

ALNRC 00025  
May 15, 2009

**Enclosure H**

Quarterly Discharge Monitoring Reports (DMR) for 2004 through 2008

Enclosure H: Callaway Quarterly NPDES Discharge Monitoring Reports:

<b>2004</b>	<b>Report Period</b>	<b>Report Months</b>
UOTCR 04-0011	NPDES Monthly Report	February 2004
UOTCR 04-0020	NPDES Monthly Report	May 2004
UOTCR 04-034	NPDES Monthly Report	August 2004
UOTCR 04-042	NPDES Monthly Report	November 2004
<b>2005</b>		
UOTCR 05-011	NPDES Monthly Report	February 2005
UOTCR 05-019	NPDES Monthly Report	May 2005
UOTCR 05-035	NPDES Monthly Report	August 2005
UOTCR 05-042	NPDES Monthly Report	November 2005
<b>2006</b>		
UOTCR 06-009	NPDES Monthly Report	February 2006
UOTCR 06-0021	NPDES Monthly Report	May 2006
UOTCR 06-0030	NPDES Monthly Report	August 2006
UOTCR 06-0037	NPDES Monthly Report	November 2006
<b>2007</b>		
UOTCR 07-0016	NPDES Monthly Report	February 2007
UOTCR 07-0032	NPDES Monthly Report	May 2007
Callaway DMR 3Qtr 2007	NPDES Quarterly Report	Jul-Aug-Sep 2007
Callaway DMR 4Qtr 2007	NPDES Quarterly Report	Oct-Nov-Dec 2007
<b>2008</b>		
Callaway DMR 1Qtr 2008	NPDES Quarterly Report	Jan-Feb-Mar 2008
Callaway DMR 2Qtr 2008	NPDES Quarterly Report	Apr-May-Jun 2008
Callaway DMR 3Qtr 2008	NPDES Quarterly Report	Jul-Aug-Sep 2008
Callaway DMR 4Qtr 2008	NPDES Quarterly Report	Oct-Nov-Dec 2008

UOTCR 04-0011

March 11, 2004

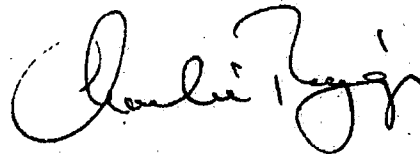
Steven S. Weiss  
Mail Code 602

Callaway NPDES Monthly Report

Attached is the NPDES Monthly Report for February 2004. Results are noted in comment section of each Outfall.

An exception report was submitted to Missouri Department of Natural Resources for the February 11, 2004, overflow of sanitary water from manhole #4, and its subsequent discharge via storm water runoff Outfall 012.

Please let me know if you have any questions or need additional information.



C. A. Riggs

CAR/RSB:lmb

Attachments

cc: G. P. Gary (470)  
C170.0005 (2 copies)  
R/C Clerk  
A160.0998

TOTAL PAGES 5



00947960

**PAGE 1 OF 4**

**NPDES MONITORING REPORT**

**OUTFALL 001  
RADWASTE SYSTEM**

[illegible]

PARAMETER	FREQ.	LIMITS	
		MONTHLY AVERAGE	DAILY MAX.
FLOW (MGD)	EB	N.A.	N.A.
pH (STD)	EB	6.0-9.0	6.0-9.0
TSS (mg/l)	EB	30	45
Boron (mg/l)	EB	N.A.	N.A.
TRC (ug/l)	Monthly	N.A.	190
BOD (mg/l)	Monthly	N.A.	N.A.
O&G (mg/l)	Monthly	15	20

ALL SAMPLES ANALYZED BY Ameren UE Callaway  
Plant OPERATIONS LABORATORY USING  
METHODS SPECIFIED UNDER 10CSR 20-7.015

## SOURCES

- 1 = WASTE MONITOR TANK A  
2 = WASTE MONITOR TANK B  
3 = STEAM GENERATOR BLOWDOWN  
4 = SEC. LIQ. WASTE MONITOR TANK A  
5 = SEC. LIQ. WASTE MONITOR TANK B  
6 = LIQ. RADWASTE DISCHARGE TANK A  
7 = LIQ. RADWASTE DISCHARGE TANK B  
EB = EACH BATCH

7. Date	BOD (mg/l)	TTC (CFU)	O&G (mg/l)
5	1.8	30	2

COMMENTS: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Ameren UE Callaway Plant

PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) February, 2004

PAGE 2 OF 4

NPDES MONITORING REPORT

OUTFALL 002  
COOLING TOWER BLOWDOWN

DATE	FLOW (MGD)	TEMP (°F)	pH	TOC (mg/l)
1	2.0	62	.17	300
2	4.4	63	.09	90
3	0	57	.13	450
4	0	68	*1	*1
5	0	64	.18	510
6	0	58	.14	260
7	0	61	.18	540
8	0	55	*1	*1
9	1.9	58	.02	160
10	0	64	*1	*1
11	0	65	*1	*1
12	0	59	.18	480
13	1.1	62	<.01	80
14	0	48	*1	*1
15	1.0	60	.14	440
16	2.9	62	.17	380
17	3.5	64	<.01	0
18	6.8	70	<.01	50
19	6.3	78	.02	150
20	5.5	72	.07	130
21	8.6	64	.04	800
22	0	68	*1	*1
23	4.6	69	.02	50
24	3.3	67	.02	140
25	8.0	67	<.01	0
26	7.6	70	.01	140
27	4.6	72	<.01	150
28	4.3	74	<.01	140
29	1.8	79	<.01	120

DATE	ISS (mg/l)	TOC (mg/l)
2	70	2304
9	33	1508
16	63	1402
23	120	1644

DATE	Sulfate (mg/l)	Calc (mg/l)
9	786	--
16	686	1.0

PARAMETER	FREQ	MDL	SDS
FLOW	CONT.	N.A.	N.A.
TOTAL SUSPENDED SOLIDS	WKLY.	N.A.	N.A.
TOTAL DISSOLVED SOLIDS	WKLY.	N.A.	N.A.
OIL AND GREASE	QRTLY (1)	15	20
TOTAL RESIDUAL CHLORINE	DAILY	N.A.	N.A.
SULFATE	QRTLY (1)	N.A.	N.A.
FREE AVAIL. CHLORINE	DAILY	N.A.	0.2 (mg/l)
TEMPERATURE (MAXIMUM)	DAILY	110° F	110° F
pH	CONT.	6.0 - 9.0	6.0 - 9.0

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
OPERATIONS LAB USING METHODS SPECIFIED UNDER  
10CSR20-7.015.

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF  
FEBRUARY, MAY, AUGUST, NOVEMBER.

COMMENTS: \*1 Blowdown secured.

No pH excursions occurred this month.

**Ameren UE Callaway Plant**

PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) February, 2004

PAGE 3 OF 4

**NPDES MONITORING REPORT**

**OUTFALL 003  
WATER TREATMENT PLANT  
NO DISCHARGE**

**OUTFALL 007**

DATE	FLOW (MGD)	TSS (mg/L)	COD (mg/L)	pH
20	.005	4	3.2	7.47

**SANITARY WASTE**

PARAMETER	FREQ	MO/ANGL	DAILY/MAX
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	70	110
BOD	QRTLY (1)	45	65
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER

**OUTFALL 009  
INTAKE HEATER BLOWDOWN  
NO DISCHARGE**

**OUTFALLS 010 - 015**

DATE	OUTFALL	FLOW (MGD)	TSS (mg/L)	COD (mg/L)	pH	
20	10	.013	10	2	15	8.43
20	11	.06	20	2	25	7.62
20	12	.005	6	7	18	7.95
20	13	.005	30	2	15	7.88
20	14	.02	10	2	<5	7.91
20	15	.009	5	2	20	8.40

**STORM WATER RUNOFF PONDS**

PARAMETERS	FREQ	MO/ANGL	DAILY/MAX
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	N.A.	N.A.
COD	QRTLY (1)	N.A.	N.A.
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	>6.0	>6.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER.

