



March 28, 2007

**Sludge Solutions International, LLC Sewper Rx (granular host) Y060206C:**  
**7-Day Static-Renewal *C. dubia* & *P. promelas* Definitive Toxicity Results**

**Bioprocessing LLC**  
 5041 Taravella Rd.  
 Marrero, LA 70072

Attention: Boyd Young

Dear Mr. Young:

A pair of 7-day chronic *C. dubia* and *P. promelas* definitive tests (EPA-821-R-02-013) was initiated March 12, 2007 (Appendix A). The sample used in this test was supplied by **Bioprocessing LLC** on behalf of their client **Sludge Solutions International, LLC** and delivered to **Environmental Enterprises USA, Inc. (EE USA)** on March 8, 2007 (Appendix D). Daily, a solution of **Sewper Rx (granular host)** was prepared at 29.96 mg/L, the recommended application rate (4oz per 1000 gallons water), and mixed for one hour on a stir plate.

The *C. dubia* test included ten replicates each of **Sewper Rx (granular host)** at 29.96 mg/L and a concurrent laboratory performance control (LPC). The *P. promelas* test included five replicates each of **Sewper Rx (granular host)** at 29.96 mg/L and a concurrent LPC. Moderately Hard Synthetic Freshwater was used as the diluent and LPC. *C. dubia* were fed 0.1ml *Selenastrum capricornutum* and 0.1ml of Yeast-Cerophyl-digested Trout Chow daily and *P. promelas* test organisms were fed *Artemia* nauplii less than 24-hours old twice daily.

EE #: E-132-07	Statistically Significant Difference between LPC and <b><i>Sewper Rx (granular host)</i></b> at 29.96 mg/L		
	Survival	Reproduction	Growth
<i>C. dubia</i>	No	No	N/A
<i>P. promelas</i>	No	N/A	No

The response used in statistical analysis of survival data was the proportion of surviving test organisms per replicate. The response used in reproduction data analysis (*C. dubia*) was the total number of neonates produced per replicate. The response used in growth data analysis (*P. promelas*) was the average individual dry weight for each replicate: replicate weight divided by the number of original larvae. The Homoscedastic t Test was used to determine if there were statistically significant differences in the endpoints of interest, survival and reproduction for *C. dubia* or survival and growth for *P. promelas*, between the LPC and 29.96 mg/L **Sewper Rx (granular host)**. In these tests, survival and reproduction of *C. dubia* and survival and growth of *P. promelas* were not significantly reduced after exposure to 29.96 mg/L **Sewper Rx (granular host)**. The results for the laboratory performance control and **Sewper Rx (granular host)** were very similar. Copies of the raw data are presented in Appendix A. Survival, reproduction and growth data analysis and summary statistics for the *C. dubia* and *P. promelas* tests are presented in Appendix B & C, respectively.

Mr. Young, thank you for choosing **EE USA** to complete this work for **Bioprocessing LLC**. I appreciate the opportunity and look forward to working with you again. Please call me if you have any questions or comments.

Sincerely,



David L. Daniel  
Laboratory Director



Mark A. O'Neil  
QA/QC Supervisor

encl: Appendixes A – D

**Environmental Enterprises USA, Inc.**

**APPENDIX A**

**Bioprocessing LLC**

Boyd Young

**Test Concentrations, mg/l Product (PR)**

<i>Ceriodaphnia dubia</i>	<i>Pimephales promelas</i>	Total Volume/ Concentration, ml	Color Code	ml SSOL	ml DH <sub>2</sub> O
29.96 mg/l		1500.00	Black	1500.00	0.00
0.0 mg/l LPC		"	White	0.00	1500.00
Total Volume (ml) of EFF needed per day=					1500.0
Total Volume (ml) of EFF needed for test duration=					10500.0

PR Stock Solution prepared daily: 4oz/1000 gallons = 44.94 mg SewperRx/1500 ml DH<sub>2</sub>O

Data Pages & Calculations by: Veronica McLean QA/QC Check by: Sharon Shaw

*C. dubia* = 10 Reps x 15 ml  
= 150 ml

*P. promelas* = 4 Reps x 250 ml  
= 1000 ml

DH<sub>2</sub>O = Dilution Water = **Moderately Hard Synthetic Freshwater**

	LPC	M #	LPC	M #	LPC	M #
Date	03/12		03/14		03/16	
Alkalinity	76	-	76	-	68	-
Conductivity	273	MS	273	MS	292	MS
Hardness	100	-	100	-	110	-
pH	8.3	Q8	8.3	Q8	7.8	Q8
TRC	///	-	///	-	///	-
	<u>VM</u>		<u>VM</u>		<u>VM</u>	

