY SW-846 METHOD 8290

DATA SUMMARY TABLE

VALIDATED DATA FOR

CUMMINGS/RITER CONSULTANTS, INC.

BEAZER SUPERFUND SITE

SAMPLE DATA PACKAGE 2492

ALTA ANALYTICAL LABORATORY INC.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | EX3-2-4-16/17 | | | | | | | |
| LAB SAMPLE ID | 2492-0009-SA | | | | | | | |
| DATE COLLECTED | 05/15/96 | | | | | | | |
| DATE EXTRACTED | 05/17/96 | | | | | | | |
| DATE ANALYZED | 05/21/96 | | | | | | | |
| SAMPLE MATRIX | SOIL | | | | | | | |
| DILUTION FACTOR | 1.0 | | | | | | | |
| PERCENT SOLIDS | 84 | | | | | | | |
| SAMPLE WEIGHT (g) | 10.04 | | | | | | | |
| COMPOUND | CONC (PG/G) | Q | | | | | | |
| 2,3,7,8-TCDD | 340 | | | | | | | |
| Total TCDD | 1500 | | | | | | | |
| 1,2,3,7,8-PeCDD | 6600 | | | | | | | |
| Total PeCDD | 19000 | | | | | | | |
| 1,2,3,4,7,8-HxCDD | 15000 | | | | | | | |
| 1,2,3,6,7,8-HxCDD | 42000 | J | | | | | | |
| 1,2,3,7,8,9-HxCDD | 19000 | J | | | | | | |
| Total HxCDD | 160000 | J | | | | | | |
| 1,2,3,4,6,7,8-HpCDD | 620000 | J | | | | | | |
| Total HpCDD | 870000 | J | | | | | | |
| OCDD | 2100000 | J | | | | | | |
| 2,3,7,8-TCDF | 330 | | | | | | | |
| Total TCDF | 3700 | J | | | | | | |
| 1,2,3,7,8-PeCDF | 1400 | | | | | | | |
| 2,3,4,7,8-PeCDF | 1200 | | | | | | | |
| Total PeCDF | 33000 | J | | | | | | |
| 1,2,3,4,7,8-HxCDF | 9300 | | | | | | | |
| 1,2,3,6,7,8-HxCDF | 7100 | J | | | | | | |
| 2,3,4,6,7,8-HxCDF | 5700 | | | | | | | |
| 1,2,3,7,8,9-HxCDF | 850 | | | | | | | |
| Total HxCDF | 160000 | J | | | | | | |
| 1,2,3,4,6,7,8-HpCDF | 110000 | J | | | | | | |
| 1,2,3,4,7,8,9-HpCDF | 8300 | | | | | | | |
| Total HpCDF | 350000 | J | | | | | | |
| OCDF | 530000 | J | | | | | | |

SDG EX1PX5/2488

TABLE EX1PX5/2488 - A
SEMIVOLATILES by SW-846 METHOD 8270B
DATA SUMMARY TABLE

VALIDATED DATA FOR
CUMMINGS/RITER CONSULTANTS, INC.
BEAZER SUPERFUND SITE

SAMPLE DATA PACKAGE EX1PX5
CEIMIC CORPORATION

| | SAMPLE ID | EX1-4-6-4 | | EX1-PX5 | | EX1-PX6 | | EX1-PX7 | |
|---|---|---|---|---|---|---|---|---|---|
| | LAB SAMPLE ID | 960378-15 | | 960378-01 | | 960378-02 | | 960378-03 | |
| | DATE COLLECTED | 05/14/96 | | 05/14/96 | | 05/14/96 | | 05/14/96 | |
| | DATE EXTRACTED | 05/15/96 | | 05/15/96 | | 05/15/96 | | 05/15/96 | |
| | DATE ANALYZED | 05/16/96 | | 05/16/96 | | 05/16/96 | | 05/16/96 | |
| | SAMPLE MATRIX | SOIL | | SOIL | | SOIL | | SOIL | |
| | DILUTION FACTOR | 1.0 | | 1.0 | | 1.0 | | 1.0 | |
| | PERCENT SOLIDS | 85 | | 95 | | 93 | | 90 | |
| | SAMPLE WEIGHT (g) | 10.4 | | 10.3 | | 10.1 | | 10.2 | |
| CAS # | COMPOUND | CONC (UG/KG) | Q | CONC (UG/KG) | Q | CONC (UG/KG) | Q | CONC (UG/KG) | Q |
| 87-86-5 | Pentachlorophenol | 1100 | U | 910 | J | 700 | J | 1100 | U |

| | SAMPLE ID | EX2-PX3R | | EX2-PX4R | | EX2-PX5 | | EX3-0-2-14/15 | |
|---|---|---|---|---|---|---|---|---|---|
| | LAB SAMPLE ID | 960378-04 | | 960378-05 | | 960378-06 | | 960378-16 | |
| | DATE COLLECTED | 05/13/96 | | 05/13/96 | | 05/14/96 | | 05/14/96 | |
| | DATE EXTRACTED | 05/15/96 | | 05/15/96 | | 05/15/96 | | 05/15/96 | |
| | DATE ANALYZED | 05/16/96 | | 05/16/96 | | 05/16/96 | | 05/16/96 | |
| | SAMPLE MATRIX | SOIL | | SOIL | | SOIL | | SOIL | |
| | DILUTION FACTOR | 1.0 | | 1.0 | | 1.0 | | 1.0 | |
| | PERCENT SOLIDS | 72 | | 73 | | 74 | | 78 | |
| | SAMPLE WEIGHT (g) | 10.2 | | 10.1 | | 10.3 | | 10.3 | |
| CAS # | COMPOUND | CONC (UG/KG) | Q | CONC (UG/KG) | Q | CONC (UG/KG) | Q | CONC (UG/KG) | Q |
| 87-86-5 | Pentachlorophenol | 1300 | U | 1300 | U | 1300 | U | 880 | J |

| | SAMPLE ID | EX3-PX1DL | | EX3-PX4 | | EX3-PX5 | | EX3-PX6 | |
|---|---|---|---|---|---|---|---|---|---|
| | LAB SAMPLE ID | 960378-08DL | | 960378-09 | | 960378-10 | | 960378-11 | |
| | DATE COLLECTED | 05/13/96 | | 05/14/96 | | 05/14/96 | | 05/14/96 | |
| | DATE EXTRACTED | 05/15/96 | | 05/15/96 | | 05/15/96 | | 05/15/96 | |
| | DATE ANALYZED | 05/17/96 | | 05/16/96 | | 05/16/96 | | 05/16/96 | |
| | SAMPLE MATRIX | SOIL | | SOIL | | SOIL | | SOIL | |
| | DILUTION FACTOR | 5.0 | | 1.0 | | 1.0 | | 1.0 | |
| | PERCENT SOLIDS | 78 | | 84 | | 83 | | 82 | |
| | SAMPLE WEIGHT (g) | 10.2 | | 10.1 | | 10.0 | | 10.0 | |
| CAS # | COMPOUND | CONC (UG/KG) | Q | CONC (UG/KG) | Q | CONC (UG/KG) | Q | CONC (UG/KG) | Q |
| 87-86-5 | Pentachlorophenol | 25000 | J | 270 | J | 350 | J | 5300 | |