**OUTFALL 016**

DATE	FLOW (MGD)	TSS (mg/L)	COD (mg/L)	pH	TRC (mg/L)
12	7.3	12	3	8.04	60

**COOLING TOWER BYPASS**

PARAMETER	FREQ	MO/ANGL	DAILY/MAX
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	30	100
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0
TRC	QRTLY (1)	N.A.	190

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER.

**OUTFALL 017**

ULTIMATE HEAT SINK  
No Discharge

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
OPERATIONS LABORATORY USING METHODS SPECIFIED  
UNDER 10CSR 20-7.015

COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Ameren UE Callaway Plant

PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) February, 2004

PAGE 4 OF 4

NPDES MONITORING REPORT


"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."



Preparer



Reviewer

  
Approved  
Plant Manager

UOTCR 04-020

June 8, 2004

Steven S. Weiss  
Mail Code 602

**Callaway NPDES Monthly Report**

Attached is the NPDES Monthly Report for May 2004. Results are noted in comment section of each Outfall.

Please let me know if you have any questions or need additional information.



C. A. Riggs

CAR/RSB:lmb

Attachments

cc: G. P. Gary (470)  
C170.0005 (2 copies)  
R/C Clerk  
A160.0998



TOTAL PAGES 5



PERMIT NO. MO-0098001  
REPORTING PERIOD (MO/YR) May, 2004  
PAGE 1 OF 4

**OUTFALL 001  
RADWASTE SYSTEM**

[illegible]

PARAMETER	FREQ	LIMITS	
		MONTHLY AVERAGE	DAILY MAX
FLOW (MGD)	EB	N.A.	N.A.
pH (STD)	EB	6.0-9.0	6.0-9.0
TSS (mg/l)	EB	30	45
Baron (mg/l)	EB	N.A.	N.A.
TRC (ug/l)	Monthly	N.A.	190
BOD (mg/l)	Monthly	N.A.	N.A.
O&G (mg/l)	Monthly	15	20

ALL SAMPLES ANALYZED BY Ameren UE Callaway  
Plant OPERATIONS LABORATORY USING  
METHODS SPECIFIED UNDER 10CSR 20-7.015

## SOURCES

- 1 = WASTE MONITOR TANK A  
2 = WASTE MONITOR TANK B  
3 = STEAM GENERATOR BLOWDOWN  
4 = SEC. LIQ. WASTE MONITOR TANK A  
5 = SEC. LIQ. WASTE MONITOR TANK B  
6 = LIQ. RADWASTE DISCHARGE TANK A  
7 = LIQ. RADWASTE DISCHARGE TANK B  
EB = EACH BATCH

Date	BOD (mg/l)	TTC (mg/l)	OLC (mg/l)
3	4.4	0.0	9

COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

PERMIT NO. MO-0098001  
REPORTING PERIOD (MO/YR) May, 2004  
PAGE 2 OF 4

# NPDES MONITORING REPORT

**OUTFALL 002**  
**COOLING TOWER BLOWDOWN**

[illegible]

DATE	TSS (mg/l)	TDS (mg/l)
4	7	1004
20	9	480
25	6	214
31	21	246

DATE	Sulfate (mg/l)	O&G (mg/l)
4	458	3
20	180	1

PARAMETER	FREQ.	UNITS	
		MO. /YR.	DAILY /YR.
FLOW	CONT.	N.A.	N.A.
TOTAL SUSPENDED SOLIDS	WKLY.	N.A.	N.A.
TOTAL DISSOLVED SOLIDS	WKLY.	N.A.	N.A.
OIL AND GREASE	QRTLY *	15	20
TOTAL RESIDUAL CHLORINE	DAILY	N.A.	N.A.
SULFATE	QRTLY *	N.A.	N.A.
FREE AVAIL. CHLORINE	DAILY	N.A.	0.2 (mg/l)
TEMPERATURE (MAXIMUM)	DAILY	110° F	110° F
pH	CONT.	6.0 - 9.0	6.0 - 9.0

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
OPERATIONS LAB USING METHODS SPECIFIED UNDER  
10CSR20-7.015.

- \* SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER.

COMMENTS: (2) DIP SAMPLE.

No pH excursions occurred this month.

**No CTBD on dates not listed**

**Ameren UE Callaway Plant**

**PERMIT NO. MO-0098001**  
**REPORTING PERIOD (MO/YR) May, 2004**  
**PAGE 3 OF 4**

**NPDES MONITORING REPORT**

**OUTFALL 003**  
**WATER TREATMENT PLANT**  
**NO DISCHARGE**

**OUTFALL 007**

DATE	FLOW (MGD)	TSS (mg/l)	BOD (mg/l)	pH
18	.013	5	--	7.76
25	--	--	12.4	--

**SANITARY WASTE**

PARAMETER	FREQ	LIMITS (mg/l)	
		MO. AVG.	WEEKLY AVG.
FLOW	QRTLY *	N.A.	N.A.
TSS	QRTLY *	70	110
BOD	QRTLY *	45	65
pH	QRTLY *	6.0 - 9.0	6.0 - 9.0

\* SAMPLES SHALL BE TAKEN DURING THE MONTHS OF  
 FEBRUARY, MAY, AUGUST, NOVEMBER

**OUTFALL 002**  
**INTAKE HEATER BLOWDOWN**  
**NO DISCHARGE**

**OUTFALLS 010 - 015**

DATE	OUTFALL	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	COD (mg/l)	pH
20	10	.050	3	2	24	8.18
20	11	.229	39	10	47	7.78
20	12	.018	58	2	19	7.96
29	13	.020	37	6	37	7.64
20	14	.082	35	2	26	8.56
20	15	.033	47	2	24	8.00

**STORM WATER RUNOFF PONDS**

PARAMETER	FREQ	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	QRTLY *	N.A.	N.A.
TSS	QRTLY *	N.A.	N.A.
COD	QRTLY *	N.A.	N.A.
O and G	QRTLY *	15	20
pH	QRTLY *	>6.0	>6.0

\* SAMPLES SHALL BE TAKEN DURING THE MONTHS  
 OF FEBRUARY, MAY, AUGUST, NOVEMBER.

**OUTFALL 016**

DATE	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	pH	TRC (mg/l)
20	2.7	11	1	8.17	<100

**COOLING TOWER BYPASS**

PARAMETER	FREQ	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	QRTLY *	N.A.	N.A.
TSS	QRTLY *	30	100
O and G	QRTLY *	15	20
pH	QRTLY *	6.0 - 9.0	6.0 - 9.0
TRC	QRTLY *	N.A.	190

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF  
 FEBRUARY, MAY, AUGUST, NOVEMBER.