LPC: Laboratory Performance Control, synthetic moderately hard water  
 Alkalinity: mg/l as CaCO<sub>3</sub> Conductivity: μS/cm Hardness: mg/l as CaCO<sub>3</sub>  
 pH: SU TRC: mg/l M#: Meter number

Prep Date	03/12	03/13	03/14	03/15	03/16	03/17	03/18
Weight	44.94	44.97	44.96	44.97	44.94	44.94	44.94
Initial	<u>VM</u>	<u>VM</u>	<u>VM</u>	<u>S6</u>	<u>S6</u>	<u>S6</u>	<u>S6</u>

Comments:

Environmental Enterprises USA, Inc.

**Cladoceran, *Ceriodaphnia dubia***  
Survival and Reproduction Test  
Method 1002

**Bioprocessing LLC**

Test Organisms Age: 7.0 - 9.0 Hours Old  
 Test Organisms Source: EE USA Test Initiation At: 1600 on 03/12/07  
 Counted by: Veronica McNew QC/QA by: Sharon Graves  
 Loaded by: Veronica McNew

***C. dubia* Daily Survival Data**

Treatment: Laboratory Performance Control (LPC), 0 mg/l													White	
	REP	1	2	3	4	5	6	7	8	9	10	% Surv	No. of Neonates Per Day	Tech
D A Y	0	0	0	0	0	0	0	0	0	0	0	///	///	✓
	1	0	0	0	0	0	0	0	0	0	0	100	0	SB
	2	0	0	0	0	0	0	0	0	0	0	100	0	ME
	3	0	5	0	3	0	6	0	0	0	0	100	ME03507 614	ME
	4	7	0	4	0	7	0	8	7	7	6	100	46	TK
	5	12	13	12	16	16	13	12	9	11	0	100	114	56
	6	7	17	15	20	22	20	19	17	17	18	100	172	56
	7													
3rd Brood Reproduction Per Replicate												Mean	CV %	///////
		26	35	31	39	45	39	39	33	35	24	34.6		

Comments:

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Environmental Enterprises USA, Inc.

*C. dubia* Daily Survival Data Cont.

Treatment: 29.96 mg/l													Black			
D A Y	REP	11	12	13	14	15	16	17	18	19	20	% Surv	No. of Neonates Per Day	Tech	Time	
	0	0	0	0	0	0	0	0	0	0	0	0	///	///	W	1600
	1	0	0	0	0	0	0	0	0	0	0	100	0	SG	1500	
	2	0	0	0	0	0	0	0	0	0	0	100	0	ME	1354	
	3	0	0	0	0	3	7	0	0	0	0	100	10	ME	1546	
	4	7	7	7	7	6	0	7	8	7	5	100	61	TK	1328	
	5	12	15	16	15	15	17	14	15	14	16	100	149	SG	1205	
	6	16	18	19	19	16	19	17	0	10	16	100	150	SG	1145	
	7															
3rd Brood Reproduction Per Replicate												Mean	CV %	//////		
35 40 42 41 24 43 38 23 31 37												35.4				

03-18-07  
SG

Calculations by: Veronica McNew QA/QC by: [Signature]

Data Entry by: Veronica McNew

Double Data Entry by: Veronica McNew or

QA/QC Officer: N/A

Environmental Enterprises USA, Inc.

*C. dubia* Water Quality Data

LPC & All Treatments: Initial & Final Temp. - 23.5 - 26.4°C; Initial & Final DO - 4.0 > 8.3 mg/l

Day 0		Treatment mg/l PR					
03/12/07	LPC	29.96 mg/l					Meter #
DO	I	8.3	8.3				57
	F	7.8	7.5				57
Temp	I	24.7	25.0				Q8
	F	25.3	25.1				Q8
pH	F	8.4	8.4				Q8
Initials	Initials: <i>Sw</i>		Finals: <i>SIEME</i>				
Times	Initial Time: <i>1550</i>		Final Time: <i>0857</i>				

Day 1		Treatment mg/l PR					
03/13/07	LPC	29.96 mg/l					Meter #
DO	I	<del>8.3</del> 8.0	<del>8.3</del> 8.2				57
	F	7.8	7.9				57
Temp	I	<del>24.7</del> 25.1	<del>25.0</del> 25.8				M5
	F	25.3	25.4				Q8
pH	F	8.4	8.4				Q8
Initials	Initials: <i>AEVMS6</i>		Finals: <i>CMPTK</i>				
Times	Initial Time: <i>1550</i>		Final Time: <i>0908</i>				