TABLE EX1PX5/2488 - A
SEMIVOLATILES by SW-846 METHOD 8270B
DATA SUMMARY TABLE

VALIDATED DATA FOR
CUMMINGS/RITER CONSULTANTS, INC.
BEAZER SUPERFUND SITE

SAMPLE DATA PACKAGE EX1PX5
CEIMIC CORPORATION

| | SAMPLE ID | EX3-PX7 | | STP-3 | | STP-4DL | | STP-5 | |
|---|---|---|---|---|---|---|---|---|---|
| | LAB SAMPLE ID | 960378-12 | | 960378-07 | | 960378-13DL | | 960378-14 | |
| | DATE COLLECTED | 05/14/96 | | 05/14/96 | | 05/14/96 | | 05/14/96 | |
| | DATE EXTRACTED | 05/15/96 | | 05/15/96 | | 05/15/96 | | 05/15/96 | |
| | DATE ANALYZED | 05/16/96 | | 05/16/96 | | 05/17/96 | | 05/16/96 | |
| | SAMPLE MATRIX | SOIL | | SOIL | | SOIL | | SOIL | |
| | DILUTION FACTOR | 1.0 | | 1.0 | | 10 | | 1.0 | |
| | PERCENT SOLIDS | 80 | | 83 | | 86 | | 81 | |
| | SAMPLE WEIGHT (g) | 10.1 | | 10.0 | | 10.3 | | 10.0 | |
| CAS # | COMPOUND | CONC (UG/KG) | Q | CONC (UG/KG) | Q | CONC (UG/KG) | Q | CONC (UG/KG) | Q |
| 87-86-5 | Pentachlorophenol | 1200 | UJ | 400 | J | 44000 | J | 9600 | |

TABLE EX1PX5/2488 - B

DIOXINS AND FURANS BY SW-846 METHOD 8290

DATA SUMMARY TABLE

VALIDATED DATA FOR
CUMMINGS/RITER CONSULTANTS, INC.
BEAZER SUPERFUND SITE

SAMPLE DATA PACKAGE 2488
ALTA ANALYTICAL LABORATORY INC.

| SAMPLE ID | EX1-PX5 | | EX1-PX6 | | EX1-PX7 | | EX2-PX3R | |
|---|---|---|---|---|---|---|---|---|
| LAB SAMPLE ID | 2488-0001-SA | | 2488-0002-SA | | 2488-0003-SA | | 2488-0004-SA | |
| DATE COLLECTED | 05/14/96 | | 05/14/96 | | 05/14/96 | | 05/13/96 | |
| DATE EXTRACTED | 05/16/96 | | 05/16/96 | | 05/16/96 | | 05/16/96 | |
| DATE ANALYZED | 05/19/96 | | 05/19/96 | | 05/19/96 | | 05/19/96 | |
| SAMPLE MATRIX | SOIL | | SOIL | | SOIL | | SOIL | |
| DILUTION FACTOR | 1.0 | | 1.0 | | 1.0 | | 1.0 | |
| PERCENT SOLIDS | 95 | | 96 | | 90 | | 78 | |
| SAMPLE WEIGHT (g) | 10.06 | | 9.97 | | 10.05 | | 9.95 | |
| COMPOUND | CONC (PG/G) | Q | CONC (PG/G) | Q | CONC (PG/G) | Q | CONC (PG/G) | Q |
| 2,3,7,8-TCDD | 0.092 | U | 0.18 | U | 0.13 | U | 0.35 | U |
| Total TCDD | 0.22 | J | 0.20 | J | 0.13 | U | 1.7 | |
| 1,2,3,7,8-PeCDD | 0.079 | U | 0.88 | J | 0.12 | U | 3.2 | |
| Total PeCDD | 0.079 | U | 2.0 | J | 0.12 | U | 15 | |
| 1,2,3,4,7,8-HxCDD | 0.24 | U | 2.6 | | 0.31 | U | 10 | |
| 1,2,3,6,7,8-HxCDD | 0.46 | J | 16 | | 0.64 | J | 19 | |
| 1,2,3,7,8,9-HxCDD | 0.23 | U | 5.5 | | 0.29 | U | 11 | |
| Total HxCDD | 1.1 | J | 54 | | 1.3 | J | 130 | |
| 1,2,3,4,6,7,8-HpCDD | 17 | | 520 | | 17 | | 840 | |
| Total HpCDD | 26 | | 820 | | 28 | | 1200 | |
| OCDD | 230 | | 3400 | | 150 | | 21000 | J |
| 2,3,7,8-TCDF | 0.098 | U | 0.090 | U | 0.12 | U | 0.13 | U |
| Total TCDF | 0.17 | J | 0.99 | | 0.12 | U | 2.0 | |
| 1,2,3,7,8-PeCDF | 0.086 | U | 0.13 | U | 0.12 | U | 0.30 | J |
| 2,3,4,7,8-PeCDF | 0.082 | U | 0.25 | U | 0.12 | U | 0.41 | J |
| Total PeCDF | 0.086 | U | 8.4 | J | 0.12 | U | 15 | J |
| 1,2,3,4,7,8-HxCDF | 0.17 | U | 2.4 | J | 0.20 | U | 3.3 | |
| 1,2,3,6,7,8-HxCDF | 0.16 | U | 0.92 | J | 0.19 | U | 2.1 | J |
| 2,3,4,6,7,8-HxCDF | 0.19 | U | 1.7 | J | 0.39 | U | 3.4 | |
| 1,2,3,7,8,9-HxCDF | 0.21 | U | 0.48 | J | 0.23 | U | 0.62 | J |
| Total HxCDF | 0.46 | J | 85 | J | 2.1 | J | 94 | J |
| 1,2,3,4,6,7,8-HpCDF | 1.3 | J | 92 | J | 3.2 | J | 97 | J |
| 1,2,3,4,7,8,9-HpCDF | 0.10 | U | 3.9 | | 0.24 | J | 4.3 | |
| Total HpCDF | 4.4 | | 330 | J | 13 | J | 330 | J |
| OCDF | 3.5 | J | 290 | | 13 | | 170 | |

TABLE EX1PX5/2488 - B

DIOXINS AND FURANS BY SW-846 METHOD 8290

DATA SUMMARY TABLE

VALIDATED DATA FOR

CUMMINGS/RITER CONSULTANTS, INC.