**OUTFALL 017**

**ULTIMATE HEAT SINK**  
**No Discharge**

**ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant**  
**OPERATIONS LABORATORY USING METHODS SPECIFIED**  
**UNDER 10CSR 20-7.015**

**COMMENTS:** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

PERMIT NO. MO-0098001  
REPORTING PERIOD (MO/YR) May 2004  
PAGE 4 OF 4

Ameren UE Callaway Plant

NPDES MONITORING REPORT

"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."

  
Preparer

  
Reviewer

  
Approved *for*  
Plant Manager

UOTCR 04-034

September 13, 2004

Steven S. Weiss  
Mail Code 602

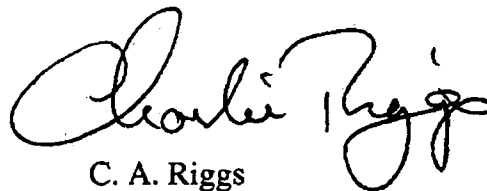
**Callaway NPDES Monthly Report**

Attached is the NPDES Monthly Report for August 2004. Results are noted in comment section of each Outfall.

An exception report was submitted to Missouri Department of Natural Resources for the August 20, 2004, overflow of sanitary water from manhole #4, and its subsequent discharge via storm water runoff Outfall 012.

This report contains the one-time monitoring value, 21 ppb, for monoethanolamine (cas 141-43-5) on Outfall 001.

Please let me know if you have any questions or need additional information.

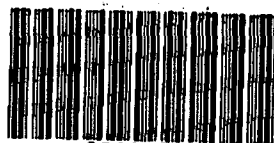
  
C. A. Riggs

CAR/RSB:lmb

Attachments

cc: G. P. Gary (470)  
C170.0005 (2 copies)  
R/C Clerk  
A160.0998

TOTAL PAGES 6



00982500

PERMIT NO. MO-0098001  
REPORTING PERIOD (MO/YR) August, 2004  
PAGE 1 OF 4

# NPDES MONITORING REPORT

**OUTFALL 001  
RADWASTE SYSTEM**

[illegible]

PARAMETER	FREQ.	LIMITS	
		MONTHLY AVERAGE	DAILY MAX.
FLOW (MGD)	EB	N.A.	N.A.
pH (STD)	EB	6.0-9.0	6.0-9.0
TSS (mg/l)	EB	30	45
Boron (mg/l)	EB	N.A.	N.A.
TRC (ug/l)	Monthly	N.A.	190
BOD (mg/l)	Monthly	N.A.	N.A.
O&G (mg/l)	Monthly	15	20

ALL SAMPLES ANALYZED BY Ameren UE Callaway  
Plant OPERATIONS LABORATORY USING  
METHODS SPECIFIED UNDER 10CSR 20-7.015

## SOURCES

- 1 = WASTE MONITOR TANK A  
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3 = STEAM GENERATOR BLOWDOWN  
4 = SEC. LIQ. WASTE MONITOR TANK A  
5 = SEC. LIQ. WASTE MONITOR TANK B  
6 = LIQ. RADWASTE DISCHARGE TANK A  
7 = LIQ. RADWASTE DISCHARGE TANK B  
EB = EACH BATCH

Date	BOD (mg/l)	TRC (ug/l)	O&G (mg/l)
4	—	100	4
6	63	—	—

COMMENTS: "B" DMT on 08-16-04 contained 21 PPB of ETA.

Ameren UE Callaway Plant

PERMIT NO. MO-0098001  
REPORTING PERIOD (MO/YR) August, 2004  
PAGE 2 OF 4

NPDES MONITORING REPORT

OUTFALL 002  
COOLING TOWER BLOWDOWN

DATE	FLOW (MGD)	TEMP (MAX °F)	FAC (mg/l)	TFC (mg/l)
1	4	88	<.01	100
2	5.1	86	<.01	30
3	3.1	90	<.01	100
4	2.5	94	<.01	190
5	3.9	88	<.01	70
6	5.3	83	<.01	80
7	4.4	86	<.01	70
8	4.4	88	<.01	100
9	4.2	83	.01	100
10	2.1	85	<.01	150
11	1.7	79	<.01	60
12	2.1	76	<.01	210
13	4.4	78	.02	160
14	3.1	80	.01	70
15	2.9	80	.03	80
16	4.2	82	<.01	<10
17	1.0	83	<.01	20
18	1.0	83	.06	20
19	3.0	82	<.01	20
20	3.2	83	.01	110
21	2.9	83	.01	120
22	3.3	85	.02	70
23	4.3	85	.04	190
24	2.8	84	.02	120
25	3.4	85	.02	90
26	3.5	90	<.01	150
27	2.4	86	.01	80
28	6.3	88	.03	140
29	2.9	84	.02	90
30	3.8	80	<.01	90
31	2.9	84	<.01	100

DATE	TSS (mg/l)	TDS (mg/l)
2	61	2360
9	46	1944
16	46	2072
23	56	2256
30	67	1764

DATE	Sulfate (mg/l)	ORP (mg/l)
2	1400	1.9

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	CONT.	N.A.	N.A.
TOTAL SUSPENDED SOLIDS	WKLY.	N.A.	N.A.
TOTAL DISSOLVED SOLIDS	WKLY.	N.A.	N.A.
OIL AND GREASE	QRTLY *	15	20
TOTAL RESIDUAL CHLORINE	DAILY	N.A.	N.A.
SULFATE	QRTLY *	N.A.	N.A.
FREE AVAIL. CHLORINE	DAILY	N.A.	0.2 (mg/l)
TEMPERATURE (MAXIMUM)	DAILY	110° F	110° F
pH	CONT.	6.0 - 9.0	6.0 - 9.0

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
OPERATIONS LAB USING METHODS SPECIFIED UNDER  
10CSR20-7.015.

\* SAMPLES SHALL BE TAKEN DURING THE MONTHS OF  
FEBRUARY, MAY, AUGUST, NOVEMBER.

COMMENTS: No PH excursions occurred this month.

**Ameren UE Callaway Plant**

PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) August, 2004

PAGE 3 OF 4

**NPDES MONITORING REPORT**

**OUTFALL 003  
WATER TREATMENT PLANT  
NO DISCHARGE**

**OUTFALL 007**

DATE	FLOW (MGD)	TSS (mg/L)	BOD (mg/L)	pH
13	.001	10	--	7.08
18	.001	18	16	7.3

**SANITARY WASTE**

PARAMETER	FREQ	LIMITS (mg/L)	
		MO. AVG	WEEKLY AVG
FLOW	QRTLY *	N.A.	N.A.
TSS	QRTLY *	70	110
BOD	QRTLY *	45	65
pH	QRTLY *	6.0 - 9.0	6.0 - 9.0

\* SAMPLES SHALL BE TAKEN DURING THE MONTHS OF  
FEBRUARY, MAY, AUGUST, NOVEMBER

**OUTFALL 009  
INTAKE HEATER BLOWDOWN  
NO DISCHARGE**

**OUTFALLS 010 - 015**

DATE	OUTFALL	FLOW (MGD)	TSS (mg/L)	O and G (mg/L)	COD (mg/L)	pH
11	10	.050	6	2	28	8.34
11	11	.229	10	1	30	7.38
11	12	.018	8	0	18	9.36
11	13	.020	41	1	25	8.94
11	14	.082	8	1	23	10.32
11	15	.033	10	1	33	8.10

**STORM WATER RUNOFF PONDS**

PARAMETER	FREQ	LIMITS	
		MO. AVG	DAILY MAX
FLOW	QRTLY *	N.A.	N.A.
TSS	QRTLY *	N.A.	N.A.
COD	QRTLY *	N.A.	N.A.
O and G	QRTLY *	15	20
pH	QRTLY *	>6.0	>6.0

\* SAMPLES SHALL BE TAKEN DURING THE MONTHS  
OF FEBRUARY, MAY, AUGUST, NOVEMBER.