XME  
031407

Day 2		Treatment mg/l PR					
03/14/07	LPC	29.96 mg/l					Meter #
DO	I	8.0	8.2				
	F	7.9	7.9				
Temp	I	25.1	25.0				
	F	26.2	26.2				
pH	F	8.2	8.2				
Initials	Initials: <i>ME</i>		Finals: <i>(X)</i>				
Times	Initial Time: <i>1338</i>		Final Time: <i>(X)</i>				

*(X) Data not recorded 03/20/07 VZ*

Environmental Enterprises USA, Inc.

*C. dubia* Water Quality Data Cont.

Day 3		Treatment mg/l PR					
03/15/07	LPC	29.96 mg/l					Meter #
DO	I	7.9	8.0				57
	F	8.3	8.3				57
Temp	I	25.4	23.5				MS
	F	24.4	24.3				MS
pH	F	8.2	8.3				QB
Initials	Initials: MW		Finals: SG MW				
Times	Initial Time: 1450		Final Time: 0715				

Day 4		Treatment mg/l PR					
03/16/07	LPC	29.96 mg/l					Meter #
DO	I	8.3	8.1				57
	F	8.3	8.3				57
Temp	I	24.9	25.6				MS
	F	25.3	25.3				QB
pH	F	8.0	8.0				QB
Initials	Initials: MW		Finals: SG				
Times	Initial Time: 1047		Final Time: 1205				

Day 5		Treatment mg/l PR					
03/17/07	LPC	29.96 mg/l					Meter #
DO	I	8.3	8.1				57
	F	8.3	8.3				57
Temp	I	25.3	23.5				MS
	F	23.5	23.8				QB
pH	F	8.0	8.0				QB
Initials	Initials: SG		Finals: SG				
Times	Initial Time: 1128		Final Time: 1150				

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*C. dubia* Water Quality Data Cont.

Day 6		Treatment mg/l PR					
03/18/07	LPC	29.96 mg/l					Meter #
DO	I	8.3	8.3				57
	F						
Temp	I	23.6	23.6				MS
	F						
pH	F						
Initials	Initials: <i>So</i>		Finals: <i>N/A</i>				
Times	Initial Time: <i>1035</i>		Final Time: <i>N/A</i>				

LPC: Laboratory Performance Control, synthetic moderately hard water  
 Alkalinity: mg/l as CaCO<sub>3</sub>    Conductivity: μS/cm    Hardness: mg/l as CaCO<sub>3</sub>  
 pH: SU    TRC: mg/l

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Environmental Enterprises USA, Inc.

**Fathead Minnow, *Pimephales promelas***  
 Larval Survival and Growth Test  
 Method 1000

**Bioprocessing LLC**

Test Organisms Age: -24 Hours Old    Test Organisms Source: EE USA  
 Test Initiation At: 1553 on 03/12/07  
 Counted by: Jimm K    QC/QA by: Veronica McLean  
 Loaded by: Veronica McLean

***P. promelas* Daily Survival Data**

Treatment: Laboratory Performance Control (LPC), 0 mg/l								White
Rep.	Day 0	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1	10	10	10	10	10	10	10	10
2	10	10	10	10	10	10	10	10
3	10	10	10	10	10	10	10	10
4	10	10	10	10	10	9	9	9
5	10	10	10	10	10	10	10	10
Initials	<u>JK</u>	<u>MM</u>	<u>ME</u>	<u>ME</u>	<u>N</u>	<u>JH</u>	<u>SB</u>	<u>JH</u>

Treatment: 29.96 mg/l PR								Black
Rep.	Day 0	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
6	10	9	9	9	9	9	8	8
7	10	*9/10	10	9	9	9	9	9
8	10	10	10	10	10	10	10	10
9	10	10	10	9/10	10	10	10	10
10	10	10	10	9	9	9	9	9
Initials	<u>JK</u>	<u>MM</u>	<u>ME</u>	<u>ME</u>	<u>N</u>	<u>JH</u>	<u>SB</u>	<u>JH</u>
Time	<u>1553</u>	<u>1600</u>	<u>1345</u>	<u>1537</u>	<u>1415</u>	<u>1223</u>	<u>1035</u>	<u>0903</u>

mm\*  
031307

Test Completed on: 03/19/07

03/20/07  
JK

Comments:

Environmental Enterprises USA, Inc.