BEAZER SUPERFUND SITE

SAMPLE DATA PACKAGE 2488

ALTA ANALYTICAL LABORATORY INC.

| SAMPLE ID | EX2-PX4R | | EX2-PX5 | | EX3-PX1 | | EX3-PX4 | |
|---|---|---|---|---|---|---|---|---|
| LAB SAMPLE ID | 2488-0005-SA | | 2488-0006-SA | | 2488-0007-SA | | 2488-0008-SA | |
| DATE COLLECTED | 05/13/96 | | 05/14/96 | | 05/13/96 | | 05/14/96 | |
| DATE EXTRACTED | 05/16/96 | | 05/16/96 | | 05/16/96 | | 05/16/96 | |
| DATE ANALYZED | 5/19, 5/20/96 | | 05/19/96 | | 05/20/96 | | 5/20, 5/21/96 | |
| SAMPLE MATRIX | SOIL | | SOIL | | SOIL | | SOIL | |
| DILUTION FACTOR | 1.0 | | 1.0 | | 1.0 | | 1.0 | |
| PERCENT SOLIDS | 75 | | 79 | | 77 | | 88 | |
| SAMPLE WEIGHT (g) | 9.99 | | 10.07 | | 10.06 | | 10.00 | |
| COMPOUND | CONC (PG/G) | Q | CONC (PG/G) | Q | CONC (PG/G) | Q | CONC (PG/G) | Q |
| 2,3,7,8-TCDD | 0.80 | | 0.15 | U | 0.15 | U | 1.7 | |
| Total TCDD | 3.5 | | 0.20 | J | 0.15 | U | 8.7 | |
| 1,2,3,7,8-PeCDD | 11 | | 0.45 | J | 0.44 | J | 34 | |
| Total PeCDD | 38 | | 0.87 | J | 0.81 | J | 100 | |
| 1,2,3,4,7,8-HxCDD | 21 | | 0.75 | J | 0.56 | J | 70 | |
| 1,2,3,6,7,8-HxCDD | 110 | | 1.9 | J | 1.6 | J | 1100 | |
| 1,2,3,7,8,9-HxCDD | 40 | | 1.2 | J | 1.1 | J | 130 | |
| Total HxCDD | 370 | | 8.9 | | 7.7 | | 2400 | |
| 1,2,3,4,6,7,8-HpCDD | 3100 | | 64 | | 40 | | 32000 | J |
| Total HpCDD | 4800 | | 110 | | 70 | | 47000 | J |
| OCDD | 26000 | J | 8200 | | 5100 | | 200000 | J |
| 2,3,7,8-TCDF | 0.39 | J | 0.087 | U | 0.085 | U | 0.95 | |
| Total TCDF | 12 | J | 0.25 | J | 0.13 | J | 69 | |
| 1,2,3,7,8-PeCDF | 1.3 | J | 0.11 | U | 0.12 | U | 5.5 | |
| 2,3,4,7,8-PeCDF | 2.3 | J | 0.12 | U | 0.14 | U | 6.8 | |
| Total PeCDF | 110 | J | 1.7 | J | 1.2 | J | 770 | J |
| 1,2,3,4,7,8-HxCDF | 16 | | 0.53 | J | 0.40 | J | 96 | |
| 1,2,3,6,7,8-HxCDF | 9.3 | J | 0.28 | J | 0.27 | J | 140 | J |
| 2,3,4,6,7,8-HxCDF | 19 | | 1.2 | J | 0.67 | J | 53 | |
| 1,2,3,7,8,9-HxCDF | 2.6 | | 0.11 | U | 0.10 | U | 12 | |
| Total HxCDF | 810 | J | 13 | J | 7.3 | J | 8500 | J |
| 1,2,3,4,6,7,8-HpCDF | 840 | J | 9.1 | J | 5.9 | J | 11000 | J |
| 1,2,3,4,7,8,9-HpCDF | 31 | | 0.53 | J | 0.35 | J | 200 | J |
| Total HpCDF | 3400 | J | 33 | J | 19 | J | 50000 | J |
| OCDF | 3400 | | 27 | | 13 | | 55000 | J |

TABLE EX1PX5/2488 - B

DIOXINS AND FURANS BY SW-846 METHOD 8290

DATA SUMMARY TABLE

VALIDATED DATA FOR

CUMMINGS/RITER CONSULTANTS, INC.

BEAZER SUPERFUND SITE

SAMPLE DATA PACKAGE 2488

ALTA ANALYTICAL LABORATORY INC.

| SAMPLE ID | EX3-PX5 | | EX3-PX6 | | EX3-PX7 | | EX1-4-6-0 | |
|---|---|---|---|---|---|---|---|---|
| LAB SAMPLE ID | 2488-0009-SA | | 2488-0010-SA | | 2488-0011-SA | | 2488-0012-SA | |
| DATE COLLECTED | 05/14/96 | | 05/14/96 | | 05/14/96 | | 05/14/96 | |
| DATE EXTRACTED | 05/16/96 | | 05/16/96 | | 05/16/96 | | 05/16/96 | |
| DATE ANALYZED | 5/20, 5/21, 5/22/96 | | 05/20/96 | | 05/21/96 | | 05/21/96 | |
| SAMPLE MATRIX | SOIL | | SOIL | | SOIL | | SOIL | |
| DILUTION FACTOR | 1.0 | | 1.0 | | 1.0 | | 1.0 | |
| PERCENT SOLIDS | 85 | | 84 | | 76 | | 86 | |
| SAMPLE WEIGHT (g) | 10.01 | | 10.07 | | 9.95 | | 10.01 | |
| COMPOUND | CONC (PG/G) | Q | CONC (PG/G) | Q | CONC (PG/G) | Q | CONC (PG/G) | Q |
| 2,3,7,8-TCDD | 200 | | 12 | | 0.27 | U | 0.21 | U |
| Total TCDD | 620 | | 45 | | 0.27 | U | 0.21 | U |
| 1,2,3,7,8-PeCDD | 3700 | | 210 | | 0.71 | U | 0.70 | U |
| Total PeCDD | 8200 | | 490 | | 0.71 | U | 0.70 | U |
| 1,2,3,4,7,8-HxCDD | 5800 | | 600 | | 2.3 | U | 1.8 | U |
| 1,2,3,6,7,8-HxCDD | 33000 | | 4000 | | 2.5 | U | 2.0 | U |
| 1,2,3,7,8,9-HxCDD | 11000 | | 760 | | 2.1 | U | 1.7 | U |
| Total HxCDD | 100000 | | 10000 | | 2.5 | U | 2.0 | U |
| 1,2,3,4,6,7,8-HpCDD | 820000 | J | 110000 | J | 44 | | 52 | |
| Total HpCDD | 1200000 | J | 170000 | J | 82 | | 84 | |
| OCDD | 6500000 | J | 650000 | J | 4900 | | 390 | |
| 2,3,7,8-TCDF | 85 | | 5.8 | | 0.17 | U | 0.12 | U |
| Total TCDF | 2700 | J | 300 | J | 0.17 | U | 0.12 | U |
| 1,2,3,7,8-PeCDF | 450 | | 34 | | 0.63 | U | 0.20 | U |
| 2,3,4,7,8-PeCDF | 640 | | 48 | | 0.58 | U | 0.20 | U |
| Total PeCDF | 26000 | J | 2600 | J | 0.63 | U | 0.20 | U |
| 1,2,3,4,7,8-HxCDF | 5300 | | 580 | | 0.46 | U | 0.33 | U |
| 1,2,3,6,7,8-HxCDF | 2400 | J | 1000 | J | 0.43 | U | 0.31 | U |
| 2,3,4,6,7,8-HxCDF | 3600 | J | 360 | | 0.49 | U | 0.33 | U |
| 1,2,3,7,8,9-HxCDF | 830 | | 99 | | 0.52 | U | 0.34 | U |
| Total HxCDF | 190000 | J | 26000 | J | 2.0 | J | 7.0 | |
| 1,2,3,4,6,7,8-HpCDF | 170000 | J | 32000 | J | 4.4 | J | 6.9 | J |
| 1,2,3,4,7,8,9-HpCDF | 8000 | | 1100 | | 2.2 | U | 0.49 | U |
| Total HpCDF | 690000 | J | 150000 | J | 14 | J | 22 | J |
| OCDF | 680000 | J | 140000 | J | 11 | | 15 | |

