MSD

Louisville and Jefferson County Metropolitan Sewer District
700 West Liberty Street
Louisville Kentucky 40203-1911
502-540-6000
www.msdlouky.org

April 25, 2007

Ms. Kathy Thurman
Kentucky Division of Water
14 Reilly Road
Frankfort, Kentucky 40601

RE: Jeffersontown Treatment Plant, KPDES No: KY0025194
Discharge Monitoring Report
March 2007

Dear Ms. Thurman:

Attached are the Discharge Monitoring Report (DMR) and the Monthly Operating Report (MOR) report for the Jeffersontown Wastewater Treatment Plant, for the month of March 2007. Also included is the first quarter bio-monitoring report for Jeffersontown Wastewater Treatment Plant.

If you have any questions concerning the attached DMR's, please contact me at (502) 239-7695.

Sincerely,

James E. Porter Jr.
Process Supervisor Central Region

JEP/Jeffersontown 0307.doc

Enclosures

cc: M. Mudd (DOW Louisville)
E. Brady
R. Shaw
P. Burgin
T. Singleton

Form Approved.
OMB No. 2040-0004

PERMITTEE NAME/ADDRESS *(Include Facility Name/Location if Different)*
NAME MSD JEFFERSONTOWN STP
ADDRESS 8405 CEDAR CREEK RD
LOUISVILLE KY 40291

FACILITY
LOCATION MSD JEFFERSONTOWN STP
JEFFERSONTOWN KY 40299
ATTN: DEBBIE NEWTON

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM *(NPDES)*
DISCHARGE MONITORING REPORT *(DMR)*

KY0025194	001 2
PERMIT NUMBER	DISCHARGE NUMBER

MONITORING PERIOD	YEAR	MO	DAY		YEAR	MO	DAY
FROM	07	03	01	TO	07	03	31

MAJOR
(SUBR LV)
F - FINAL
FLOW BOD TSS DO PH
EFFLUENT
*** NO DISCHARGE [ ] ***
NOTE: Read Instructions before completing this form.

JEFFE

PARAMETER		QUANTITY OR LOADING AVERAGE	QUANTITY OR LOADING MAXIMUM	QUANTITY OR LOADING UNITS	QUALITY OR CONCENTRATION MINIMUM	QUALITY OR CONCENTRATION AVERAGE	QUALITY OR CONCENTRATION MAXIMUM	QUALITY OR CONCENTRATION UNITS	NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
OXYGEN, DISSOLVED (DO) 00300 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	******	******		9.2	******	******	(19)	0	3/7	GRAB
	PERMIT REQUIREMENT	******	******	**** ****	7 INST MIN	******	******	MG/L		THREE/WEEK	GRAB
PH 00400 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	******	******		7.1	******	7.4	(12)	0	3/7	GRAB
	PERMIT REQUIREMENT	******	******	*** ****	6 MINIMUM	******	9 MAXIMUM	SU		THREE/WEEK	GRAB
SOLIDS, TOTAL SUSPENDED 00530 8 0 0 RAW SEW/INFLUENT	SAMPLE MEASUREMENT	5465	6695	(26)	******	158	206	(19)	0	3/7	COMP
	PERMIT REQUIREMENT	REPORT MO AVG	REPORT MX WK AV	LBS/DY	******	REPORT MO AVG	REPORT MX WK AV	MG/L		THREE/WEEK	COMPOS
SOLIDS, TOTAL SUSPENDED 00530 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	191	266	(26)	******	5	6	(19)	0	3/7	COMP
	PERMIT REQUIREMENT	1000 MO AVG	1501 MX WK AV	LBS/DY	******	30 MO AVG	45 MX WK AV	MG/L		THREE/WEEK	COMPOS
NITROGEN, AMMONIA TOTAL (AS N) 00610 8 0 0 RAW SEW/INFLUENT	SAMPLE MEASUREMENT	477	492	(26)	******	14.2	17.07	(19)	0	3/7	COMP
	PERMIT REQUIREMENT	REPORT MO AVG	REPORT MX WK AV	LBS/DY	******	REPORT MO AVG	REPORT MX WK AV	MG/L		THREE/WEEK	COMPOS
NITROGEN, AMMONIA TOTAL (AS N) 00610 1 2 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	5.42	11.89	(26)	******	0.14	0.27	(19)	0	3/7	COMP
	PERMIT REQUIREMENT	334 MO AVG	500 MX WK AV	LBS/DY	******	10 MO AVG	15 MX WK AV	MG/L		THREE/WEEK	COMPOS
PHOSPHORUS, TOTAL (AS P) 00665 1 2 1 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	16.40	17.95	(26)	******	0.47	0.51	(19)	0	3/7	COMP
	PERMIT REQUIREMENT	57 MO AVG	100 MX WK AV	LBS/DY	******	2.0 MO AVG	3.0 MX WK AV	MG/L		THREE/WEEK	COMPOS