***P. promelas* Water Quality Data**  
 LPC & All Treatments: Initial Temp. - 23.5 - 26.4°C; Initial DO - 4.0>8.3 mg/l

Day 0		Treatment mg/l PR					
03/12/07	LPC	29.96 mg/l					Meter #
DO	I	8.3	8.3				S7
	F	7.7	7.0				S7
Temp	I	24.7	25.0				M5
	F	25.4	25.4				Q8
pH	F	8.1	7.9				Q8
Initials	Initials: SC		Finals: Cmpgth				
Times	Initial Time: 1550		Final Time: 0915				

Day 1		Treatment mg/l PR					
03/13/07	LPC	29.96 mg/l					Meter #
DO	I	8.3	8.3				S7
	F	4.8	10.4				S7
Temp	I	24.7	25.0				Q8
	F	25.6	25.6				Q8
pH	F	8.0	7.9				Q8
Initials	Initials: 1256		Finals: Slome				
Times	Initial Time: 1550		Final Time: 0856				

Day 2		Treatment mg/l PR					
03/14/07	LPC	29.96 mg/l					Meter #
DO	I	8.0	8.2				S7
	F	7.7	7.5				S7
Temp	I	25.1	25.8				M5
	F	25.3	25.4				Q8
pH	F	8.3	8.2				Q8
Initials	Initials: ME		Finals: Cmpgth				
Times	Initial Time: 1338		Final Time: 0907				

Environmental Enterprises USA, Inc.

*P. promelas* Water Quality Data Cont.

Day 3		Treatment mg/l PR					
03/15/07	LPC	29.96 mg/l					Meter #
DO	I	7.9	8.0				57
	F	7.5	7.5				57
Temp	I	25.4	23.5				MS
	F	24.0	23.9				MS
pH	F	8.0	7.9				QB
Initials	Initials: <i>NV</i>		Finals: <i>SG NV</i>				
Times	Initial Time: <i>1450</i>		Final Time: <i>0715</i>				

Day 4		Treatment mg/l PR					
03/16/07	LPC	29.96 mg/l					Meter #
DO	I	8.3	8.1				
	F	<i>x</i> 7.6	<i>x</i> 6.9				<i>x</i> 57
Temp	I	24.9	25.6				
	F	<i>x</i> 23.5	<i>x</i> 23.4				Q8
pH	F	<i>x</i> 8.2	<i>x</i> 8.0				Q8
Initials	Initials: <i>SLP NV</i>		Finals: <i>x</i>				
Times	Initial Time: <i>1047</i>		Final Time: <i>x</i>				

Day 5		Treatment mg/l PR					
03/17/07	LPC	29.96 mg/l					Meter #
DO	I	8.3	8.1				57
	F	7.4	6.9				57
Temp	I	<i>5</i> 23.3	23.5				MS
	F	23.6	23.6				Q8
pH	F	8.2	8.0				Q8
Initials	Initials: <i>SLP</i>		Finals: <i>SLP</i>				
Times	Initial Time: <i>1128</i>		Final Time: <i>0738</i>				

*x* Final water quality not recorded  
03/20/07 NV

*3/18/07*  
*SLP*

Environmental Enterprises USA, Inc.

*P. promelas* Water Quality Data Cont.

Day 6		Treatment mg/l PR					
03/18/07	LPC	29.96 mg/l					Meter #
DO	I	8.3	8.3				S7
	F	6.4	6.7				S7
Temp	I	23.6	23.6				M5
	F	24.6	24.6				Q8
pH	F	7.6	7.5				Q8
Initials	Initials: SG		Finals: CMPTK				
Times	Initial Time: 1035		Final Time: 0938				

LPC: Laboratory Performance Control, synthetic moderately hard water  
 Alkalinity: mg/l as CaCO<sub>3</sub>    Conductivity: μS/cm    Hardness: mg/l as CaCO<sub>3</sub>  
 pH: SU    TRC: mg/l

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Environmental Enterprises USA, Inc.