TABLE EX1PX5/2488 - B
DIOXINS AND FURANS BY SW-846 METHOD 8290
DATA SUMMARY TABLE

VALIDATED DATA FOR
CUMMINGS/RITER CONSULTANTS, INC.
BEAZER SUPERFUND SITE

SAMPLE DATA PACKAGE 2488
ALTA ANALYTICAL LABORATORY INC.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | EX3-02-14/15 | | | | | | | |
| LAB SAMPLE ID | 2488-0013-SA | | | | | | | |
| DATE COLLECTED | 05/14/96 | | | | | | | |
| DATE EXTRACTED | 05/16/96 | | | | | | | |
| DATE ANALYZED | 5/20, 5/21/96 | | | | | | | |
| SAMPLE MATRIX | SOIL | | | | | | | |
| DILUTION FACTOR | 1.0 | | | | | | | |
| PERCENT SOLIDS | 76 | | | | | | | |
| SAMPLE WEIGHT (g) | 9.96 | | | | | | | |
| COMPOUND | CONC (PG/G) | Q | | | | | | |
| 2,3,7,8-TCDD | 11 | | | | | | | |
| Total TCDD | 48 | | | | | | | |
| 1,2,3,7,8-PeCDD | 230 | | | | | | | |
| Total PeCDD | 610 | | | | | | | |
| 1,2,3,4,7,8-HxCDD | 510 | | | | | | | |
| 1,2,3,6,7,8-HxCDD | 2800 | | | | | | | |
| 1,2,3,7,8,9-HxCDD | 1000 | | | | | | | |
| Total HxCDD | 8600 | | | | | | | |
| 1,2,3,4,6,7,8-HpCDD | 94000 | J | | | | | | |
| Total HpCDD | 150000 | J | | | | | | |
| OCDD | 1200000 | J | | | | | | |
| 2,3,7,8-TCDF | 4.3 | | | | | | | |
| Total TCDF | 260 | J | | | | | | |
| 1,2,3,7,8-PeCDF | 33 | | | | | | | |
| 2,3,4,7,8-PeCDF | 45 | | | | | | | |
| Total PeCDF | 2000 | J | | | | | | |
| 1,2,3,4,7,8-HxCDF | 530 | | | | | | | |
| 1,2,3,6,7,8-HxCDF | 410 | J | | | | | | |
| 2,3,4,6,7,8-HxCDF | 360 | J | | | | | | |
| 1,2,3,7,8,9-HxCDF | 78 | | | | | | | |
| Total HxCDF | 16000 | J | | | | | | |
| 1,2,3,4,6,7,8-HpCDF | 17000 | J | | | | | | |
| 1,2,3,4,7,8,9-HpCDF | 580 | | | | | | | |
| Total HpCDF | 60000 | J | | | | | | |
| OCDF | 120000 | J | | | | | | |

SDG EX2025/2481

TABLE EX2025/2481 - A
SEMIVOLATILES by SW-846 METHOD 8270B
DATA SUMMARY TABLE

VALIDATED DATA FOR
CUMMINGS/RITER CONSULTANTS, INC.
BEAZER SUPERFUND SITE

SAMPLE DATA PACKAGE EX2025
CEIMIC CORPORATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | SAMPLE ID | EX1-4-6-1/2 | | EX1-PX2 | | EX1-PX3 | | EX1-PX4 | |
| | LAB SAMPLE ID | 960375-02 | | 960375-03 | | 960375-04 | | 960375-05 | |
| | DATE COLLECTED | 05/09/96 | | 05/13/96 | | 05/13/96 | | 05/13/96 | |
| | DATE EXTRACTED | 05/14/96 | | 05/14/96 | | 05/14/96 | | 05/14/96 | |
| | DATE ANALYZED | 05/15/96 | | 05/15/96 | | 05/15/96 | | 05/15/96 | |
| | SAMPLE MATRIX | SOIL | | SOIL | | SOIL | | SOIL | |
| | DILUTION FACTOR | 1.0 | | 1.0 | | 1.0 | | 1.0 | |
| | PERCENT SOLIDS | 92 | | 93 | | 90 | | 86 | |
| | SAMPLE WEIGHT (g) | 10.3 | | 10.0 | | 10.2 | | 10.0 | |
| CAS # | COMPOUND | CONC (UG/KG) | Q | CONC (UG/KG) | Q | CONC (UG/KG) | Q | CONC (UG/KG) | Q |
| 87-86-5 | Pentachlorophenol | 1400 | | 530 | J | 270 | J | 210 | J |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | SAMPLE ID | EX2-0-2-5/6 | | STP-1 | | STP-2 | | | |
| | LAB SAMPLE ID | 960375-01 | | 960375-07 | | 960375-08 | | | |
| | DATE COLLECTED | 05/09/96 | | 05/13/96 | | 05/13/96 | | | |
| | DATE EXTRACTED | 05/14/96 | | 05/14/96 | | 05/14/96 | | | |
| | DATE ANALYZED | 05/15/96 | | 05/15/96 | | 05/15/96 | | | |
| | SAMPLE MATRIX | SOIL | | SOIL | | SOIL | | | |
| | DILUTION FACTOR | 1.0 | | 1.0 | | 1.0 | | | |
| | PERCENT SOLIDS | 77 | | 91 | | 84 | | | |
| | SAMPLE WEIGHT (g) | 10.1 | | 10.0 | | 10.1 | | | |
| CAS # | COMPOUND | CONC (UG/KG) | Q | CONC (UG/KG) | Q | CONC (UG/KG) | Q | | |
| 87-86-5 | Pentachlorophenol | 5100 | | 2500 | | 510 | J | | |

