N60200.AR.000882
NAS CECIL FIELD, FL
5090.3a

TECHNICAL MEMORANDUM REGARDING OPERABLE UNIT 2 (OU 2) SITE 5 BIOCELL LONG TERM WATER MANAGEMENT AND CONTINGENCY PLAN WITH ATTACHMENTS
NAS CECIL FIELD FL
5/2/1996
ABB ENVIRONMENTAL SERVICES INC

NAS Cecil Field Administrative Record
Document Index Number
32215-002
18.02.02.0015

TECHNICAL MEMORANDUM

TO: Site 5 Sub-committee
Mark Davidson - Southdiv
John Dingwall, P.E. - NASCF
Greg Brown, P.E. - FDEP
Hermann Bauer - BEI
Mike Deliz, P.G. - FDEP
Debbie Vaughn-Wright - USEPA

FROM: Bob Lunardini, P.E. - ABB-ES RCL

DATE: 2 May 1996

SUBJECT: NAS Cecil Field, OU 2, Site 5 Biocell Long-term Water Management and Contingency Plan

==========

Purpose A water balance submitted February 12, 1996 indicated that removal of excess water from the biocell will be required up to five times annually. The storage capacity of the biocell is 425,000 gallons (50,000 gallon storage tank plus the 375,000 gallon storage capacity of the sand drainage layer). This memo proposes a long-term excess water management plan along with a contingency plan to treat excess water from the Site 5 biocell if analytical results collected prior to removal indicate that excess water is not safe to discharge.

Long-term Management Plan The biocell will be in operation for at least another 1.5 years. The long-term excess water management plan is to discharge excess water into the woods to the east of the biocell. This will occur only if analytical data collected prior to discharge indicates the water will present no harm to human health or the environment. While pumping, the point of discharge will be moved every two hours to prevent sheet flow into Lake Fretwell. The analytical suite will be Purgeable Aromatics (EPA Method 602), Total Petroleum Hydrocarbons (EPA Method 418.1), and Turbidity (EPA Method 180.1). While pumping, turbidity will be monitored once every 2 hours using a Lamotte 2008 Turbidity Meter or equivalent.

Background On January 3, 1996 water from the biocell was sampled and analyzed for the following.

	USEPA Method
Halogenated Volatile Organics	8010
Aromatic Volatile Organics	8020
Semivolatile Organics	8270
Organochlorine Pesticides and PCBs	8080
Organophosphorus Pesticides	8141

Chlorinated Herbicides	8150
Total Petroleum Hydrocarbons	418.1
RCRA Metals, Hex. Chromium	200.7, 245.1, SM3128
Dissolved Oxygen	360.1
TSS	160.2

Results indicated the presence of two compounds above reporting limits; toluene at 5 ug/l and 3 & 4 methylphenol at 13 ug/l. Based on these results the BCT agreed to allow direct discharge of excess water from the 50,000 gallon storage tank onto the ground east of the biocell. Discharge of approximately 375,000 gallons occurred in late January with the discharge point being moved to prevent sheet flow into Lake Fretwell.

On January 21, 1996 water from the 50,000 gallon storage tank was sampled and analyzed for the following.

	USEPA Method
Volatile Aromatics	602
Total Petroleum Hydrocarbons	418.1
Turbidity	180.1

Turbidity was 36.2 NTU, all other results were non-detect.

Water from the 50,000 gallon storage tank was sampled and analyzed for the same parameters again on February 21 and March 18, 1996. Turbidity was 49 and 39.3 NTU respectively, all other results were non-detect. Analytical results from the last three sampling events are attached. See the January 17, 1996 Technical Memorandum *Disposal Options for Excess Water at the Site 5 Biocell* for the initial analytical results.

Contingency Plan If future analytical results indicate the need for treatment prior to discharge a temporary treatment system will be mobilized to the site. The treatment system will be either a mobile air stripper or liquid phase granular activated carbon (GAC). Contaminants identified from analytical results will dictate which system to used. It will take approximately 2 weeks to discharge 425,000 gallons.

A mobile, shallow tray air stripper can be leased on a weekly basis from local vendors. The estimated cost for 2 weeks rental is $2,800 rounded.