7 Day *P. promelas* Growth Data

Pan #	Concentration and Replicate	A Final Weight (mg)	B Initial Weight (mg)	C No. of Orig. Larvae	D No. of Surv. Larvae
1	White	9.97	8.70	10	10
2	"	10.30	8.74	10	10
3	"	10.78	9.39	10	10
4	"	11.80 <sup>23</sup>	9.95	10	9
5		11.80	10.43	10	10
6	Black	10.38	9.19	10	8
7	"	9.52	8.03	10	9
8	"	9.89	8.31	10	10
9	"	9.72	8.10	10	10
10		10.36	8.95	10	9

\*TK  
3/20/07

Initial Foil Wts at 1125 on 3/17/2007 (<sup>cmp</sup>) Scale#: R9

Oven Temp. 59 °C Therm. #: T113

Begin Drying Survivors at 0953 on 03/19/2007 (JH) Oven #: 0V2

Finish Drying Survivors at 0855 on 3/20/2007 (ME)

Final Foil Wts. at 1403 on 03/20/2007 (TK) Scale #: R9

Data Entry by: Veronica McNew

Double Data Entry: Veronica McNew or

QA/QC Officer: N/A

Environmental Enterprises USA, Inc.

### Data Pages

- Company name & contact matches client file.
- PR matches client file.
- Critical dilution (CD) match client file; and dilution series are correct:

29.96%(CD)

Dilution series: (Region IV CD is second dilution, Region VI CD is 3<sup>rd</sup> dilution in series)

29.96,

- Calculations on mixing page are correct. (sign mixing page)
- Dates, dilutions, test method, # of replicates, replicate volume, outfall, acceptance limits, data analysis endpoint, and test organisms are correct throughout data pages.
- Format correct. (spaces for all entries, page numeration, no split pages, etc.)

SG Initials 03/12/07 Date

### Chain-of-Custody

- PR on COC matches sample bottle.
- PR on COC matches test data pages.
- Lab # on COC matches sample bottle.
- Lab # on COC matches test data pages.
- Sample collection date:   /  /   & Time:    hrs.  
expiration date:   /  /   & Time:    hrs. (Sample expired if >36 hrs)
- Sample volume is sufficient for test duration. (Sample volume in container(s) checked against sample volume on mixing page)

Sample volume available:    ml

Sample volume needed: 314.58 mg ml

(Sample volume insufficient if sample volume available < sample volume needed)

VR Initials 03/20/07 Date

### Jugs & Labels

- Lab # on jug and labels matches test data pages.
- Dilution water type is on jug. (i.e. 25 ppt, 20 ppt, MHSF, etc.)
- Dilutions on jugs and labels match dilutions on test data pages.
- Jugs are color-coded. (see mixing page for appropriate color code sequence)

N/A Initials N/A Date

Raw Data QC/QA'd by: Veronica McNeil 03/20/07

⊗ Not recorded 03/20/07 VR

**Environmental Enterprises USA, Inc.**

**APPENDIX B**

**Ceriodaphnia Survival and Reproduction Test-7 Day Survival**

Start Date: 3/12/2007      Test ID: cd13207      Sample ID:  
 End Date: 3/18/2007      Lab ID: EE-Environmental Enterprise      Sample Type: PRD-Product  
 Sample Date: 3/8/2007      Protocol: EPAF 02-EPA Freshwater      Test Species: CD-Ceriodaphnia dubia  
 Comments:

Conc-mg/L	1	2	3	4	5	6	7	8	9	10
PC-LP Control	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
29.96	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

Conc-mg/L	Mean	CV%	Transform: Untransformed					N
			Mean	Min	Max	CV%		
PC-LP Control	1.0000	0.000	1.0000	1.0000	1.0000	0.000	10	
29.96	1.0000	0.000	1.0000	1.0000	1.0000	0.000	10	

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution ( $p > 0.01$ )	1	0.868		
Equality of variance cannot be confirmed				