TABLE EX2025/2481 - B
DIOXINS AND FURANS BY SW-846 METHOD 8290
DATA SUMMARY TABLE

VALIDATED DATA FOR
CUMMINGS/RITER CONSULTANTS, INC.
BEAZER SUPERFUND SITE

SAMPLE DATA PACKAGE 2481
ALTA ANALYTICAL LABORATORY INC.

| SAMPLE ID | EX1-PX2 | | EX1-PX3 | | EX1-PX4 | | | |
|---|---|---|---|---|---|---|---|---|
| LAB SAMPLE ID | 2481-0001-SA | | 2481-0002-SA | | 2481-0003-SA | | | |
| DATE COLLECTED | 05/13/96 | | 05/13/96 | | 05/13/96 | | | |
| DATE EXTRACTED | 05/14/96 | | 05/14/96 | | 05/14/96 | | | |
| DATE ANALYZED | 05/16/96 | | 05/16/96 | | 05/16/96 | | | |
| SAMPLE MATRIX | SOIL | | SOIL | | SOIL | | | |
| DILUTION FACTOR | 1.0 | | 1.0 | | 1.0 | | | |
| PERCENT SOLIDS | 94 | | 92 | | 88 | | | |
| SAMPLE WEIGHT (g) | 10.02 | | 10.02 | | 10.30 | | | |
| COMPOUND | CONC (PG/G) | Q | CONC (PG/G) | Q | CONC (PG/G) | Q | | |
| 2,3,7,8-TCDD | 0.36 | J | 0.43 | J | 0.45 | J | | |
| Total TCDD | 0.36 | J | 3.6 | | 0.96 | J | | |
| 1,2,3,7,8-PeCDD | 1.4 | J | 1.1 | J | 0.36 | J | | |
| Total PeCDD | 3.0 | | 3.9 | | 1.2 | J | | |
| 1,2,3,4,7,8-HxCDD | 2.2 | J | 0.80 | J | 0.53 | J | | |
| 1,2,3,6,7,8-HxCDD | 11 | | 6.9 | | 4.9 | | | |
| 1,2,3,7,8,9-HxCDD | 5.6 | | 2.6 | | 1.0 | J | | |
| Total HxCDD | 48 | | 21 | | 16 | | | |
| 1,2,3,4,6,7,8-HpCDD | 280 | | 150 | | 160 | | | |
| Total HpCDD | 480 | | 250 | | 280 | | | |
| OCDD | 1300 | | 800 | | 1100 | | | |
| 2,3,7,8-TCDF | 0.66 | J | 0.10 | U | 0.088 | U | | |
| Total TCDF | 2.4 | | 4.9 | | 0.85 | J | | |
| 1,2,3,7,8-PeCDF | 0.17 | U | 0.18 | U | 0.10 | U | | |
| 2,3,4,7,8-PeCDF | 0.28 | U | 0.17 | U | 0.17 | U | | |
| Total PeCDF | 6.2 | J | 8.2 | J | 2.8 | J | | |
| 1,2,3,4,7,8-HxCDF | 1.6 | J | 1.1 | J | 0.95 | J | | |
| 1,2,3,6,7,8-HxCDF | 1.7 | J | 1.3 | J | 0.93 | J | | |
| 2,3,4,6,7,8-HxCDF | 1.8 | J | 1.1 | J | 1.2 | J | | |
| 1,2,3,7,8,9-HxCDF | 0.53 | J | 0.32 | J | 0.24 | J | | |
| Total HxCDF | 49 | J | 34 | J | 28 | J | | |
| 1,2,3,4,6,7,8-HpCDF | 40 | J | 27 | J | 28 | J | | |
| 1,2,3,4,7,8,9-HpCDF | 2.8 | | 1.3 | J | 1.5 | J | | |
| Total HpCDF | 160 | J | 100 | J | 120 | J | | |
| OCDF | 110 | | 71 | | 110 | | | |

SDG EX3PX2/2508

TABLE EX3PX2/2508 - A
SEMIVOLATILES by SW-846 METHOD 8270B
DATA SUMMARY TABLE

VALIDATED DATA FOR
CUMMINGS/RITER CONSULTANTS, INC.
BEAZER SUPERFUND SITE

SAMPLE DATA PACKAGE EX3PX2
CEIMIC CORPORATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | SAMPLE ID | EX3-PX2A | | STP-10DL | | STP-11DL | | STP-12DL | |
| | LAB SAMPLE ID | 960393-01 | | 960393-02DL | | 960393-03DL | | 960393-04DL | |
| | DATE COLLECTED | 05/21/96 | | 05/21/96 | | 05/21/96 | | 05/21/96 | |
| | DATE EXTRACTED | 05/22/96 | | 05/22/96 | | 05/22/96 | | 05/22/96 | |
| | DATE ANALYZED | 05/23/96 | | 06/01/96 | | 06/01/96 | | 06/01/96 | |
| | SAMPLE MATRIX | SOIL | | SOIL | | SOIL | | SOIL | |
| | DILUTION FACTOR | 1.0 | | 10 | | 20 | | 5.0 | |
| | PERCENT SOLIDS | 86 | | 76 | | 90 | | 87 | |
| | SAMPLE WEIGHT (g) | 10.5 | | 10.0 | | 10.4 | | 10.0 | |
| CAS # | COMPOUND | CONC (UG/KG) | Q | CONC (UG/KG) | Q | CONC (UG/KG) | Q | CONC (UG/KG) | Q |
| 87-86-5 | Pentachlorophenol | 970 | U | 16000 | U | 64000 | J | 32000 | J |