A GAC system can be leased on a monthly basis (3 month minimum) from local vendors. Two cost estimates obtained from area vendors for delivery, set up, and removal ranged from $3,800 to $5,100 rounded. All cost estimates are attached.

If implemented influent and effluent sampling and analyses will be required.

Environmental Conservation Laboratories
4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216-6069
904 / 296-3007
Fax 904 / 296-6210

ENCO Laboratories

DHRS Certification No. E82277, 8241

CLIENT : Bechtel Environmental, Inc.
ADDRESS: P.O. Box 171
Qtrs E Ave G, NAS Cecil
Jacksonville, FL 32215

REPORT # : JR1578
DATE SUBMITTED: January 22, 19
DATE REPORTED : January 22, 19

ATTENTION: Fred Seale

SAMPLE IDENTIFICATION

Sample submitted and
identified by client as:

Site 5

01/22/96

#1 - TANK @ 08:45

PROJECT MANAGER

Scott D. Martin

Scott D. Martin

ENCO LABORATORIES
REPORT # : JR1578
DATE REPORTED: January 22, 1996
PROJECT NAME : Site 5

RESULTS OF ANALYSIS

EPA METHOD 602 - VOLATILE AROMATICS	TANK	LAB BLANK	Units
Methyl tert-butyl ether	2 U	2 U	µg/L
Benzene	1 U	1 U	µg/L
Toluene	1 U	1 U	µg/L
Chlorobenzene	1 U	1 U	µg/L
Ethylbenzene	1 U	1 U	µg/L
m-Xylene & p-Xylene	1 U	1 U	µg/L
o-Xylene	1 U	1 U	µg/L
1,3-Dichlorobenzene	1 U	1 U	µg/L
1,4-Dichlorobenzene	1 U	1 U	µg/L
1,2-Dichlorobenzene	1 U	1 U	µg/L
Total Xylenes	2 U	2 U	µg/L
Surrogate:	% RECOV	% RECOV	LIMITS
Bromofluorobenzene (surr)	100	102	58-130
Date Analyzed	01/22/96	01/22/96	

EPA METHOD 418.1 - TOTAL PETR. HYDROCARBONS	TANK	LAB BLANK	Units
Total Petr. Hydrocarbons	1 U	1 U	mg/L
Date Analyzed	01/22/96	01/22/96	

MISCELLANEOUS	METHOD	TANK	LAB BLANK	Units
Turbidity	180.1	36.2	0.05 U	NTU
Date Analyzed		01/22/96	01/22/96	

U = Compound was analyzed for but not detected.

ENCO LABORATORIES
REPORT # : JR1578
DATE REPORTED: January 22, 1996
PROJECT NAME : Site 5

QUALITY CONTROL DATA

Parameter	% RECOVERY MS/MSD/LCS	ACCEPT LIMITS	% RPD MS/MSD	ACCEP LIMIT
EPA Method 602				
Benzene	96/ 98/ 90	59-137	2	17
Toluene	94/ 96/ 90	57-138	2	15
Ethylbenzene	94/ 96/ 90	47-144	2	16
m-Xylene & p-Xylene	93/ 95/ 90	51-151	2	16
EPA Method 418.1				
Total Petr. Hydrocarbons	104/104/ 90	62-127	<1	15

Environmental Conservation Laboratories Comprehensive QA Plan #910190G

= Less Than
S = Matrix Spike
SD = Matrix Spike Duplicate
CS = Laboratory Control Standard
= Relative Percent Difference

This report shall not be reproduced except in full, without the written approval of the laboratory.

NAVY RAC CHAIN OF CUSTODY RECORD

Page 1 of ___

Facility Name: NAS CECIL FIELD
Site Name: SITE 5 ~~Blind~~ TANK (50K) (HOLDING)
Delivery Order No.:
Cooler/Crate No.: #23
Sampling Event: TANK

SEIR No.: N/A
COC Number: N/A
Lab: ENCO
Field Logbook No.:
Logbook Pg. No.:

Sampled by: DAVID NOWES (Print) [signature] (Sign) ___ (Print) ___ (Sign)