**OUTFALL 016**

DATE	FLOW (MGD)	TSS (mg/L)	O and G (mg/L)	pH	TRC (mg/L)
11	2.16	20	2	8.17	90

**COOLING TOWER BYPASS**

PARAMETER	FREQ	LIMITS	
		MO. AVG	DAILY MAX
FLOW	QRTLY *	N.A.	N.A.
TSS	QRTLY *	30	100
O and G	QRTLY *	15	20
pH	QRTLY *	6.0 - 9.0	6.0 - 9.0
TRC	QRTLY *	N.A.	190

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF  
FEBRUARY, MAY, AUGUST, NOVEMBER.

**OUTFALL 017**

ULTIMATE HEAT SINK  
No Discharge

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
OPERATIONS LABORATORY USING METHODS SPECIFIED  
UNDER 10CSR 20-7.015

COMMENTS: Outfall 016 TRC results on Attachment 1.



Ameren UE Callaway Plant

PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) August, 2004

PAGE 4 OF 4

NPDES MONITORING REPORT

"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."

  
Preparer

  
Reviewer

  
Approved  
Plant Manager *AKW*

**ATTACHMENT 1**  
**AUGUST 31, 2004**

**Cooling tower bypass after addition total residual chlorine (TRC) results (ug/ml).**

<u>Date</u>	<u>TRC (ug/ml)</u>
3	110
4	140
5	110
10	70
11	150
12	140
17	180
18	160
19	170
24	160
25	90
31	190

UOTCR 04-042

December 10, 2004

Steven S. Weiss  
Mail Code 602

Callaway NPDES Monthly Report

Attached is the NPDES Monthly Report for November 2004. Results are noted in comment section of each Outfall.

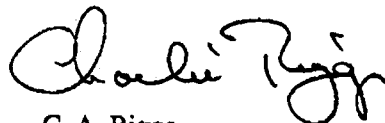
An exception report was submitted to Missouri Department of Natural Resources for the November 30, 2004 unauthorized discharge of oily waste water from an outside oily waste sump.

The TSS monthly average was exceeded on Outfall 016 due to the failure of a pump feeding polyelectrolyte.

Attachment 1 of the Discharge Monitoring Report contains the Outfall 002 asbestos results. This is a one time monitoring requirement per the new NPDES permit. Results were less than the detectable limit of the testing laboratory IATL.

The 2004 WET test results are included with this report for submittal to DNR.

Please let me know if you have any questions or need additional information.



C. A. Riggs

CAR/RSB:lmb

Attachments

cc: G. P. Gary (470)  
C170.0005 (2 copies)  
R/C Clerk  
A160.0998



00958493

TOTAL PAGES 45

PERMIT NO. MO-0098001  
REPORTING PERIOD (MO/YR)November, 2004  
PAGE 1 OF 4

## NPDES MONITORING REPORT

**OUTFALL 001  
RADWASTE SYSTEM**

[illegible]

PARAMETER	FREQ.	LIMITS	
		MONTHLY AVERAGE	DAILY MAX.
FLOW (MGD)	EB	N.A.	N.A.
pH (STD)	EB	6.0-9.0	6.0-9.0
TSS (mg/l)	EB	30	45
Boron (mg/l)	EB	N.A.	N.A.
TRC (ug/l)	Monthly	N.A.	190
BOD (mg/l)	Monthly	N.A.	N.A.
O&G (mg/l)	Monthly	15	20

ALL SAMPLES ANALYZED BY Ameren UE Callaway  
Plant OPERATIONS LABORATORY USING  
METHODS SPECIFIED UNDER 10CSR 20-7.015

## SOURCES

- 1 = WASTE MONITOR TANK A  
2 = WASTE MONITOR TANK B  
3 = STEAM GENERATOR BLOWDOWN  
4 = SEC. LIQ. WASTE MONITOR TANK A  
5 = SEC. LIQ. WASTE MONITOR TANK B  
6 = LIQ. RADWASTE DISCHARGE TANK A  
7 = LIQ. RADWASTE DISCHARGE TANK B  
EB = EACH BATCH

Date	BOD (mg/l)	TRC (ug/l)	O&G (mg/l)
3	472	<10	1.4

**COMMENTS:**

Ameren UE Callaway Plant

PERMIT NO. MO-0098001  
REPORTING PERIOD (MO/YR) November, 2004  
PAGE 2 OF 4

NPDES MONITORING REPORT

**OUTFALL 002**  
**COOLING TOWER BLOWDOWN**

DATE	FLOW (MGD)	TEMP (MAX/SE)	PH	TSS (mg/l)
1	5.3	79	.04	160
2	3.5	77	.02	200
3	2.6	72	.03	110
4	4.6	74	<.01	130
5	2.1	74	.02	50
6	5.8	82	.02	90
7	5.9	78	<.01	40
8	3.7	74	<.01	10
9	5.0	75	<.01	70
10	5.0	82	.02	40
11	4.0	76	.03	40
12	4.6	71	.06	170
13	4.0	67	.10	150
14	6.0	68	.07	90
15	5.2	74	.01	60
16	4.6	73	<.01	10
17	4.3	81	<.01	<10
18	3.9	78	<.01	<10
19	5.2	73	<.01	60
20	4.7	72	.02	240
21	4.5	72	.02	140
22	4.7	72	.12	180
23	4.5	73	.06	180
24	5.9	73	.02	40
25	6.5	65	.04	200
26	6.0	73	.08	200
27	4.7	73	.01	90
28	6.5	65	.06	90
29	5.2	69	<.01	130
30	6.4	66	<.01	20

DATE	TSS (mg/l)	TDS (mg/l)
1	49	2372
8	79	1484
15	59	1724
22	72	2024
29	30	1540

DATE	Sulfate (mg/l)	O&G (mg/l)
1	978	8

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	CONT.	N.A.	N.A.
TOTAL SUSPENDED SOLIDS	WKLY.	N.A.	N.A.
TOTAL DISSOLVED SOLIDS	WKLY.	N.A.	N.A.
OIL AND GREASE	QRTLY *	15	20
TOTAL RESIDUAL CHLORINE	DAILY	N.A.	N.A.
SULFATE	QRTLY *	N.A.	N.A.
FREE AVAIL. CHLORINE	DAILY	N.A.	0.2 (mg/l)
TEMPERATURE (MAXIMUM)	DAILY	110 ° F	110 ° F
pH	CONT.	6.0 - 9.0	6.0 - 9.0

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
OPERATIONS LAB USING METHODS SPECIFIED UNDER  
10CSR20-7.015.

\* SAMPLES SHALL BE TAKEN DURING THE MONTHS OF  
FEBRUARY, MAY, AUGUST, NOVEMBER.

COMMENTS: No pH excursions occurred this month.

See Attachment 1 for the one time asbestos monitoring of Outfall 002 required  
by the new NPDES permit.