TABLE EX3PX2/2508 - B
DIOXINS AND FURANS BY SW-846 METHOD 8290
DATA SUMMARY TABLE

VALIDATED DATA FOR
CUMMINGS/RITER CONSULTANTS, INC.
BEAZER SUPERFUND SITE

SAMPLE DATA PACKAGE 2508
ALTA ANALYTICAL LABORATORY INC.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | EX3-PX2A | | | | | | | |
| LAB SAMPLE ID | 2508-0001-SA | | | | | | | |
| DATE COLLECTED | 05/21/96 | | | | | | | |
| DATE EXTRACTED | 05/22/96 | | | | | | | |
| DATE ANALYZED | 05/24/96 | | | | | | | |
| SAMPLE MATRIX | SOIL | | | | | | | |
| DILUTION FACTOR | 1.0 | | | | | | | |
| PERCENT SOLIDS | 85 | | | | | | | |
| SAMPLE WEIGHT (g) | 5.07 | | | | | | | |
| COMPOUND | CONC (PG/G) | Q | | | | | | |
| 2,3,7,8-TCDD | 0.48 | U | | | | | | |
| Total TCDD | 0.48 | U | | | | | | |
| 1,2,3,7,8-PeCDD | 2.8 | | | | | | | |
| Total PeCDD | 6.8 | | | | | | | |
| 1,2,3,4,7,8-HxCDD | 5.8 | | | | | | | |
| 1,2,3,6,7,8-HxCDD | 23 | | | | | | | |
| 1,2,3,7,8,9-HxCDD | 9.1 | | | | | | | |
| Total HxCDD | 95 | | | | | | | |
| 1,2,3,4,6,7,8-HpCDD | 610 | | | | | | | |
| Total HpCDD | 1000 | | | | | | | |
| OCDD | 8000 | | | | | | | |
| 2,3,7,8-TCDF | 0.51 | J | | | | | | |
| Total TCDF | 35 | | | | | | | |
| 1,2,3,7,8-PeCDF | 0.74 | U | | | | | | |
| 2,3,4,7,8-PeCDF | 0.70 | U | | | | | | |
| Total PeCDF | 31 | | | | | | | |
| 1,2,3,4,7,8-HxCDF | 4.0 | | | | | | | |
| 1,2,3,6,7,8-HxCDF | 2.2 | J | | | | | | |
| 2,3,4,6,7,8-HxCDF | 3.9 | | | | | | | |
| 1,2,3,7,8,9-HxCDF | 0.72 | U | | | | | | |
| Total HxCDF | 120 | | | | | | | |
| 1,2,3,4,6,7,8-HpCDF | 110 | | | | | | | |
| 1,2,3,4,7,8,9-HpCDF | 39 | | | | | | | |
| Total HpCDF | 510 | | | | | | | |
| OCDF | 620 | | | | | | | |

SDG EX3PX5/2524

TABLE EX3PX5/2524 - A

SEMIVOLATILES by SW-846 METHOD 8270B

DATA SUMMARY TABLE

VALIDATED DATA FOR
CUMMINGS/RITER CONSULTANTS, INC.
BEAZER SUPERFUND SITE

SAMPLE DATA PACKAGE EX3PX5
CEIMIC CORPORATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | SAMPLE ID | EX3-2-4-34/35 | | EX3-PX5A | | | | | |
| | LAB SAMPLE ID | 960408-02 | | 960408-01 | | | | | |
| | DATE COLLECTED | 05/29/96 | | 05/29/96 | | | | | |
| | DATE EXTRACTED | 05/30/96 | | 05/30/96 | | | | | |
| | DATE ANALYZED | 05/30/96 | | 05/30/96 | | | | | |
| | SAMPLE MATRIX | SOIL | | SOIL | | | | | |
| | DILUTION FACTOR | 1.0 | | 1.0 | | | | | |
| | PERCENT SOLIDS | 81 | | 95 | | | | | |
| | SAMPLE WEIGHT (g) | 10.4 | | 10.2 | | | | | |
| CAS # | COMPOUND | CONC (UG/KG) | Q | CONC (UG/KG) | Q | | | | |
| 87-86-5 | Pentachlorophenol | 1200 | | 500 | J | | | | |

TABLE EX3PX5/2524 - B
DIOXINS AND FURANS BY SW-846 METHOD 8280
DATA SUMMARY TABLE

VALIDATED DATA FOR
CUMMINGS/RITER CONSULTANTS, INC.
BEAZER SUPERFUND SITE

SAMPLE DATA PACKAGE 2524
ALTA ANALYTICAL LABORATORY INC.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | EX3-PX5A | | EX3-2-4-34/35 | | | | | |
| LAB SAMPLE ID | 2524-0001-SA | | 2524-0002-SA | | | | | |
| DATE COLLECTED | 05/29/96 | | 05/29/96 | | | | | |
| DATE EXTRACTED | 06/02/96 | | 06/02/96 | | | | | |
| DATE ANALYZED | 6/03, 6/05/96 | | 6/03, 6/05/96 | | | | | |
| SAMPLE MATRIX | SOIL | | SOIL | | | | | |
| DILUTION FACTOR | 1.0 | | 1.0 | | | | | |
| PERCENT SOLIDS | 83 | | 82 | | | | | |
| SAMPLE WEIGHT (g) | 5.00 | | 4.99 | | | | | |
| COMPOUND | CONC (PG/G) | Q | CONC (PG/G) | Q | | | | |
| 2,3,7,8-TCDD | 0.92 | U | 1.5 | | | | | |
| Total TCDD | 0.92 | U | 2.7 | | | | | |
| 1,2,3,7,8-PeCDD | 1.7 | U | 20 | | | | | |
| Total PeCDD | 1.7 | U | 51 | | | | | |
| 1,2,3,4,7,8-HxCDD | 1.6 | U | 45 | | | | | |
| 1,2,3,6,7,8-HxCDD | 7.2 | | 280 | | | | | |
| 1,2,3,7,8,9-HxCDD | 3.2 | J | 78 | | | | | |
| Total HxCDD | 45 | | 830 | | | | | |
| 1,2,3,4,6,7,8-HpCDD | 210 | | 7300 | | | | | |
| Total HpCDD | 400 | | 11000 | | | | | |
| OCDD | 11000 | | 68000 | J | | | | |
| 2,3,7,8-TCDF | 1.3 | | 1.7 | | | | | |
| Total TCDF | 3.3 | | 23 | | | | | |
| 1,2,3,7,8-PeCDF | 1.0 | U | 2.8 | J | | | | |
| 2,3,4,7,8-PeCDF | 0.96 | U | 5.0 | | | | | |
| Total PeCDF | 1.0 | U | 120 | | | | | |
| 1,2,3,4,7,8-HxCDF | 0.91 | U | 37 | | | | | |
| 1,2,3,6,7,8-HxCDF | 0.88 | U | 24 | | | | | |
| 2,3,4,6,7,8-HxCDF | 0.90 | U | 39 | | | | | |
| 1,2,3,7,8,9-HxCDF | 1.1 | U | 6.5 | | | | | |
| Total HxCDF | 25 | | 1400 | J | | | | |
| 1,2,3,4,6,7,8-HpCDF | 28 | | 1600 | J | | | | |
| 1,2,3,4,7,8,9-HpCDF | 1.2 | J | 83 | | | | | |
| Total HpCDF | 110 | | 7300 | J | | | | |
| OCDF | 130 | | 8900 | | | | | |