Legend

SAMPLE TYPE

- PSB Preservative Blank
- FDP Field Duplicate
- ENV Environmental
- FDB Field Blank
- GEO Geotechnical Sample
- MXD Matrix Spike Duplicate
- MXS Matrix Spike
- BLS Blind Spike
- BLB Blind Blank
- PTS Point Source
- FRP Field Replicate
- RSB Rinsate Blank
- SPL Split
- TRP Trip Blank

MATRIX

- AIR Air
- FLO Flora
- FAU Fauna
- GWT Groundwater
- LCH Leachate
- OIL Oil
- DIW Deionized Water
- DFW Deionized Organic Free Water
- SBS Subsurface Soil
- SED Sediment
- SFS Surface Soil
- SFW Surface Water
- SLG Sludge
- SLW Solid Waste
- OFW Organic Free Water
- PTW Potable Water
- SEP Seeps
- SOL Solid
- WWT Waste Water
- SLW Solid Waste
- SST Surface Water Storm Event

QC LEVELS

- C Sample results and QC reported
- D Sample results, QC and raw data reported
- E Sample results, blanks, and calibration reported
- S Screening level analysis; sample results and QC as reported

Station ID	BEI Sample ID	Sample Type	Matrix Code	Collection Date/Time	Container ID	Preservative	Pay Item	Parameter	Priority	QC Code
TANK		ENV	SFW	1/22/96 0845	N/A	HCL	N/A	602	24 HR	C
↓		↓	↓	↓	↓	HCL	↓	602	↓	↓
						H_2SO_4		418.1		
						HNO_3		TURBIDITY		

RELINQUISHED BY	RECEIVED BY	DATE	TIME	REASON FOR TRANSFER
[signature]	Scott D Hart	1/22/96	1005	TRANSFER TO LAB

COMMENTS/INSTRUCTIONS

CONTAMINATION	YES	NO
Radiological		X
Chemical	X	

Shipper:

Ship to:

Airbill No. ___ Traffic Report No. ___

This package conforms to the conditions and limitations specified in 49 CFR 173.421 for ...

Environmental Conservation Laboratories
4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216-6069
904 / 296-3007
Fax 904 / 296-6210

ENCO Laboratories

DHRS Certification No. E82277, 82417

CLIENT : Bechtel Environmental, Inc.
ADDRESS: P.O. Box 171
Qtrs E Ave G, NAS Cecil
Jacksonville, FL 32215

REPORT # : JR1834
DATE SUBMITTED: February 21, 19
DATE REPORTED : February 22, 19

ATTENTION: Greg Olson

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

Site 5 Holding Tank

JOB #: 22567-221

02/21/96

#1 - SITE 5 HT @ 08:35-08:42

PROJECT MANAGER Scott D. Martin

ENCO LABORATORIES
REPORT # : JR1834
DATE REPORTED: February 22, 1996
PROJECT NAME : Site 5 Holding Tank

RESULTS OF ANALYSIS

EPA METHOD 602 - VOLATILE AROMATICS	SITE 5 HT	LAB BLANK	Units
Methyl tert-butyl ether	2 U	2 U	µg/L
Benzene	1 U	1 U	µg/L
Toluene	1 U	1 U	µg/L
Chlorobenzene	1 U	1 U	µg/L
Ethylbenzene	1 U	1 U	µg/L
m-Xylene & p-Xylene	1 U	1 U	µg/L
o-Xylene	1 U	1 U	µg/L
1,3-Dichlorobenzene	1 U	1 U	µg/L
1,4-Dichlorobenzene	1 U	1 U	µg/L
1,2-Dichlorobenzene	1 U	1 U	µg/L
Surrogate:	% RECOV	% RECOV	LIMITS
Bromofluorobenzene	100	115	58-130
Date Analyzed	02/21/96	02/21/96	

EPA METHOD 418.1 - TOTAL PETR. HYDROCARBONS	SITE 5 HT	LAB BLANK	Units
Total Petr. Hydrocarbons	1 U	1 U	mg/L
Date Analyzed	02/21/96	02/21/96	

MISCELLANEOUS	METHOD	SITE 5 HT	LAB BLANK	Units
Turbidity	180.1	49	0.05 U	NTU
Date Analyzed		02/21/96	02/21/96	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JR1834
DATE REPORTED: February 22, 1996
PROJECT NAME : Site 5 Holding Tank