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER
H. J. SCHINDELN JR
EXECUTIVE DIRECTOR
TYPED OR PRINTED

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

James E. Porter Jr.
SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE		DATE		
AREA CODE	NUMBER	YEAR	MO	DAY
502	540-6000	7	4	20

COMMENTS AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*
USE MO AVG FOR BOD/TSS REMV; REPT IN MINIMUM COLUMN.

Form Approved.
OMB No. 2040-0004

PERMITTEE NAME/ADDRESS *(Include Facility Name/Location if Different)*
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ADDRESS 8405 CEDAR CREEK RD
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JEFFERSONTOWN KY 40299
ATTN: DEBBIE NEWTON

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM ***(NPDES)***
DISCHARGE MONITORING REPORT ***(DMR)***

KY0025194	001-2
PERMIT NUMBER	DISCHARGE NUMBER

MONITORING PERIOD

	YEAR	MO	DAY		YEAR	MO	DAY
FROM	07	03	01	TO	07	03	31

MAJOR
(SUBR LV)
F - FINAL
FLOW BOD TSS DO FH
EFFLUENT
*** NO DISCHARGE ( ) ***
NOTE: Read Instructions before completing this form.

PARAMETER		QUANTITY OR LOADING AVERAGE	QUANTITY OR LOADING MAXIMUM	QUANTITY OR LOADING UNITS	QUALITY OR CONCENTRATION MINIMUM	QUALITY OR CONCENTRATION AVERAGE	QUALITY OR CONCENTRATION MAXIMUM	QUALITY OR CONCENTRATION UNITS	NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	SAMPLE MEASUREMENT	4.10	8.51	(03)	******	******	******		0	C/N	C/N
50050 1 0 0	PERMIT REQUIREMENT	REPORT MO AVG	REPORT MX WK AV	MGD	******	******	****** ****	****		CONTINUOUS	CONTIN
EFFLUENT GROSS VALUE											
COLIFORM, FECAL GENERAL	SAMPLE MEASUREMENT	******	******		******	9	36.23	(13)	0	3/7	GRAB
74055 1 0 0	PERMIT REQUIREMENT	******	****** ****	****	******	200 30DA GEO	400 #/ 7 DA GEO	100ML		THREE/ WEEK	GRAB
EFFLUENT GROSS VALUE											
BOD, CARBONACEOUS 05 DAY, 20C	SAMPLE MEASUREMENT	5272	6512	(26)	******	152	168	(19)	0	3/7	COMP
80082 0 0 0	PERMIT REQUIREMENT	REPORT MO AVG	REPORT MX WK AV	LBS/DY	******	REPORT MO AVG	REPORT MX WK AV	MG/L		THREE/ WEEK	COMPOS
RAW SEW/INFLUENT											
BOD, CARBONACEOUS 05 DAY, 20C	SAMPLE MEASUREMENT	95	144	(26)	******	3	3	(19)	0	3/7	COMP
80082 1 0 0	PERMIT REQUIREMENT	667 MO AVG	1001 MX WK AV	LBS/DY	******	20 MO AVG	30 MX WK AV	MG/L		THREE/ WEEK	COMPOS
EFFLUENT GROSS VALUE											
BOD, CARB-5 DAY, 20 DEG C, PERCENT REMVL	SAMPLE MEASUREMENT	******	******		98.2	******	******	(23)	0	1/31	CALC
80091 K 0 0	PERMIT REQUIREMENT	******	****** ****	****	85 MO AVG	******	****** PER-	CENT		ONCE/ MONTH	CALCTD
PERCENT REMOVAL											
SOLIDS, SUSPENDED PERCENT REMOVAL	SAMPLE MEASUREMENT	******	******		92.9	******	******	(23)	0	1/31	CALC
81011 K 0 0	PERMIT REQUIREMENT	******	****** ****	****	85 MO MIN	******	****** PER-	CENT		ONCE/ MONTH	CALCTD
PERCENT REMOVAL											
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER
H. J. SCHAUBEIN JR.
EXECUTIVE DIRECTOR
TYPED OR PRINTED