**Ceriodaphnia Survival and Reproduction Test-Reproduction**

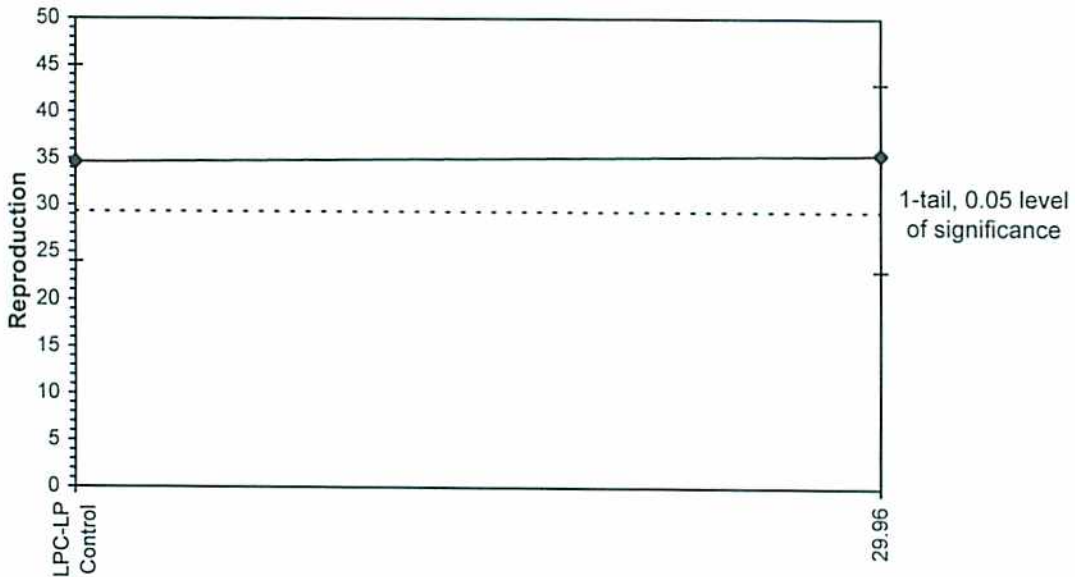
Start Date: 3/12/2007      Test ID: cd13207      Sample ID:  
 End Date: 3/18/2007      Lab ID: EE-Environmental Enterprise      Sample Type: PRD-Product  
 Sample Date: 3/8/2007      Protocol: EPAF 02-EPA Freshwater      Test Species: CD-Ceriodaphnia dubia  
 Comments:

Conc-mg/L	1	2	3	4	5	6	7	8	9	10
PC-LP Control	26.000	35.000	31.000	39.000	45.000	39.000	39.000	33.000	35.000	24.000
	29.96	35.000	40.000	42.000	41.000	24.000	43.000	38.000	23.000	31.000
										37.000

Conc-mg/L	Mean	CV%	Transform: Untransformed				N	t-Stat	1-Tailed	
			Mean	Min	Max	CV%			Critical	MSD
PC-LP Control	34.600	18.491	34.600	24.000	45.000	18.491	10			
	29.96	20.335	35.400	23.000	43.000	20.335	10	-0.263	1.734	5.281

Auxiliary Tests	Statistic	Critical	Skew	Kurt		
Shapiro-Wilk's Test indicates normal distribution ( $p > 0.01$ )	0.93314	0.868	-0.5923	-0.5936		
F-Test indicates equal variances ( $p = 0.73$ )	1.26602	6.54109				
Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences	5.28123	0.15264	3.2	46.3778	0.79578	1, 18

**Dose-Response Plot**



*2 PA  
3/21/07*

**Environmental Enterprises USA, Inc.**

**APPENDIX C**

**Larval Fish Growth and Survival Test-7 Day Survival**

Start Date: 3/12/2007      Test ID: pp13207      Sample ID: GMG290000-NPDES Permit #  
 End Date: 3/18/2007      Lab ID: EE-Environmental Enterprise      Sample Type: PRD-Product  
 Sample Date: 3/8/2007      Protocol: EPAF 02-EPA Freshwater      Test Species: PP-Pimephales promelas

Comments:

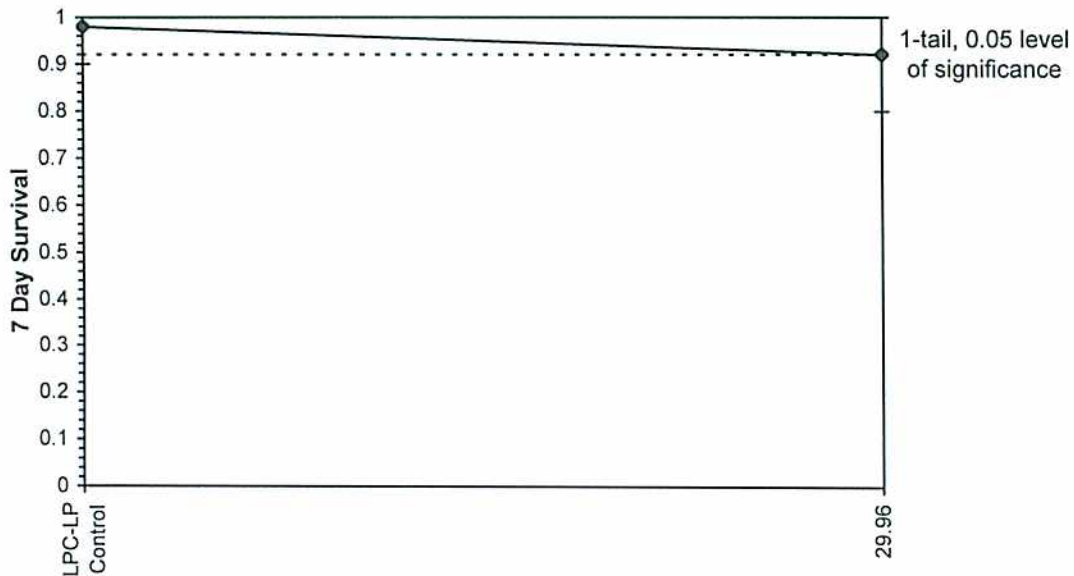
Conc-mg/L	1	2	3	4	5
PC-LP Control	1.0000	1.0000	1.0000	0.9000	1.0000
29.96	0.8000	0.9000	1.0000	1.0000	0.9000