QUALITY CONTROL DATA

Parameter	% RECOVERY MS/MSD/LCS	ACCEPT LIMITS	% RPD MS/MSD	ACCEP LIMIT
EPA Method 602				
Benzene	88/ 88/ 92	59-137	<1	17
Toluene	88/ 90/ 92	57-138	2	15
Ethylbenzene	84/ 86/ 90	47-144	2	16
m-Xylene & p-Xylene	84/ 84/ 88	51-151	<1	16
EPA Method 418.1				
Total Petr. Hydrocarbons	94/ 92/ 93	62-127	2	15

Environmental Conservation Laboratories Comprehensive QA Plan #910190G

< = Less Than
MS = Matrix Spike
MSD = Matrix Spike Duplicate
LCS = Laboratory Control Standard
RPD = Relative Percent Difference

This report shall not be reproduced except in full, without the written approval of the laboratory.

CHAIN OF CUSTODY RECORD

BECHTEL

Site Name: SITE 5 - HOLDING TANK
Delivery Order No.:
Cooler/Crate No.:

SEIR No.:
COC Number: 10,002
Lab: ENCO
Field Logbook No.:
Logbook Pg. No.:

Sampled by: GREGORY M. OLSON JR (Print) — Gregory M. Olson Jr. (Sign) — (Print) — (Sign)

Legend

SAMPLE TYPE

PSB	Preservative Blank	BLS	Blind Spike
FDP	Field Duplicate	BLB	Blink Blank
ENV	Environmental	PTS	Point Source
FDB	Field Blank	FRP	Field Replicate
GEO	Geotechnical Sample	RSB	Rinsate Blank
MXD	Matrix Spike Duplicate	SPL	Split
MXS	Matrix Spike	TRP	Trip Blank

MATRIX

AIR	Air	SDS	Subsurface Soil	PTW	Potable Water
FLO	Flora	SED	Sediment	SEP	Seeps
FAU	Fauna	SFS	Surface Soil	SOL	Solid
GWT	Groundwater	SPW	Surface Water	WWT	Waste Water
LCH	Leachate	SLG	Sludge	SLW	Solid Waste
OIL	Oil	SST	Surface Water Storm Event		

QC LEVELS

- S Sample Results and QC
- C Reported
- D Sample results, QC and raw data reported
- E Sample results, blanks, and calibration reported
- S Screening level analysis

Station ID	BEI Sample ID	Sample Type	Matrix Code	Collection Date/Time	Container ID	Preservative	Pay Item	Parameter	Priority	QC Code
SSHT	CF22170	ENV	SST	2/21/96 0835	01	HCl/COOL 4°C	N/A	BTEX	24 HR	C
SSHT	CF22170	↓	↓	0837	02	HCl/COOL 4°C	↓	602	↓	C
SSHT	CF22170	↓	↓	0839	03	H_2SO_4/COOL 4°C	↓	418.1	↓	C
SSHT	CF22170	↓	↓	0842	04	COOL 4°C	↓	GASOLINE TURBIDITY	↓	C

RELINQUISHED BY	RECEIVED BY	DATE	TIME	REASON FOR TRANSFER
Gregory M. Olson Jr.	K. [illegible]	2/21/96	0945	SHIP TO LAB FOR ANALYSIS

COMMENTS/INSTRUCTIONS: JOB #22567-221
ATTN: SCOTT MARTIN

CONTAMINATION	YES	NO
Radiological		X
Chemical		X

Shipper: BEC QTRS. E, G. AVE, NAS CECIL FIELD
Ship to: ENCO LABS, JACKSONVILLE, FL (904) 296-3007

Airbill No.
Traffic Report No.