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James E. Schaubein Jr.
SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE
AREA CODE 502 NUMBER 540-6000

DATE
YEAR 97 MO 4 DAY 30

COMMENTS AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*
USE MO AVG FOR BOD/TSS REMV; REPT IN MINIMUM COLUMN.

NAME OF TREATMENT PLANT JEFFERSONTOWN WTP COUNTY JEFFERSON MONTH OF: March 2007

KPDES PERMIT NUMBER KY0025194 PLANT CAPACITY 4.0 MGD RECEIVING STREAM CHENOWETH RUN

DATE	TOTAL FLOW (MILLION GALLONS)	RAW SEWAGE		pH		SETTLEABLE SOLIDS (mg/L)			DISSOLVED OXYGEN (mg/L)			SUSPENDED SOLIDS (mg/L)			5 DAY CBOD (mg/L)			ACTIVATED SLUDGE			AERATION BASIN					SLUDGE HANDLING						FINAL		
		GRIT REMOVED (CUBIC FEET)	SCREENINGS (CUBIC FEET)	RAW	FINAL	RAW	PRIMARY EFFLUENT	FINAL EFFLUENT	STREAM ABOVE	FINAL EFFLUENT	STREAM BELOW	RAW	PRIMARY EFFLUENT	FINAL EFFLUENT	RAW	PRIMARY EFFLUENT	FINAL EFFLUENT	RETURN		WASTED	DISSOLVED OXYGEN (mg/L)	MLSS (mg/L) x 1000	MLVSS (mg/L) X 1000	SETTLED SLUDGE VOLUME		RAW			HAULED			TOTAL PHOS. (mg/L)	NH3-N (mg/L)	FECAL COLIFORM (COLONIES/100ML)
																		GAL/DAY X 1000	MLSS x1000	MLVSS X 1000				30 MIN.	60 MIN.	GALLONS X 1000	% DRY SOLIDS	% VOLATILE SOLIDS	% DRY SOLIDS	% VOLATILE SOLIDS	WITHDRAWN GALLONS X 1000			
1	8.51						13.0											1.29	7.49	41	8.2	3.54	2.61	280	230	19					19			
2	5.75																	1.41	7.91	8	8	2.54	1.84	220	150	19					57			
3	4.85																	1.34		8				230	170	19					44			
4	5.13						10.0					153		4	102		2	1.58		36				240	200	19					19	0.36	0.10	3
5	4.02			7.1	7.3		12.0			10.4		134		6	147		3	1.37	5.65	38	7.8	2.96	2.28	240	200	13					19	0.58	0.10	7
6	3.94			7.2	7.3					10.6		172		8	176		3	1.38	5.69	40	7.8	2.9	2.17	250	200	13	3.6	89%	0.84	72%	19	0.47	0.10	13
7	3.39			7.1	7.4					10.2								1.28	5.91	43	7.5	3.08	2.26	240	200	13					13			
8	3.44						8.0					130		6	105		2	1.22	6.21	40	7.1	3.1	2.67	240	210	50					19	0.55	0.10	3
9	2.17			7.2	7.2					10.0								1.24	6.32	29	7.4	3.06	2.25	250	210	19					38			
10	2.40																	1.26		29				240	210	19					25			
11	3.53						11.0					176		6	155		3	1.47		36				250	210	19					13	0.45	0.10	13
12	3.40			7.1	7.2		14.0			10.8		98		7	179		3	1.37	3.88	36	9.8	3.01	2.26	250	200	38					38	0.53	0.10	3
13	2.64			7.0	7.2					10.3								1.32	5.78	36	9.2	2.76	2.13	220	200	19	4	90%	0.99	71%	25			
14	5.31																	1.47	6.76	28	7.4	3	2.25	250	200	19					44			
15	5.87						9.0					140		8	168		3	1.35	6.31	28	7.2	2.92	1.96	230	200	19					19	0.50	0.10	6
16	3.59			7.1	7.3					10.1								1.18	6.58	36	7.4	2.92	2.3	240	200	19					19			
17	3.80																	1.35		42	7.5			250	210	19					25			
18	3.84						10.0					151		3	145		2	1.39		42	7.8			240	200	19						0.22	0.10	3
19	5.33			7.1	7.3		9.0			10.6		122		7	150		5	1.27	5.57	38	8.6	2.66	2.03	230	240	19					50	0.50	0.62	7
20	5.12			7.3	7.3					10.4								1.36	8.09	31	8.6	2.64	1.96	250	200	19					25			
21	4.32																	1.31	7.47	40	8.3	3.12	2.38	290	250	19	4.3	91%	1.1	72%	19			
22	4.46						11.0					212		4	142		2	1.38	5.8	46	8.2	3.36	2.63	270	240	19					57	0.37	0.10	39
23	3.24			7.1	7.2					10.1								1.18	6.29	38	8	3.19	2.29	270	250	19					44			
24	3.58																	1.14		40	7.6			280	250	19					13			
25	4.07						10.0					176		4	158		2	1.6		40	6.6			300	260	19					25	0.57	0.10	53
26	3.23			7.0	7.2		11.0			10.1		230		1	198		2	1.29	6.55	39	6.8	3.31	2.6	370	300	25					32	0.59	0.10	23
27	3.21			7.1	7.2					10.4								1.39	5.53	40	6.6	2.94	2.22	360	300	19	4.7	91%	1.1	72%	32			
28	4.68																	1.28	6.25	40	6.7	2.91	2.11	350	310	31					25			
29	3.24																	1.23	4.97	40	6.7	2.56	1.94	300	240	38					19			
30	3.13																	1.25	5.22	36	6.6	2.64	2	300	270	13					57			
31	3.75																	1.26		36				290	260	25					69			
Tot.	#####																	41.21								658					922			
Avg.	4.09			7.1	7.3		10.7			10.3		158		5	152		3	1.329	6.192	35.48	7.669	2.96	2.234	265.2	224.8	21.23	4.15	0.903	1.008	0.718	30.73	0.47	0.14	9