Conc-mg/L	Mean	CV%	Transform: Arcsin Square Root				N	t-Stat	1-Tailed	
			Mean	Min	Max	CV%			Critical	MSD
PC-LP Control	0.9800	4.563	1.3794	1.2490	1.4120	5				
29.96	0.9200	9.094	1.2859	1.1071	1.4120	5	1.413	1.860	0.1232	

**Auxiliary Tests**

	Statistic	Critical	Skew	Kurt		
Shapiro-Wilk's Test indicates normal distribution ( $p > 0.01$ )	0.91129	0.781	-0.5583	-0.15		
F-Test indicates equal variances ( $p = 0.30$ )	3.1288	23.1545				
Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences	0.05953	0.06177	0.02189	0.01097	0.19542	1, 8

**Dose-Response Plot**



**Larval Fish Growth and Survival Test-7 Day Growth**

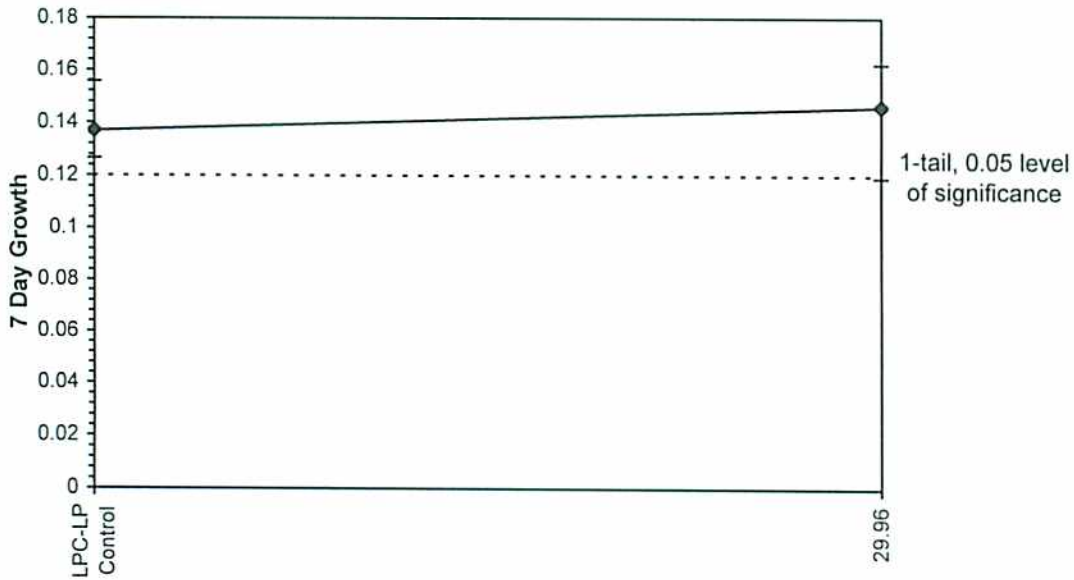
Start Date: 3/12/2007      Test ID: pp13207      Sample ID:  
 End Date: 3/18/2007      Lab ID: EE-Environmental Enterprise Sample Type: PRD-Product  
 Sample Date: 3/8/2007      Protocol: EPAF 02-EPA Freshwater      Test Species: PP-Pimephales promelas  
 Comments:

Conc-mg/L	1	2	3	4	5
PC-LP Control	0.1270	0.1560	0.1390	0.1280	0.1370
29.96	0.1190	0.1490	0.1580	0.1620	0.1410

Conc-mg/L	Mean	CV%	Transform: Untransformed				N	t-Stat	1-Tailed Critical	MSD
			Mean	Min	Max	CV%				
PC-LP Control	0.1374	8.497	0.1374	0.1270	0.1560	8.497	5			
29.96	0.1458	11.694	0.1458	0.1190	0.1620	11.694	5	-0.909	1.860	0.0172