TP 1836

Environmental Conservation Laboratories
4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216-6069
904 / 296-3007
Fax 904 / 296-6210

ENCO Laboratories

DHRS Certification No. E82277, 82417

CLIENT : Bechtel Environmental, Inc.
ADDRESS: P.O. Box 171
Qtrs E Ave G, NAS Cecil
Jacksonville, FL 32215

REPORT # : JR2077
DATE SUBMITTED: March 18, 1996
DATE REPORTED : March 19, 1996

ATTENTION: Greg Olson

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

PROJECT #: 22567-221

Site 5 Holding Tank

03/18/96

#1 - CF22184 @ 16:36-16:39

PROJECT MANAGER Scott D Martin

Scott D. Martin

ENCO LABORATORIES
REPORT # : JR2077
DATE REPORTED: March 19, 1996
REFERENCE : 22567-221
PROJECT NAME : Site 5 Holding Tank

RESULTS OF ANALYSIS

EPA METHOD 602 - VOLATILE AROMATICS	CF22184	LAB BLANK	Units
Methyl tert-butyl ether	2 U	2 U	µg/L
Benzene	1 U	1 U	µg/L
Toluene	1 U	1 U	µg/L
Chlorobenzene	1 U	1 U	µg/L
Ethylbenzene	1 U	1 U	µg/L
m-Xylene & p-Xylene	1 U	1 U	µg/L
o-Xylene	1 U	1 U	µg/L
1,3-Dichlorobenzene	1 U	1 U	µg/L
1,4-Dichlorobenzene	1 U	1 U	µg/L
1,2-Dichlorobenzene	1 U	1 U	µg/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Bromofluorobenzene	105	90	58-130
Date Analyzed	03/19/96	03/18/96	

EPA METHOD 418.1 - TOTAL PETR. HYDROCARBONS	CF22184	LAB BLANK	Units
Total Petr. Hydrocarbons	1 U	1 U	mg/L
Date Analyzed	03/19/96	03/19/96	

MISCELLANEOUS	METHOD	CF22184	LAB BLANK	Units
Turbidity	180.1	39.3	0.26	NTU
Date Analyzed		03/19/96	03/19/96	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : JR2077
DATE REPORTED: March 19, 1996
REFERENCE : 22567-221
PROJECT NAME : Site 5 Holding Tank

QUALITY CONTROL DATA

Parameter	% RECOVERY MS/MSD/LCS	ACCEPT LIMITS	% RPD MS/MSD	ACCEPT LIMITS
EPA Method 602				
Benzene	100/100/ 95	59-137	<1	17
Toluene	105/100/ 95	57-138	5	15
Ethylbenzene	105/115/100	47-144	9	16
m-Xylene & p-Xylene	105/112/ 92	51-151	6	16
EPA Method 418.1				
Total Petr. Hydrocarbons	95/ 91/ 96	62-127	4	15

Environmental Conservation Laboratories Comprehensive QA Plan #960038G

< = Less Than
MS = Matrix Spike
MSD = Matrix Spike Duplicate
LCS = Laboratory Control Standard
RPD = Relative Percent Difference

This report shall not be reproduced except in full, without the written approval of the laboratory.

CHAIN OF CUSTODY RECORD

BECHTEL

Site Name: SITE 5 - HOLDING TANK
Delivery Order No.:
Cooler/Crate No.:

SEIR No:
COC Number: 10,003
Lab: ENCO
Field Logbook No.:
Logbook Pg. No.:

Sampled by: GREGORY M. OLSON JR. (Print) [signature] (Sign) _____ (Print) _____ (Sign)

Legend

SAMPLE TYPE

PSB	Preservative Blank	BLS	Blind Spike
FDP	Field Duplicate	BLB	Blank Blank
ENV	Environmental	PTS	Point Source
FDB	Field Blank	FRP	Field Replicate
GEO	Geotechnical Sample	RSB	Rinsate Blank
MXD	Matrix Spike Duplicate	SPL	Split
MXS	Matrix Spike	TRP	Trip Blank

MATRIX

AIR	Air	SBS	Subsurface Soil	PTW	Potable Water
FLO	Flora	SED	Sediment	SEP	Seeps
FAU	Fauna	SFS	Surface Soil	SOL	Solid
GWT	Groundwater	SPW	Surface Water	WWT	Waste Water
LCH	Leachate	SLG	Sludge	SLW	Solid Waste
OIL	Oil	SST	Surface Water Storm Event		

QC LEVELS

- S Sample Results and QC
- C Reportec
- D Sample results, QC and raw data reported
- E Sample results, blanks, and calibration reported
- S Screening level analysis