SDG EX3PX9/2503

TABLE EX3PX9/2503 - A
SEMIVOLATILES by SW-846 METHOD 8270B
DATA SUMMARY TABLE

VALIDATED DATA FOR
CUMMINGS/RITER CONSULTANTS, INC.
BEAZER SUPERFUND SITE

SAMPLE DATA PACKAGE EX3PX9
CEIMIC CORPORATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | SAMPLE ID | 901 | | EX1-4-6-19/20 | | EX1-PX8A | | EX1-PX9 | |
| | LAB SAMPLE ID | 960390-02 | | 960390-04 | | 960390-05 | | 960390-03 | |
| | DATE COLLECTED | 05/20/96 | | 05/20/96 | | 05/20/96 | | 05/20/96 | |
| | DATE EXTRACTED | 05/21/96 | | 05/21/96 | | 05/21/96 | | 05/21/96 | |
| | DATE ANALYZED | 05/24/96 | | 05/22/96 | | 05/22/96 | | 05/22/96 | |
| | SAMPLE MATRIX | SOIL | | SOIL | | SOIL | | SOIL | |
| | DILUTION FACTOR | 2.0 | | 1.0 | | 1.0 | | 1.0 | |
| | PERCENT SOLIDS | 83 | | 91 | | 89 | | 96 | |
| | SAMPLE WEIGHT (g) | 10.2 | | 10.2 | | 10.1 | | 10.1 | |
| CAS # | COMPOUND | CONC (UG/KG) | Q | CONC (UG/KG) | Q | CONC (UG/KG) | Q | CONC (UG/KG) | Q |
| 87-86-5 | Pentachlorophenol | 11000 | | 920 | J | 2600 | | 240 | J |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | SAMPLE ID | EX3-PX10ADL | | EX3-PX9A | | STP-6DL | | STP-7DL | |
| | LAB SAMPLE ID | 960390-06DL | | 960390-01 | | 960390-07DL | | 960390-08DL | |
| | DATE COLLECTED | 05/20/96 | | 05/20/96 | | 05/20/96 | | 05/20/96 | |
| | DATE EXTRACTED | 05/21/96 | | 05/21/96 | | 05/21/96 | | 05/21/96 | |
| | DATE ANALYZED | 05/24/96 | | 05/22/96 | | 06/01/96 | | 06/01/96 | |
| | SAMPLE MATRIX | SOIL | | SOIL | | SOIL | | SOIL | |
| | DILUTION FACTOR | 10 | | 1.0 | | 400 | | 400 | |
| | PERCENT SOLIDS | 78 | | 88 | | 92 | | 72 | |
| | SAMPLE WEIGHT (g) | 10.0 | | 10.2 | | 10.2 | | 10.1 | |
| CAS # | COMPOUND | CONC (UG/KG) | Q | CONC (UG/KG) | Q | CONC (UG/KG) | Q | CONC (UG/KG) | Q |
| 87-86-5 | Pentachlorophenol | 75000 | J | 1100 | U | 1700000 | J | 2500000 | J |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | SAMPLE ID | STP-8DL | | STP-9 | | | | | |
| | LAB SAMPLE ID | 960390-09DL | | 960390-10 | | | | | |
| | DATE COLLECTED | 05/20/96 | | 05/20/96 | | | | | |
| | DATE EXTRACTED | 05/21/96 | | 05/21/96 | | | | | |
| | DATE ANALYZED | 06/01/96 | | 05/22/96 | | | | | |
| | SAMPLE MATRIX | SOIL | | SOIL | | | | | |
| | DILUTION FACTOR | 200 | | 1.0 | | | | | |
| | PERCENT SOLIDS | 76 | | 88 | | | | | |
| | SAMPLE WEIGHT (g) | 10.3 | | 10.4 | | | | | |
| CAS # | COMPOUND | CONC (UG/KG) | Q | CONC (UG/KG) | Q | | | | |
| 87-86-5 | Pentachlorophenol | 1800000 | J | 8300 | | | | | |

TABLE EX3PX9/2503 - B
DIOXINS AND FURANS BY SW-846 METHOD 8290
DATA SUMMARY TABLE

VALIDATED DATA FOR
CUMMINGS/RITER CONSULTANTS, INC.
BEAZER SUPERFUND SITE

SAMPLE DATA PACKAGE 2503
ALTA ANALYTICAL LABORATORY INC.

| SAMPLE ID | EX3-PX9A | | EX1-PX8A | | 901 | | EX1-PX9 | |
|---|---|---|---|---|---|---|---|---|
| LAB SAMPLE ID | 2503-0001-SA | | 2503-0002-SA | | 2503-0003-SA | | 2508-0004-SA | |
| DATE COLLECTED | 05/20/96 | | 05/20/96 | | 05/20/96 | | 05/21/96 | |
| DATE EXTRACTED | 05/22/96 | | 05/22/96 | | 05/22/96 | | 05/22/96 | |
| DATE ANALYZED | 05/24/96 | | 05/24/96 | | 05/24/96 | | 05/24/96 | |
| SAMPLE MATRIX | SOIL | | SOIL | | SOIL | | SOIL | |
| DILUTION FACTOR | 1.0 | | 1.0 | | 1.0 | | 1.0 | |
| PERCENT SOLIDS | 86 | | 93 | | 80 | | 93 | |
| SAMPLE WEIGHT (g) | 4.99 | | 4.98 | | 4.96 | | 5.02 | |
| COMPOUND | CONC (PG/G) | Q | CONC (PG/G) | Q | CONC (PG/G) | Q | CONC (PG/G) | Q |
| 2,3,7,8-TCDD | 0.49 | U | 0.36 | U | 1.0 | | 0.65 | U |
| Total TCDD | 0.49 | U | 0.36 | U | 1.0 | | 0.65 | U |
| 1,2,3,7,8-PeCDD | 1.7 | J | 0.96 | U | 8.4 | | 3.0 | |
| Total PeCDD | 3.1 | | 0.96 | U | 18 | | 5.4 | |
| 1,2,3,4,7,8-HxCDD | 3.3 | | 1.4 | U | 20 | | 5.8 | |
| 1,2,3,6,7,8-HxCDD | 14 | | 5.2 | | 170 | | 52 | |
| 1,2,3,7,8,9-HxCDD | 5.9 | | 1.1 | U | 36 | | 10 | |
| Total HxCDD | 53 | | 11 | | 490 | | 150 | |
| 1,2,3,4,6,7,8-HpCDD | 390 | | 100 | | 4700 | | 1500 | |
| Total HpCDD | 670 | | 150 | | 6900 | | 2400 | |
| OCDD | 10000 | | 550 | | 43000 | | 11000 | |
| 2,3,7,8-TCDF | 0.48 | U | 0.33 | J | 0.45 | J | 0.30 | J |
| Total TCDF | 0.56 | | 2.3 | | 12 | | 3.8 | |
| 1,2,3,7,8-PeCDF | 0.28 | U | 0.23 | U | 1.3 | J | 0.47 | J |
| 2,3,4,7,8-PeCDF | 0.32 | U | 0.29 | U | 2.2 | J | 0.81 | J |
| Total PeCDF | 7.7 | | 3.6 | | 79 | | 22 | |
| 1,2,3,4,7,8-HxCDF | 1.9 | J | 0.75 | J | 17 | | 5.7 | |
| 1,2,3,6,7,8-HxCDF | 1.2 | J | 0.54 | J | 10 | | 2.9 | |
| 2,3,4,6,7,8-HxCDF | 2.4 | J | 1.4 | J | 18 | | 5.6 | |
| 1,2,3,7,8,9-HxCDF | 0.49 | J | 0.39 | J | 2.5 | | 1.2 | J |
| Total HxCDF | 57 | | 22 | | 780 | J | 240 | J |
| 1,2,3,4,6,7,8-HpCDF | 58 | | 25 | | 890 | J | 250 | J |
| 1,2,3,4,7,8,9-HpCDF | 3.2 | | 2.1 | J | 46 | | 13 | |
| Total HpCDF | 230 | | 110 | | 4400 | J | 1400 | J |
| OCDF | 250 | | 120 | | 4900 | | 1400 | |