**Ameren UE Callaway Plant**

PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) November, 2004

PAGE 3 OF 4

**NPDES MONITORING REPORT**

**OUTFALL 003  
WATER TREATMENT PLANT  
NO DISCHARGE**

**OUTFALL 007**

DATE	FLOW (MGD)	TSS (mg/l)	BOD (mg/l)	pH
10	.04	9	7	9.2

**SANITARY WASTE**

PARAMETER	FREQ	LIMITS (mg/l)	
		MO. AVG	WKLY. AVG
FLOW	QRTLY *	N.A.	N.A.
TSS	QRTLY *	70	110
BOD	QRTLY *	45	65
pH	QRTLY *	6.0 - 9.0	6.0 - 9.0

\* SAMPLES SHALL BE TAKEN DURING THE MONTHS OF  
FEBRUARY, MAY, AUGUST, NOVEMBER

**OUTFALL 009  
INTAKE HEATER BLOWDOWN  
NO DISCHARGE**

**OUTFALLS 010 - 015**

DATE	OUTFALL	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	COD (mg/l)	pH
19	10	.087	8	1	19	8.16
19	11	.399	25	8	56	7.77
19	12	.031	49	2	22	8.36
19	13	.035	31	3	36	7.85
19	14	.143	14	1	22	7.93
19	15	.058	50	1	22	8.14

**STORM WATER RUNOFF PONDS**

PARAMETER	FREQ	LIMITS	
		MO. AVG	DAILY MAX
FLOW	QRTLY *	N.A.	N.A.
TSS	QRTLY *	N.A.	N.A.
COD	QRTLY *	N.A.	N.A.
O and G	QRTLY *	15	20
pH	QRTLY *	>6.0	>6.0

\* SAMPLES SHALL BE TAKEN DURING THE MONTHS  
OF FEBRUARY, MAY, AUGUST, NOVEMBER.

**OUTFALL 016**

DATE	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	pH	TRC (ug/l)
9	0.94	13	3	7.91	<10
(2) 29	1.37	78	—	—	—

**COOLING TOWER BYPASS**

PARAMETER	FREQ	LIMITS	
		MO. AVG	DAILY MAX
FLOW	QRTLY *	N.A.	N.A.
TSS	QRTLY *	30	100
O and G	QRTLY *	15	20
pH	QRTLY *	6.0 - 9.0	6.0 - 9.0
TRC	QRTLY *	N.A.	190

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF  
FEBRUARY, MAY, AUGUST, NOVEMBER.

**OUTFALL 017**

ULTIMATE HEAT SINK  
No Discharge

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
OPERATIONS LABORATORY USING METHODS SPECIFIED  
UNDER 10CSR 20-7.015

COMMENTS: (2) High TSS resulted in monthly average being  
exceeded. High TSS due to loss of poly feed.

Ameren UE Callaway Plant

PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) November, 2004

PAGE 4 OF 4

NPDES MONITORING REPORT

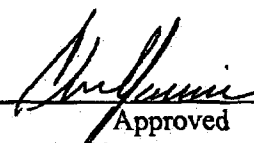
"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage 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."



Preparer



Reviewer



Approved  
Plant Manager

201010 040042 REV  
001

January 7, 2004

Steven S. Weiss  
Mail Code 602

**Callaway NPDES Monthly Report**

ATTACHED IS AN UPDATED PAGE 3 OF THE NOVEMBER REPORT (dated December 10, 2004, ~~001010 040042~~). ~~PLEASE PLACE THIS IN THE REPORT, AND DISCARD THE OLD PAGE.~~

Luanna M. Belsky

cc: G. P. Gary (470)  
C170.0005 (2 copies)  
R/C Clerk  
A160.0998



01004163

TOTAL PAGES 2



**Ameren UE Callaway Plant**

**PERMIT NO. MO-0098001**

**REPORTING PERIOD (MO/YR) November, 2004**

**PAGE 3 OF 4**

**NPDES MONITORING REPORT**

**OUTFALL 003  
WATER TREATMENT PLANT  
NO DISCHARGE**

**OUTFALL 007**

DATE	CONDUCTIVITY (µmhos/cm)	TEMPERATURE (°C)	PH	TSS (mg/L)
10	.04	9	7	7.51

**SANITARY WASTE**

PARAMETER	UNIT	MONITORING FREQUENCY	MINIMUM	MAXIMUM
FLOW	QRTLY *	N.A.	N.A.	N.A.
TSS	QRTLY *	70	110	
BOD	QRTLY *	45	65	
pH	QRTLY *	6.0 - 9.0	6.0 - 9.0	

\* SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER

**OUTFALL 009  
INTAKE HEATER BLOWDOWN  
NO DISCHARGE**

**OUTFALLS 010 - 015**

DATE	CONDUCTIVITY (µmhos/cm)	TEMPERATURE (°C)	PH	TSS (mg/L)	BOD (mg/L)	TRC (mg/L)
19	10	.087	8	1	19	8.16
19	11	.399	25	8	56	7.77
19	12	.031	49	2	22	8.36
19	13	.035	31	3	36	7.85
19	14	.143	14	1	22	7.93
19	15	.058	50	1	22	8.14

**STORM WATER RUNOFF PONDS**

PARAMETER	UNIT	MONITORING FREQUENCY	MINIMUM	MAXIMUM
FLOW	QRTLY *	N.A.	N.A.	N.A.
TSS	QRTLY *	N.A.	N.A.	N.A.
COD	QRTLY *	N.A.	N.A.	N.A.
O and G	QRTLY *	15	20	
pH	QRTLY *	>6.0	>6.0	

\* SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER.

**OUTFALL 016**

DATE	CONDUCTIVITY (µmhos/cm)	TEMPERATURE (°C)	PH	TSS (mg/L)	BOD (mg/L)	TRC (mg/L)
9	0.94	13	3	7.91	<10	
(2) 29	1.37	78	--	--	--	

**COOLING TOWER BYPASS**

PARAMETER	UNIT	MONITORING FREQUENCY	MINIMUM	MAXIMUM
FLOW	QRTLY *	N.A.	N.A.	N.A.
TSS	QRTLY *	30	100	
O and G	QRTLY *	15	20	
pH	QRTLY *	6.0 - 9.0	6.0 - 9.0	
TRC	QRTLY *	N.A.	190	

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER.

**OUTFALL 017**

ULTIMATE HEAT SINK  
No Discharge

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
OPERATIONS LABORATORY USING METHODS SPECIFIED  
UNDER 10CSR 20-7.015

COMMENTS: (2) High TSS resulted in monthly average being exceeded. High TSS due to loss of poly feed.

UOTCR 05-011

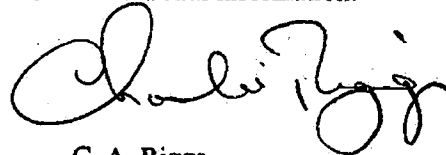
March 9, 2005

Steven S. Weiss  
Mail Code 602

Callaway NPDES Monthly Report

Attached is the NPDES Monthly Report for February 2005. Results are noted in comment section of each Outfall.

Please let me know if you have any questions or need additional information.