Station ID	BEI Sample ID	Sample Type	Matrix Code	Collection Date/Time	Container ID	Preservative	Pay Item	Parameter	Priority	QC Code
SSHT	CF22184	ENV	SST	3/18/96, 1636	01	HCl/COOL 4°C	N/A	BTEX	24 HR	C
SSHT				1637	02	HCl/COOL 4°C		602		C
SSHT				1638	03	H_2SO_4/COOL 4°C		418.1		C
SSHT				1639	04	COOL 4°C		GASOLINE TURBIDITY		C

RELINQUISHED BY	RECEIVED BY	DATE	TIME	REASON FOR TRANSFER
[signature]	Scott Martin	3/18/96	21:15	SHIP TO LAB FOR ANALYSIS

COMMENTS/INSTRUCTIONS
JOB# 22567-221
ATTN: SCOTT MARTIN

CONTAMINATION	YES	NO
Radiological		X
Chemical		X

Shipper: BEI; QTRS. E, G. AVE.; NAS CECIL FIELD; JAX, FL
Ship to: ENCO LABS; JAX, FL; (904) 296-3007

Airbill No. _____ Traffic Report No. _____

This package conforms to the conditions and limitations specified in 49 CFR 173.421 for excepted radioactive material, limited quantity, n.o.s., UN2910

TP 2077

ESi

March 11, 1996,
Mr. Tim Kelly
ABB Environmental

Dear Tim,

Thanks for your request regarding the site at Cecil Field. With 25 gpm and BETX at less than 1 ppm we would recommend the following:

2 vessels - model TW18 - each contains 500 lbs
liquid phase GAC, 30" OD, 75 psi $2,650.00 ea. $5,300.00

3 month rental $250 per vessel per month plus carbon x 3 x 2 = 1500
6 month rental $210 per vessel per month plus carbon

Liquid Phase GAC.....$ 1.20/lb. x 1000 = 1200

Another option is 3 drums in parallel followed by 3 drums
(max 7 psi)...$495.00 ea plus hoses and connects.....$2,970.00

Vacuum and rebed 500 lb spent non-hazardous vessel.....$ 235.00 x 2 = 470

Regeneration of non-hazardous carbon.....$ .26/lb x 1000 = 260

Service transportation calculated at
$1.25/one-way mile.
Approximately 250 miles to Cecil Field. .....$ 312.50 312.5

3742.

Please call if you have any questions.

Andy Pickens

938 Grove Park Dr. N. • Orange Park, FL 32073 • (904) 264-2520 • fax (904) 269-9916

PETRO-CHEM EQUIPMENT CO.

15310 Amberly Drive - Suite 250
Tampa, FL 33647
(813) 972-1331 FAX (813) 972-0955

Telefax Cover Letter

Please deliver the following page(s) to:

Name: Tim Kelley

Company: ABB ENVIRONMENTAL

Total Number of Pages: 4 including cover letter.

Date: Monday, March 11, 1996 Time: 10:32AM

If all pages are not received or any are not legible, please call me as soon as possible

Telephone: 813-972-1331 Telefax: 813-972-0955

Operator: Don Schurr, Jr

Remarks: RE: QUOTATION FOR NAS-CECIL FIELD
RENTAL OF CARBON SYSTEM

2 - Aqua 800 HP liquid phase carbon adsorbers, each with 800 lbs. carbon, inlet pressure gauge, 1-1/2" male Cam-lock fittings, outlet sample port and ball valve. Delivery and placement onsite by factory technician included. System may be utilized for up to ninety (90) days. Additional months after initial 90 days will be $300 per month.

TOTAL PRICE: $5,125.00

1 - Removal of activated carbon and vessels from jobsite and disposal of exhausted nonhazardous carbon is at no charge. If the spent carbon must be handled as a RCRA Hazardous Waste, then exhausted carbon will be subject to a $2,500 initial acceptance fee plus RCRA freight and taxes from Jacksonville, FL to Catlettsburg, KY. Freight estimated at $1,650.