RESIDENTIAL

COMMERCIAL

INDUSTRIAL

INDUSTRIAL WASTE POPULATION EQUIVALENT

38998	30552	25667
FLOW	CBOD	TSS

OPERATOR

CERT. NO.

TOTAL NUMBER OF SEWER CONNECTIONS 0

SEWER CONNECTIONS 0 X 4 = 0 SEWERED POPULATION

PLANT TELEPHONE

Form Approved.
OMB No. 2040-0004

PERMITTEE NAME/ADDRESS *(Include Facility Name/Location if Different)*
NAME MSD JEFFERSONTOWN STP
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FACILITY LOCATION MSD JEFFERSONTOWN STP
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ATTN: DEBBIE NEWTON

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM *(NPDES)*
DISCHARGE MONITORING REPORT *(DMR)*

KY0025194	001 Y
PERMIT NUMBER	DISCHARGE NUMBER

MAJOR
(SUBR LV)
F - FINAL JEFFE
BIOMONITORING/ONCE PER QUARTER
EFFLUENT
*** NO DISCHARGE [ ] ***

MONITORING PERIOD	YEAR	MO	DAY		YEAR	MO	DAY
FROM	07	01	01	TO	07	03	31

NOTE: Read Instructions before completing this form.

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
HARDNESS, TOTAL (AS CACO3) 00900 1 0 1 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	******	******		******	236	236	(19)	0	1/90	Comp
	PERMIT REQUIREMENT	******	******	**** ****	******	REPORT MO AVG	REPORT DAILY MX	MG/L		QTRLY	COMPOS
CADMIUM, DISSOLVED (AS CD) 01025 1 0 1 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	******	******		******	<0.001	<0.001	(19)	0	1/90	Comp
	PERMIT REQUIREMENT	******	******	**** ****	******	REPORT MO AVG	REPORT DAILY MX	MG/L		QTRLY	COMPOS
COPPER, DISSOLVED (AS CU) 01040 1 0 1 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	******	******		******	<0.003	<0.003	(19)	0	1/90	Comp
	PERMIT REQUIREMENT	******	******	**** ****	******	REPORT MO AVG	REPORT DAILY MX	MG/L		QTRLY	COMPOS
LEAD, DISSOLVED (AS PB) 01049 1 0 1 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	******	******		******	<0.004	<0.004	(19)	0	1/90	Comp
	PERMIT REQUIREMENT	******	******	**** ****	******	REPORT MO AVG	REPORT DAILY MX	MG/L		QTRLY	COMPOS
ZINC, DISSOLVED (AS ZN) 01090 1 0 1 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	******	******		******	0.042	0.042	(19)	0	1/90	Comp
	PERMIT REQUIREMENT	******	******	**** ****	******	REPORT MO AVG	REPORT DAILY MX	MG/L		QTRLY	COMPOS
ZINC TOTAL RECOVERABLE 01094 1 0 1 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	******	******		******	0.113	0.113	(19)	0	1/90	Comp
	PERMIT REQUIREMENT	******	******	**** ****	******	REPORT MO AVG	REPORT DAILY MX	MG/L		QTRLY	COMPOS
CADMIUM TOTAL RECOVERABLE 01113 1 0 1 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	******	******		******	<0.001	<0.001	(19)	0	1/90	Comp
	PERMIT REQUIREMENT	******	******	**** ****	******	REPORT MO AVG	REPORT DAILY MX	MG/L		QTRLY	COMPOS