C. A. Riggs

CAR/RSB:lmb

Attachments

cc: G. P. Gary (470)  
C170.0005 (2 copies)  
R/C Clerk  
A160.0998



00958674

TOTAL PAGES 5

PERMIT NO. MO-0098001  
REPORTING PERIOD FEBRUARY, 2005  
PAGE 1 of 4

## NPDES MONITORING REPORT

**OUTFALL 001  
RADWASTE SYSTEM**

[illegible]

PARAMETER	FREQ.	LIMITS	
		MONTHLY AVERAGE	DAILY MAX.
FLOW (MGD)	EB	N.A.	N.A.
pH (STD)	EB	6.0-9.0	6.0-9.0
TSS (mg/l)	EB	30	45
Boron (mg/l)	EB	N.A.	N.A.
TRC (ug/l)	Monthly	N.A.	190
BOD (mg/l)	Monthly	N.A.	N.A.
O&G (mg/l)	Monthly	15	20

ALL SAMPLES ANALYZED BY Ameren UE Callaway  
Plant OPERATIONS LABORATORY USING  
METHODS SPECIFIED UNDER 10CSR 20-7.015

### SOURCES

- 1 = WASTE MONITOR TANK A  
2 = WASTE MONITOR TANK B  
3 = STEAM GENERATOR BLOWDOWN  
4 = SEC. LIQ. WASTE MONITOR TANK A  
5 = SEC. LIQ. WASTE MONITOR TANK B  
6 = LIQ. RADWASTE DISCHARGE TANK A  
7 = LIQ. RADWASTE DISCHARGE TANK B  
EB = EACH BATCH

Date	BOD (mg/l)	TRC (ug/l)	O&G (mg/l)
3	226	20	2

**COMMENTS:**

(1) Exceeds monthly average limit but is below the daily max limit. Actual monthly average is 13.9.

Ameren UE Callaway Plant

PERMIT NO. MO-0098001  
REPORTING PERIOD FEBRUARY, 2005  
PAGE 2 of 4

NPDES MONITORING REPORT

OUTFALL 002  
COOLING TOWER BLOWDOWN

DATE	FLOW (MGD)	TEMP (MAX °F)	TSS (mg/l)
1	2.0	62	<10
2	4.1	64	60
3	6.1	67	50
4	5.1	73	60
5	6.7	74	100
6	7.6	72	70
7	3.6	74	130
8	2.2	63	100
9	3.2	62	40
10	3.9	66	<10
11	3.4	68	180
12	3.5	72	70
13	7.6	75	40
14	3.7	75	70
15	5.4	77	70
16	3.2	68	<10
17	3.0	67	100
18	1.0	67	180
19	2.2	64	110
20	3.5	72	10
21	2.8	73	100
22	6.1	67	120
23	5.6	67	100
24	5.9	65	120
25	6.6	73	130
26	7.5	70	140
27	6.6	70	150
28	5.4	70	180

DATE	TSS (mg/l)	TDS (mg/l)
7	57	1576
14	69	2988
21	96	2312
28	51	1364

DATE	Sulfate (mg/l)	Chlorine (mg/l)
7	742	1

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	CONT.	N.A.	N.A.
TOTAL SUSPENDED SOLIDS	WKLY.	N.A.	N.A.
TOTAL DISSOLVED SOLIDS	WKLY.	N.A.	N.A.
OIL AND GREASE	QRTLY (1)	15	20
SULFATE	QRTLY (1)	N.A.	N.A.
TEMPERATURE (MAXIMUM)	DAILY	110 ° F	110 ° F
pH	CONT.	6.0 - 9.0	6.0 - 9.0
TOTAL RESIDUAL CHLORINE	DAILY	N.A.	190 ug/L

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
OPERATIONS LAB USING METHODS SPECIFIED UNDER  
10CSR20-7.015.

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF  
FEBRUARY, MAY, AUGUST, NOVEMBER.

COMMENTS: No pH excursions occurred this month.

**Ameren UE Callaway Plant**

**PERMIT NO. MO-0098001**  
**REPORTING PERIOD FEBRUARY, 2005**  
**PAGE 3 of 4**

**NPDES MONITORING REPORT**

**OUTFALL 003**  
**WATER TREATMENT PLANT**  
**NO DISCHARGE**

**OUTFALL 007**

DATE	FLOW (MGD)	TSS (mg/l)	BOD (mg/l)	pH
10	.177	4	4	7.89

**SANITARY WASTE**

PARAMETER	FREQ.	MO. AVG.	WEEKLY AVG.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	70	110
BOD	QRTLY (1)	45	65
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER

**OUTFALL 009**  
**INTAKE HEATER BLOWDOWN**  
**NO DISCHARGE**

**OUTFALLS 010 - 015**

DATE	OUTFALL	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	COD (mg/l)	pH
7	10	.035	6	2	22	8.25
7	11	.161	42	2	20	8.35
7	12	.012	29	2	20	8.54
7	13	.014	14	3	12	8.07
7	14	.058	16	2	20	8.25
7	15	.023	16	0	5	8.55

**STORM WATER RUNOFF PONDS**

PARAMETER	FREQ.	MO. AVG.	DAILY MAX.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	N.A.	N.A.
COD	QRTLY (1)	N.A.	N.A.
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	>6.0	>6.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER

**OUTFALL 016**

DATE	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	pH	TRC (mg/l)
10	1.62	10	2	7.86	<10

**COOLING TOWER BYPASS**

PARAMETER	FREQ.	MO. AVG.	DAILY MAX.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	30	100
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0
TRC	QRTLY (1)	N.A.	190

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER

**OUTFALL 017**

**ULTIMATE HEAT SINK**  
**No Discharge**

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
 OPERATIONS LABORATORY USING METHODS SPECIFIED  
 UNDER 10CSR 20-7.015

COMMENTS: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Ameren UE Callaway Plant

PERMIT NO. MO-0098001

REPORTING PERIOD FEBRUARY, 2005

PAGE 4 of 4

NPDES MONITORING REPORT

"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."



Preparer



Reviewer



Approved  
Plant Manager

UOTCR 05-019

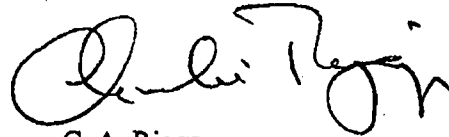
June 14, 2005

Steven S. Weiss  
Mail Code 602

Callaway NPDES Monthly Report

Attached is the NPDES Monthly Report for May, 2005. Results are noted in comment section of each Outfall.

Please let me know if you have any questions or need additional information.

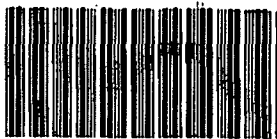


C. A. Riggs

CAR/RSB:lmb

Attachments

cc: G. P. Gary (470)  
C170.0005  
R/C Clerk  
A160.0998



00986387

TOTAL PAGES 5





**Ameren UE Callaway Plant**

**PERMIT NO. MO-0098001**  
**REPORTING PERIOD MAY, 2005**  
**PAGE 2 of 4**

**NPDES MONITORING REPORT**

**OUTFALL 002**  
**COOLING TOWER BLOWDOWN**

DATE	FLOW (MGD)	TEMP (MAX °F)	TRC (ug/l)
1	4.2	70	100
2	5.8	72	30 (2)
3	0	74	50
4	3.6	75	50
5	3.8	79	140
6	3.9	81	50
7	3.1	83	92
8	3	84	50
9	4	85	50
10	5.6	86	70
11	7.1	85	50
12	6.3	85	50
13	5.2	84	55
14	6	80	64
15	5.8	75	59
16	4.8	79	50
17	4	82	50
18	4.1	84	50
19	6.8	82	50
20	6.5	84	50
21	5.3	82	50
22	6.1	85	30 (2)
23	4.1	82	133
24	3.7	82	50
25	5.1	81	58
26	5.8	80	50
27	5.6	80	50
28	6.1	80	50
29	6.3	89	74
30	6.1	83	50
31	6.4	83	35 (2)