Availability: Stock
FOB: Jacksonville, FL
Terms: Net 30 Days
Issue PO to: Carbon Service & Equipment Company
c/o Petro-Chem Equipment Co.
PO Box 838
Donora, PA 15033
Phone: (800) 330-6949
FAX: (813) 972-0955

ENVIRONMENTAL RESTORATION SYSTEMS

RENTAL EQUIPMENT ORDER CONFIRMATION

DATE	CATEGORY	PROPOSAL NUMBER
May 1, 1996	SH & CAR	96429

CUSTOMER INFORMATION

NAME	Bill Zulliger	PHONE	(423) 220-2210
COMPANY	Bechtel Environmental	FAX	(423) 220-2108
ADDRESS	151 Lafayette Drive Oak Ridge, TN	ZIP	47830

PURCHASE INFORMATION

ITEM	DESCRIPTION	PRICE
1	Two week rental of model 2331 Shallow/Tray Aerator	$ 1,500.00
2	Two week rental of a self priming centrifugal influent pump	$ 250.00
3	Crating, and shipping one-way to Jacksonville, FL	$ 1,000.00
	TOTAL	$ 2,750.00

TERMS AND CONDITIONS | As per ERS Lease Agreement

Special Conditions/Addenda: ERS would require a XXX (X) XXX notice to schedule rental units. Rental subject to availability. Client must supply 208 vac xxxxx phase power to the rental unit location, and all piping and hose not normally included with the rental equipment. Return shipment, decontamination of the unit is the responsibility of the customer and must be performed prior to the return shipment to Environmental Restoration Systems (ERS) per ERS lease agreement. ERS reserves the right to refuse any return shipments that are not decontaminated or to invoice for damages or additional cleaning if deemed necessary by ERS. Price does not include shipping. ERS can, at additional charges, provide installation and/or on-site start-up assistance. Call for estimate.

ACCEPTANCE

Please examine this Order Confirmation and the terms and special conditions enclosed. The prices and terms herein are not subject to verbal changes or other amendments unless approved in writing by ERS. *Proprietary Notice:* Information contained herein is the property of and is proprietary to Environmental Restoration Systems, Inc. and shall not be reproduced, disclosed or used except for evaluation purposes without written permission of Environmental Restoration Systems, Inc.

AUTHORIZED SIGNATURE	DATE	SUBMITTED BY
		James S. Taylor, II Rental Specialist/Customer Service

FAX or mail a signed Order Confirmation and Lease Agreement along with a copy of the check or purchase order to expedite your order to:

Environmental Restoration Systems, Inc.
9 Dogwood Lane Middletown, PA 17057

ERS LEASE AGREEMENT

LESSEE INFORMATION

LEGAL NAME:	Bechtel Environmental	BILLING ADDRESS:	151 Lafayette Drive
PHONE:	(423) 220-2210	CITY:	Oak Ridge
FAX:	(423) 220-2106	STATE:	TN
PROPOSAL NUMBER:	96429	Zip:	47830

EQUIPMENT INFORMATION

LOCATION IF OTHER THAN ABOVE:	SEND INVOICE TO THE ATTENTION OF:
Jacksonville, FL	Bill Zulliger

ITEM	MODEL/SERIAL NO.	DESCRIPTION	PRICE
1	IT 035	Two week rental of a model 2331 ShallowTray Aerator as per ERS Lease Agreement.	$ 1,500.00
2		Two week rental of a self priming centrifugal pump	$ 250.00

LESSEE PAYMENT INFORMATION		AUTHORIZED SIGNATURE
SECURITY DEPOSIT	$ 875.00	
FIRST PAYMENT	$ 875.00	
SUBSEQUENT PAYMENT (IF REQUIRED)	$ 875.00	DATE
PAYMENT TERMS	weekly	
TOTAL FIRST PAYMENT ENCLOSED	$ 1,750.00	

TERMS

THIS LEASE IS NON-CANCELABLE. This lease is a binding contract of all terms on the front and pages following hereof. Signing this agreement indicates all terms and conditions have been reviewed and accepted. Rental period includes outbound and inbound shipment time. ERS must be notified prior to any return shipment of rental equipment. Charges for cleaning and/or making repairs for damage caused by negligence on the part of the lessee or agents acting in behalf of the lessee will be billed to the lessee at a time ($45.00/hr) and material rate.

FAX or mail a signed Order Confirmation and Lease Agreement along with a copy of the check or purchase order to expedite your order to:

Environmental Restoration Systems, Inc.
9 Dogwood Lane Middletown, PA 17057
PHONE (717) 944-5508 FAX (717) 944-4551