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER		TELEPHONE		DATE		
H.J. SCHRODIN JR EXECUTIVE DIRECTOR TYPED OR PRINTED	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.	James E. Brooks Jr SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	502 540-6000 AREA CODE NUMBER	07 YEAR	04 MO	25 DAY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*

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PERMITTEE NAME/ADDRESS *(Include Facility Name/Location if Different)*

NAME MSD JEFFERSONTOWN STP
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ATTN: DEBBIE NEWTON

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MONITORING PERIOD

	YEAR	MO	DAY		YEAR	MO	DAY
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MAJOR
(SUBR LV)
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BIOMONITORING/ONCE PER QUARTER
EFFLUENT
*** NO DISCHARGE [ ] ***

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LEAD, TOTAL RECOVERABLE 01114 1 0 1 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	******	******		******	<0.004	<0.004	(19)	0	1/90	Comb
	PERMIT REQUIREMENT	******	****** ****	****	******	REPORT MO AVG	REPORT DAILY MX	MG/L		STRLY	COMPOS
COPPER, TOTAL RECOVERABLE 01119 1 0 1 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	******	******		******	<0.003	<0.003	(19)	0	1/90	Comb
	PERMIT REQUIREMENT	******	****** ****	****	******	REPORT MO AVG	REPORT DAILY MX	MG/L		STRLY	COMPOS
TOXICITY, FINAL CONC TOXICITY UNITS 51906 1 0 1 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	******	******		******	******	<1.00	(28)	0	1/90	Comb
	PERMIT REQUIREMENT	******	****** ****	****	******	******	1.00 CHRONC DAILY MX	TOXCTY		STRLY	COMPOS
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER		TELEPHONE	DATE		
H. J. SCHROEDER III EXECUTIVE DIRECTOR TYPED OR PRINTED	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.	James E. Roberts Jr SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE 502 NUMBER 540-6000	YEAR 07	MO 04	DAY 25

COMMENTS AND EXPLANATION OF ANY VIOLATIONS *(Reference all attachments here)*

Chronic Toxicity Evaluation for the MSD-Jeffersontown Wastewater Treatment Plant

March 2007

Prepared by:

Beckmar Environmental Laboratory
Biomonitoring Department
3251 Ruckriegel Parkway
Louisville, KY. 40299
(502) 266-6533

Submitted to:

Mr. Eric Brady
Jeffersontown Wastewater Treatment Plant
700 West Liberty St.
Louisville, KY 40203

Released by: Amanda L. Spalding
Biomonitoring QA Officer 4-20-07

Beckmar

Date of Issue: March 20, 2007

Metropolitan Sewer District c/o Mr. Eric Brady
700 West Liberty St.
Louisville, KY 40203-1913

RE: Analysis results for: J'town WWTP: Biomonitoring metals/hardness.