Auxiliary Tests	Statistic	Critical	Skew	Kurt		
Shapiro-Wilk's Test indicates normal distribution ( $p > 0.01$ )	0.95999	0.781	-0.4662	0.18591		
F-Test indicates equal variances ( $p = 0.48$ )	2.1328	23.1545				
Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences	0.01718	0.12507	0.00018	0.00021	0.38993	1, 8

**Dose-Response Plot**



*00A*  
*3/24/07*

**Larval Fish Growth and Survival Test-7 Day Growth**

Start Date: 3/12/2007      Test ID: pp13207cv      Sample ID:  
 End Date: 3/18/2007      Lab ID: EE-Environmental Enterprise      Sample Type: PRD-Product  
 Sample Date: 3/8/2007      Protocol: EPAF 02-EPA Freshwater      Test Species: PP-Pimephales promelas  
 Comments: %CV of growth based on surviving test organisms

Conc-mg/L	1	2	3	4	5
PC-LP Control	0.1270	0.1560	0.1390	0.1422	0.1370
29.96	0.1488	0.1656	0.1580	0.1620	0.1567

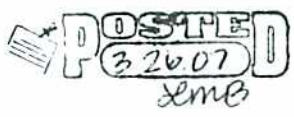
Conc-mg/L	Mean	CV%	Transform: Untransformed				
			Mean	Min	Max	CV%	N
PC-LP Control	0.1402	7.475	0.1402	0.1270	0.1560	7.475	5
29.96	0.1582	4.001	0.1582	0.1488	0.1656	4.001	5

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution ( $p > 0.01$ )	0.97257	0.781	0.29798	0.75169
F-Test indicates equal variances ( $p = 0.35$ )	2.74367	23.1545		

*0.00*  
*3/21/07*

**Environmental Enterprises USA, Inc.**

**APPENDIX D**



10. EE 4011  
 Client BIOPROCESSING, LLC  
 Contact Boyd Young  
 Address 5041 TARAVELLA ROAD  
 City, State, Zip MARRERO, LA 70072  
 Phone Number 504-382-4087  
 Fax Number \_\_\_\_\_  
 P.O. # VERBIL - Boyd Young

Project/Site Name SLUDGE SOLUTIONS, LLC Sampler's Name L.B. Young Due Date N/TAT

Matrix: P = Potable Water W = Water/Wastewater S = Soil SI = Sludge O = Oil G = Glycol PC = Paint Chips Ot = Other (describe in remarks)						Testing Required & Preservative								
Preservatives: A = Cool, 4°C B = Cool, 4°C, Sulfuric Acid to pH <2 C = Cool, 4°C, Nitric Acid to pH <2 D = Other (describe in remarks) E = Cool, 4°C, Sodium Thiosulfate F = Cool, 4°C, HCl to pH <2						M a t r i x	#	C o n t a i n e r s	EPA METHOD 1000	EPA METHOD 1002				
Sample Containers Used: BOD, TSS, CN - 950 ml Plastic Oil & Grease, Phenol - 1 L Glass w/TLC TOC - 4 oz. Glass COD - 250 ml Plastic Metals - 250 ml Plastic VOA - 40 ml Glass Vial w/TLS SVOA, Pesticides - 1250 ml Amber Glass w/TLC														
Date	Time	Grab	Comp	Sample Location										
	N/A			Y060206C	OT	1	✓	✓						
				E-57529-07										
				Lab#: E-132-07										

Remarks: ~~#~~ = OT = SEWER RX CORNMEAL Y060206C

NOTE: ONLY 1 Dilution; Ratio is Four (4) ounces cornmeal to 1000 gal water  
 Please call Boyd prior to starting tests

Relinquished by (Signature) <i>Boyd Young</i>	Date/Time: 03/08/07 0748	Received By (Signature) <i>[Signature]</i>
Relinquished by (Signature) <i>[Signature]</i>	Date/Time: 3-8-07 11:20	Received By (Signature) <i>Charlie Rye</i>
Relinquished by (Signature) <i>Charlie Rye</i>	Date/Time: 3-8-07 11:30 AM	Received for Lab By (Signature) <i>Vernice McNew</i>
Relinquished by (Signature)	Samples on ice when received at lab? YES NO	Received By (Signature)
Relinquished by (Signature)	Date/Time	Received By (Signature)

Rev 05/23/00 Replaces Rev 06/29/99

**E-MAILED**  
 3-28-07