DATE	TSS (mg/l)	TDS (mg/l)
2	1544	23
9	2414	86
16	1212	61
23	1608	25
30	2416	36

DATE	Sulfate (mg/l)	O&G (mg/l)
2	854	0.4

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	CONT.	N.A.	N.A.
TOTAL SUSPENDED SOLIDS	WKLY.	N.A.	N.A.
TOTAL DISSOLVED SOLIDS	WKLY.	N.A.	N.A.
OIL AND GREASE	QRTLY (1)	15	20
SULFATE	QRTLY (1)	N.A.	N.A.
TEMPERATURE (MAXIMUM)	DAILY	110 ° F	110 ° F
pH	CONT.	6.0 - 9.0	6.0 - 9.0
TOTAL RESIDUAL CHLORINE	DAILY	N.A.	190 ug/L

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
 OPERATIONS LAB USING METHODS SPECIFIED UNDER  
 10CSR20-7.015.

- (1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF  
 FEBRUARY, MAY, AUGUST, NOVEMBER.

COMMENTS: No pH excursions occurred this month.

(2) By spectrophotometric method.

Ameren UE Callaway Plant

PERMIT NO. MO-0098001  
REPORTING PERIOD MAY, 2005  
PAGE 3 of 4

NPDES MONITORING REPORT

**OUTFALL 003**  
WATER TREATMENT PLANT  
NO DISCHARGE

**OUTFALL 007**

DATE	FLOW (MGD)	TSS (mg/l)	BOD (mg/l)	pH
5	.00001	9	19	7.36

**SANITARY WASTE**

PARAMETER	FREQ.	LIMITS (mg/l)	
		MO. AVG.	WEEKLY AVG.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	70	110
BOD	QRTLY (1)	45	65
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF  
FEBRUARY, MAY, AUGUST, NOVEMBER

**OUTFALL 002**  
INTAKE HEATER BLOWDOWN  
NO DISCHARGE

**OUTFALLS 010 - 015**

DATE	OUTFALL	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	COD (mg/l)	pH
23	10	.011	2	2	20 (2)	8.31
9	11	.048	17	3	25 (2)	8.18
23	12	.004	44	1	25 (2)	8.19
23	13	.004	47	3	20 (2)	8.35
	14	- NO DISCHARGE -				
23	15	.007	12	1	18 (2)	7.53

**STORM WATER RUNOFF PONDS**

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	N.A.	N.A.
COD	QRTLY (1)	N.A.	N.A.
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	>6.0	>6.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS  
OF FEBRUARY, MAY, AUGUST, NOVEMBER.

**OUTFALL 016**

DATE	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	pH	TRC (ug/l)
4	1.6	8	2	7.95	50

**COOLING TOWER BYPASS**

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	30	100
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0
TRC	QRTLY (1)	N.A.	190

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF  
FEBRUARY, MAY, AUGUST, NOVEMBER.

**OUTFALL 017**

ULTIMATE HEAT SINK  
No Discharge

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
OPERATIONS LABORATORY USING METHODS SPECIFIED  
UNDER 10CSR 20-7.015

COMMENTS:

(2) Samples exceeded the 28 days from date of sample to time of  
analysis.

Ameren UE Callaway Plant

PERMIT NO. MO-0098001

REPORTING PERIOD MAY, 2005


PAGE 4 of 4

NPDES MONITORING REPORT

"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."



Preparer



Reviewer



Approved  
Plant Manager

UOTCR 05-035

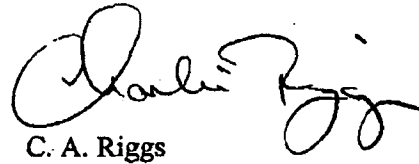
September 12, 2005

Steven S. Weiss  
Mail Code 602

**Callaway NPDES Monthly Report**

Attached is the NPDES Monthly Report for August, 2005. Results are noted in comment section of each Outfall.

Please let me know if you have any questions or need additional information.

  
C. A. Riggs

CAR/RSB:lmb

Attachments

cc: G. P. Gary (470)  
C170.0005  
R/C Clerk  
A160.0998



6

PERMIT NO. MO-0098001  
REPORTING PERIOD AUGUST, 2005  
PAGE 1 of 5

**OUTFALL 001  
RADWASTE SYSTEM**

[illegible]

<b>PARAMETER</b>	<b>FREQ.</b>	<b>LIMITS</b>	
		<b>MONTHLY AVERAGE</b>	<b>DAILY MAX.</b>
FLOW (MGD)	EB	N.A.	N.A.
pH (STD)	EB	6.0-9.0	6.0-9.0
TSS (mg/l)	EB	30	45
Boron (mg/l)	EB	N.A.	N.A.
TRC (ug/l)	Monthly	N.A.	190
BOD (mg/l)	Monthly	N.A.	N.A.
O&G (mg/l)	Monthly	15	20

ALL SAMPLES ANALYZED BY Amerscan UE Callaway  
Plant OPERATIONS LABORATORY USING  
METHODS SPECIFIED UNDER 10CSR 20-7.015

1 = WASTE MONITOR TANK A  
2 = WASTE MONITOR TANK B  
3 = STEAM GENERATOR BLOWDOWN  
4 = SEC. LIQ. WASTE MONITOR TANK A  
5 = SEC. LIQ. WASTE MONITOR TANK B  
6 = LIQ. RADWASTE DISCHARGE TANK A  
7 = LIQ. RADWASTE DISCHARGE TANK B  
EB = EACH BATCH

Date	BOD (mg/l)	TRC (ug/l)	O&G (mg/l)
4	2	---	---
1	---	50	2.2

COMMENTS: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Ameren UE Callaway Plant

PERMIT NO. MO-0098001  
REPORTING PERIOD AUGUST, 2005  
PAGE 2 of 5

NPDES MONITORING REPORT

OUTFALL 002  
COOLING TOWER BLOWDOWN

DATE	FLOW (MGD)	TEMP (MAX °F)	TRC (ug/l)
1	6	92	50
2	8	95	50
3	8.8	91	<50
4	10	88	50
5	9.2	91	50
6	5.7	88	50
7	8.2	87	<50
8	7.7	90	50
9	6.7	92	50
10	5.3	92	50
11	6.3	92	50
12	7.0	89	50
13	7.9	90	50
14	8.4	85	50
15	8.4	84	77
16	7.8	85	50
17	4.3	87	50
18	7.1	92	50
19	7.3	94	50
20	8.0	88	50
21	9.3	90	50
22	6.9	90	<50
23	9.2	85	<50
24	5.6	85	<50
25	8.6	87	50
26	8.7	88	50
27	9.3	86	50
28	9.7	87	50
29	5.8	87	50
30	7.7	86	<50
31	8.2	85	<50

DATE	TSS (mg/l)	TDS (mg/l)
1	48	2088
8	94	1340
15	62	1709
22	28	1448
29	25	616

DATE	Sulfate (mg/l)	O&G (mg/l)
8	1000	5.6

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	CONT.	N.A.	N.A.
TOTAL SUSPENDED SOLIDS	WKLY.	N.A.	N.A.
TOTAL DISSOLVED SOLIDS	WKLY.	N.A.	N.A.
OIL AND GREASE	QRTLY (1)	15	20
SULFATE	QRTLY (1)	N.A.	N.A.
TEMPERATURE (MAXIMUM)	DAILY	110 ° F	110 ° F
pH	CONT.	6.0 - 9.0	6.0 - 9.0
TOTAL RESIDUAL CHLORINE	DAILY	N.A.	190 ug/L

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
OPERATIONS LAB USING METHODS SPECIFIED UNDER  
10CSR20-7.015.