BECKMAR CERTIFICATE OF ANALYSIS # 181805

Sample Date: 3/13/2007
Sample Time: 8:15
Sampled by: Client

Parameter	Results	Units	Type	Method	Analyzed Date / Time		Analyst
Hardness (T)	*236*	mg/l	C	EPA 130.2	3/16/2007	15:00	PJB
Cadmium (TR)	*< 0.001*	mg/l	C	EPA 200.7	3/16/2007	15:00	ALS
Cadmium (D)	*< 0.001*	mg/l	C	EPA 200.7	3/16/2007	15:00	ALS
Copper (TR)	*< 0.003*	mg/l	C	EPA 200.7	3/16/2007	15:00	ALS
Copper (D)	*< 0.003*	mg/l	C	EPA 200.7	3/16/2007	15:00	ALS
Lead (TR)	*< 0.004*	mg/l	C	EPA 200.7	3/16/2007	15:00	ALS
Lead (D)	*< 0.004*	mg/l	C	EPA 200.7	3/16/2007	15:00	ALS
Zinc (TR)	*0.113*	mg/l	C	EPA 200.7	3/16/2007	15:00	ALS
Zinc (D)	*0.042*	mg/l	C	EPA 200.7	3/16/2007	15:00	ALS

Remarks:

If you have any questions please call.

Thank you,

Joe P. Carney
Quality Control Officer

JPC:dwt

NVIRONMENTAL
ABORATORY
ffersontown Business Park
251 Ruckriegel Parkway
ffersontown, KY 40299
02.266.6533
X 502.266.6446

Materials and Methods

Sampling

Composite effluent samples were collected once every other 24 hours (Table I) and delivered to Beckmar Environmental Laboratory. Upon receipt, each sample went through standard log in procedures.

Control/Dilution Water

All chemicals used are reagent grade, obtained from Aldrich. 1.20 grams of $CaSO_4$, 1.2 grams of $MgSO_4$, 1.92 grams of $NaHCO_3$, and 0.080 grams of KCl were dissolved in distilled water provided by a Barnstead Thermolyne distillation system and aerated for a minimum of 24 hours.

Test Containers

P. promelas tests were performed in 600 mL plastic cups obtained from Liquor Outlet (Louisville, KY).

Toxicity Testing

Samples were allowed to warm to room temperature (25°C) and were tested for residual chlorine immediately prior to dilution. Testing was then performed in accordance with US EPA methodology. Data was recorded on Beckmar generated lab sheets (Appendix I).

Chemical Analysis

All test dilutions as well as control/dilution water were tested to determine initial dissolved oxygen, temperature, and pH. At the end of 24 hours, the control/dilution water and test dilutions were again tested to determine final dissolved oxygen, temperature and pH. Also, specific conductance, hardness, and alkalinity analyses were performed on the initial control/dilution water and 100% effluent samples. Data was recorded on Beckmar generated lab sheet (Appendix I).

Statistical Analysis

Statistical data was generated using ToxCalc 5.0© (Tidepool Scientific software, McKinleyville, CA) and ToxStat© (USEPA, Cincinnati, OH) on a Pentium IV©, computer using Windows 98© Operating System.

TABLE I
Sampling Summary

Outfall	Sample Type	Volume	Collection Period			Rainfall	Sample Temp
1	Composite	2 gallons	03/12/07 @ 8:15 a.m.	=	03/13/07 @ 8:15 a.m.	0.00"	4.0 degrees C
	Composite	2 gallons	03/14/07 @ 8:00 a.m.	=	03/15/07 @ 8:00 a.m.	0.62"	4.5 degrees C
	Composite	3 gallons	03/16/07 @ 7:30 a.m.	=	03/18/07 @ 7:30 a.m.	0.00"	3.5 degrees C

Dates/Times of Test Performance

Species #1: *Pimephales promelas*

Initiated: 03/13/07 @ 5:30 P.M.
Renewed Daily @ 5:30 P.M.
Terminated 03/20/07 @ 5:30 P.M.