TABLE EX3PX9/2503 - B
DIOXINS AND FURANS BY SW-846 METHOD 8290
DATA SUMMARY TABLE

VALIDATED DATA FOR
CUMMINGS/RITER CONSULTANTS, INC.
BEAZER SUPERFUND SITE

SAMPLE DATA PACKAGE 2503
ALTA ANALYTICAL LABORATORY INC.

| SAMPLE ID | EX3-PX10A | | EX1-4-6-19/20 | | | | | |
|---|---|---|---|---|---|---|---|---|
| LAB SAMPLE ID | 2503-0005-SA | | 2503-0006-SA | | | | | |
| DATE COLLECTED | 05/20/96 | | 05/20/96 | | | | | |
| DATE EXTRACTED | 05/22/96 | | 05/22/96 | | | | | |
| DATE ANALYZED | 05/24/96 | | 05/24/96 | | | | | |
| SAMPLE MATRIX | SOIL | | SOIL | | | | | |
| DILUTION FACTOR | 1.0 | | 1.0 | | | | | |
| PERCENT SOLIDS | 79 | | 92 | | | | | |
| SAMPLE WEIGHT (g) | 4.98 | | 5.02 | | | | | |
| COMPOUND | CONC (PG/G) | Q | CONC (PG/G) | Q | | | | |
| 2,3,7,8-TCDD | 1.9 | | 0.86 | | | | | |
| Total TCDD | 7.6 | | 2.1 | | | | | |
| 1,2,3,7,8-PeCDD | 27 | | 0.58 | U | | | | |
| Total PeCDD | 90 | | 0.58 | U | | | | |
| 1,2,3,4,7,8-HxCDD | 59 | | 0.97 | U | | | | |
| 1,2,3,6,7,8-HxCDD | 480 | | 5.6 | | | | | |
| 1,2,3,7,8,9-HxCDD | 120 | | 0.84 | U | | | | |
| Total HxCDD | 1400 | | 14 | | | | | |
| 1,2,3,4,6,7,8-HpCDD | 13000 | | 130 | | | | | |
| Total HpCDD | 19000 | | 220 | | | | | |
| OCDD | 100000 | J | 2400 | | | | | |
| 2,3,7,8-TCDF | 1.2 | | 0.34 | U | | | | |
| Total TCDF | 30 | J | 0.65 | | | | | |
| 1,2,3,7,8-PeCDF | 4.1 | | 0.30 | U | | | | |
| 2,3,4,7,8-PeCDF | 6.5 | | 0.27 | U | | | | |
| Total PeCDF | 260 | J | 0.77 | J | | | | |
| 1,2,3,4,7,8-HxCDF | 51 | | 0.56 | U | | | | |
| 1,2,3,6,7,8-HxCDF | 30 | J | 0.53 | U | | | | |
| 2,3,4,6,7,8-HxCDF | 53 | | 0.60 | U | | | | |
| 1,2,3,7,8,9-HxCDF | 7.6 | | 0.68 | U | | | | |
| Total HxCDF | 2100 | J | 20 | | | | | |
| 1,2,3,4,6,7,8-HpCDF | 2500 | J | 15 | | | | | |
| 1,2,3,4,7,8,9-HpCDF | 140 | | 5.1 | | | | | |
| Total HpCDF | 13000 | J | 75 | | | | | |
| OCDF | 13000 | | 73 | | | | | |

TABLE EX3PX9/2503 - B
DIOXINS AND FURANS BY SW-846 METHOD 8290
DATA SUMMARY TABLE

VALIDATED DATA FOR
CUMMINGS/RITER CONSULTANTS, INC.
BEAZER SUPERFUND SITE

SAMPLE DATA PACKAGE 2503
ALTA ANALYTICAL LABORATORY INC.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | EQB-1 | | | | | | | |
| LAB SAMPLE ID | 2503-0007-SA | | | | | | | |
| DATE COLLECTED | 05/17/96 | | | | | | | |
| DATE EXTRACTED | 05/23/96 | | | | | | | |
| DATE ANALYZED | 05/24/96 | | | | | | | |
| SAMPLE MATRIX | WATER | | | | | | | |
| DILUTION FACTOR | 1.0 | | | | | | | |
| SAMPLE VOLUME (ml) | 914 | | | | | | | |
| COMPOUND | CONC (PG/L) | Q | | | | | | |
| 2,3,7,8-TCDD | 1.9 | U | | | | | | |
| Total TCDD | 1.9 | U | | | | | | |
| 1,2,3,7,8-PeCDD | 5.5 | U | | | | | | |
| Total PeCDD | 5.5 | U | | | | | | |
| 1,2,3,4,7,8-HxCDD | 8.9 | U | | | | | | |
| 1,2,3,6,7,8-HxCDD | 9.9 | U | | | | | | |
| 1,2,3,7,8,9-HxCDD | 8.5 | U | | | | | | |
| Total HxCDD | 9.9 | U | | | | | | |
| 1,2,3,4,6,7,8-HpCDD | 5.1 | U | | | | | | |
| Total HpCDD | 5.1 | U | | | | | | |
| OCDD | 21 | UJ | | | | | | |
| 2,3,7,8-TCDF | 1.3 | U | | | | | | |
| Total TCDF | 1.3 | U | | | | | | |
| 1,2,3,7,8-PeCDF | 1.7 | U | | | | | | |
| 2,3,4,7,8-PeCDF | 1.7 | U | | | | | | |
| Total PeCDF | 1.7 | U | | | | | | |
| 1,2,3,4,7,8-HxCDF | 2.7 | U | | | | | | |
| 1,2,3,6,7,8-HxCDF | 2.5 | U | | | | | | |
| 2,3,4,6,7,8-HxCDF | 2.6 | U | | | | | | |
| 1,2,3,7,8,9-HxCDF | 2.6 | U | | | | | | |
| Total HxCDF | 2.6 | U | | | | | | |
| 1,2,3,4,6,7,8-HpCDF | 1.2 | U | | | | | | |
| 1,2,3,4,7,8,9-HpCDF | 1.1 | U | | | | | | |
| Total HpCDF | 1.2 | U | | | | | | |
| OCDF | 4.0 | U | | | | | | |