Appendix I

Pimephales promelas
Data Sheets

Grab # ___

Toxicity Test Results

Results of *Pimephales* (Genus) *promelas* (Species) 7 day chronic definitive (Type / Duration) Toxicity Test

Conducted: 03/13/07 (mm/dd/yy) -- 03/20/07 (mm/dd/yy) Using Effluent from Outfall # 1

Test Solution	Percent Survival (time intervals used:- DAY) 1	2	3	4	5	6	7	8	# of Young Total	Mean	Dry Weight Total	Mean
Control	100	100	100	100	100	100	100				11.5	0.29
20% Effluent	100	100	100	100	100	100	97.5				12.9	0.32
40% Effluent	100	100	100	97.5	97.5	97.5	95				14.5	0.36
60% Effluent	100	100	100	100	97.5	97.5	95				14.2	0.36
80% Effluent	100	100	100	97.5	97.5	97.5	97.5				15.6	0.39
100% Effluent	100	100	100	100	97.5	97.5	97.5				15.8	0.4

LC_{50} / IC_{25} Value: >100%

95% Confidence Limits

UL: NA
LL: NA

UL = Upper Limit
LL = Lower Limit

Calculated TU Estimate * less than 1.0 TUc
(indicate Aute / Chromic)

Permit Limits: 1.0 TUc
(Indicate TU_a / TU_c)

If acute test, method used to determine LC50 and Confidence Limit Valued: _____

Note: $TU_a = 100/LC_{50}$; $TU_c = 100/IC_{25}$

Reference Toxicant Test Results

Species	Date	Time	Duration	Toxicant	Results (LC_{50} / IC_{25})
Pimephales promelas	03/13/07	5:30 P.M.	7 days	NaCl	IC25=2.4708g/l

Survival data for FATHEAD MINNOW LARVAL
Survival and Growth Test

BECKMAR
Jeffersontown Business Park
3251 Ruckriegel Parkway
Louisville, Ky 40299
Phone: (502) 266-6533

Number of Survivors

Discharge : Jeffersontown Test Date(s) : 3-13-07 -320-07 5:30

Location : _____ Analyst : A Baker

SURVIVAL AT END OF THE DAY

	Replicate Number:	1	2	3	4	5	6	7	% SURV	Remarks
Control	1	10	10	10	10	10	10	10		
	2									
	3									
	4							9	100	
Conc : 20%	1							9		
	2							10		
	3							10		
	4				↓	↓	↓	10	97.5	
Conc : 40%	1				9	9	9	9		
	2				10	10	10	10		
	3							10		
	4				97.5	97.5	97.5	9	95	
Conc : 60%	1							10		
	2					↓	↓	9		
	3					9	9	9		
	4					10 97.5	10 97.5	10	95	
Conc : 80%	1					10	10	10		
	2				↓	10	10	10		
	3				9	9	9	9		
	4				10 97.5	10 97.5	10 97.5	10	97.5	
Conc : 100%	1					10	10	10		
	2					9	9	9		
	3					10	10	10		
	4	↓	↓	↓	↓	10 97.5	10 97.5	10	97.5	

Data form for the Fathead Minnow survival and growth test.
Routine chemical and physical determinations.

Client: Jefferson Farm
Test Start: 3-13-07 5:30
Test Stop: 3-20-07 5:30

Analyst: R Baker
Analyst:
Analyst:

Conc. 60%		Day 1	2	3	4	5	6	7	Remarks
Temp. Degree C.	Initial	25.9	24.0	26.0	25.7	26.0	24.9	24.0	
	Final	24.0	24.0	24.0	24.0	24.0	24.0	24.0	
D. O. mg/l	Initial	8.5	8.0	8.8	8.3	8.6	8.8	8.7	
	Final	7.0	6.1	6.7	6.4	6.1	6.5	5.0	
pH S.U.	Initial	7.91	7.74	7.68	7.78	7.77	7.68	7.76	
	Final	7.86	7.61	7.47	7.66	7.41	7.76	7.82	
Analyst (init.)		RB	RB	RB	RB	RB	RB	RB	

Conc. 80%		Day 1	2	3	4	5	6	7	Remarks
Temp. Degree C.	Initial	26.0	24.5	26.0	26.0	26.0	25.1	24.0	
	Final	24.0	24.0	24.0	24.0	24.0	24.0	24.0	
D. O. mg/l	Initial	8.6	9.1	9.0	9.0	8.9	9.0	8.9	
	Final	6.8	5.7	6.0	5.3	6.0	6.6	5.1	
pH S.U.	Initial	7.77	7.68	7.66	7.71	7.75	7.71	7.72	
	Final	7.89	7.63	7.51	7.66	7.45	7.84	7.51	
Analyst (init.)		RB	RB	RB	RB	RB	RB	RB	

Conc. 100%		Day 1	2	3	4	5	6	7	Remarks
Temp. Degree C.	Initial	26.0	24.9	25.9	24.8	25.4	25.0	24.1	
	Final	24.0	24.0	24.0	24.0	24.0	24.0	24.0	
D. O. mg/l	Initial	9.1	9.3	9.5	9.3	9.5	9.1	9.5	
	Final	6.3	5.8	6.6	5.3	5.5	5.2	5.1	
pH S.U.	Initial	7.65	7.62	7.61	7.60	7.69	7.71	7.55	
	Final	7.97	7.74	7.59	7.64	7.51	7.82	7.63	
Alkalinity (mg/l)		176	178.4	181.6	178.4	189.2	192.4	193.6	
Hardness (mg/l)		247.2	244.2	251.7	240.1	247.2	269.7	278.3	
Conductivity (µmhos)		772	801	806	772	750	770	771	
Chlorine (mg/l)		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
Analyst (init.)		RB	RB	RB	RB	RB	RB	RB	

Beckman Sample # 181799 181799 181951 181951 182068 182068 182068

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(502) 266-6533
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www.beckmarlab.com

CHAIN OF CUSTODY

PAGE _____ OF _____

Beckmar

Client / Company Name: MSD. J-Town

Sampled by (print name): Eddie Whittaker

Signature: Eddie Whittaker P/O#:

Beckmar ID #	Collection Date	Collection Time	Sample Type	Sample Point / Description	Number of Containers	Sample Matrix	Tests / Analysis Requested: BOD	Preservative
181799	3-13-07	815	C	Eff Channel	2	WW		

Relinquished by:	Received by:	Date:	Time:
Eddie Whittaker	McCullar	3-13-07	1110
Relinquished by:	Received by:	Date:	Time:
		3-13-7	1410
Relinquished by: R F	Received by:	Date:	Time:

FIELD DATA

Calibration ID:	pH _____ SU	Temperature _____ °C
D.O. _____ mg/l	Total Chlorine _____ mg/l	Free Chlorine _____ mg/l

LABORATORY DATA

Temperature Received 4 °C		
HNO_3 PH _____ SU	H_2NO_4 PH _____ SU	
NaOH PH _____ SU	UNP PH _____ SU	

Comments:
12 0 3.4
14 1.62 5.31

Sample Types: Composite (C), Grab (G)

Matrix Codes: DW = Drinking Water, GW = Ground Water, S = Soil, WW = Wastewater, SW = Surface Water, SL = Sludge

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CHAIN OF CUSTODY

PAGE 1 OF 1

Beckmar

Client / Company Name: MSD / J-TOWN
Sampled by (print name): Joe Scroggin
Signature: Joe Scroggin
P/O#:

Beckmar ID #	Collection Date	Collection Time	Sample Type	Sample Point / Description	Number of Containers	Sample Matrix	BOD	Preservative
182068	3-17-07	730A	C	Eff Channel	3	WW		

Tests / Analysis Requested

Relinquished by:	Received by:	Date:	Time:
Joe Scroggin	Paul Barb	3-19-07	830
Relinquished by:	Received by:	Date:	Time:
Carl B	LN	3-19-07	950
Relinquished by:	Received by:	Date:	Time:

FIELD DATA		LABORATORY DATA	
~~Calibration ID:~~	pH _____ SU	Temperature Received _____ °C	
D.O. _____ mg/l	Total Chlorine _____ mg/l	HNO_3 PH_____ SU	H_2NO_4 PH_____ SU
Temperature 3.1 °C	Free Chlorine _____ mg/l	NaOH PH_____ SU	UNP PH_____ SU

Comments:

Sample Types: Composite (C), Grab (G)

Matrix Codes: DW = Drinking Water, GW = Ground Water, S = Soil, WW = Wastewater, SW = Surface Water, SL = Sludge