- (1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF  
FEBRUARY, MAY, AUGUST, NOVEMBER.

COMMENTS: No pH excursions occurred this month.

PERMIT NO. MO-0098001  
REPORTING PERIOD AUGUST, 2005  
PAGE 3 of 5

Ameren UE Callaway Plant

NPDES MONITORING REPORT

OUTFALL 003  
WATER TREATMENT PLANT  
NO DISCHARGE

OUTFALL 007

DATE	FLOW (MGD)	TSS (mg/l)	BOD (mg/l)	pH
18	.0006	18	---	7
28	.0006	36	3	8.98

SANITARY WASTE

PARAMETER	FREQ	LIMITS (mg/l)	
		MO. AVG.	WKLY. AVG.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	.70	110
BOD	QRTLY (1)	45	65
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF  
FEBRUARY, MAY, AUGUST, NOVEMBER

OUTFALL 009  
INTAKE HEATER BLOWDOWN  
NO DISCHARGE

OUTFALLS 010 - 015

DATE	OUTFALL	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	COD (mg/l)	pH
17	10	.065	9.6	1.5	33	8.59
17	11	.298	19.1	1.5	33	8.01
17	12	.023	39	27	38	8.84
17	13	.026	7.3	1	33	8.77
17	14	.107	41	1	13	8.04
17	15	.043	19	1.5	35	8.65

STORM WATER RUNOFF PONDS

PARAMETER	FREQ	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	N.A.	N.A.
COD	QRTLY (1)	N.A.	N.A.
O and G	QRTLY (1)	N.A.	N.A.
pH	QRTLY (1)	>6.0	>6.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS  
OF FEBRUARY, MAY, AUGUST, NOVEMBER.

OUTFALL 016

DATE	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	pH	TRC (ug/l)
8	2.17	12	1.4	8.34	50

COOLING TOWER BYPASS

PARAMETER	FREQ	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	30	100
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0
TRC	QRTLY (1)	N.A.	190

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF  
FEBRUARY, MAY, AUGUST, NOVEMBER.

OUTFALL 017

ULTIMATE HEAT SINK  
No Discharge

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
OPERATIONS LABORATORY USING METHODS SPECIFIED  
UNDER 10CSR 20-7.015

COMMENTS: Outfall 016 TRC results on Attachment 1.

Ameren UE Callaway Plant

PERMIT NO. MO-0098001

REPORTING PERIOD AUGUST, 2005

PAGE 4 of 5

NPDES MONITORING REPORT

"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."



Preparer



Reviewer



Approved

Operations Manager



PERMIT NO. MO-0098001  
REPORTING PERIOD AUGUST, 2005  
PAGE 5 of 5

Ameren UE Callaway Plant

NPDES MONITORING REPORT

**OUTFALL 016**  
**COOLING TOWER BYPASS AFTER ADDITION**  
**FREE AVAILABLE CHLORINE (FAC)**  
**AFTER ADD SAMPLE RESULTS AND**  
**TOTAL RESIDUAL CHLORINE (TRC)**

<u>Date</u>	<u>TRC (mg/l)</u>
08/16/2005	50
08/17/2005	<50
08/18/2005	50
08/23/2005	92

UOTCR 05-042

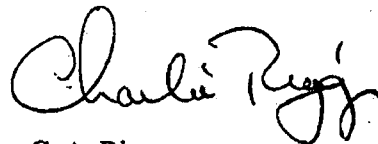
December 6, 2005

Steven S. Weiss  
Mail Code 602

**Callaway NPDES Monthly Report**

Attached is the NPDES Monthly Report for November, 2005. Results are noted in comment section of each Outfall.

Please let me know if you have any questions or need additional information.



C. A. Riggs

CAR/RSB:lmb

Attachments

cc: G. P. Gary (470)  
C170.0005  
R/C Clerk  
→ A160.0998



00927417



**Ameren UE Callaway Plant**

**PERMIT NO. MO-0098001**  
**REPORTING PERIOD (MO/YR) NOVEMBER, 2005**  
**PAGE 2 OF 4**

**NPDES MONITORING REPORT**

**OUTFALL 002**  
**COOLING TOWER BLOWDOWN**

DATE	FLOW (MGD)	TEMP. (MAX/F)	TRC (ug/l)
1	0.4 (2)	63	<50
2	6.4	59	<50
3	3.8	59	<50
4	0 (2)	59	<50
5	0.6 (2)	62	<50
6	0.6 (2)	63	<50
7	0.3 (2)	56	<50
8	4.5	60	<50
9	5.7	65	<50
10	8.9	54	<50
11	6.3	57	<50
12	8.0	63	<50
13	6.2	56	<50
14	1.2	52	<50
15	0 (2)	50	<50
16	0 (2)	33	<50
17	0 (2)	55	<50
18	0.3 (2)	47	<50
19	0 (2)	61	<50
20	1.7	61	<50
21	1.6	65	<50
22	4.1	65	<50
23	4.2	69	<50
24	4.3	71	<50
25	4.3	66	<50
26	4.3	75	<50
27	3.5	79	<50
28	4.8	71	<50
29	5.9	63	<50
30	5.63	65	<50

DATE	TSS (mg/l)	TDS (mg/l)
7	253 (3)	336
14	7	308
21	43	1130
28	82	1120

DATE	Sulfate (mg/l)	O&G (mg/l)
14	168	1

PARAMETER	FREQ	MO. AVG.	DAILY MAX.
FLOW	CONT.	N.A.	N.A.
TOTAL SUSPENDED SOLIDS	WKLY.	N.A.	N.A.
TOTAL DISSOLVED SOLIDS	WKLY.	N.A.	N.A.
OIL AND GREASE	QRTLY (1)	15	20
SULFATE	QRTLY (1)	N.A.	N.A.
TEMPERATURE (MAXIMUM)	DAILY	110 ° F	110 ° F
pH	CONT.	6.0 - 9.0	6.0 - 9.0
TOTAL RESIDUAL CHLORINE	DAILY	N.A.	190 ug/L

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
 OPERATIONS LAB USING METHODS SPECIFIED UNDER  
 10CSR20-7.015.

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF  
 FEBRUARY, MAY, AUGUST, NOVEMBER.

**COMMENTS:**

No pH excursions occurred this month

(2) Dip Samples.

(3) Basin Level very low and murky; hard to sample.

**Ameren UE Callaway Plant**

**PERMIT NO. MO-0098001**

**REPORTING PERIOD (MO/YR) NOVEMBER, 2005**

**PAGE 3 OF 4**

**NPDES MONITORING REPORT**

**OUTFALL 003  
WATER TREATMENT PLANT  
NO DISCHARGE**

**OUTFALL 007**

DATE	FLOW (MGD)	TSS (mg/l)	BOD (mg/l)	pH
16	.07	4	5	7.95

**SANITARY WASTE**

PARAMETER	FREQ.	LIMITS (mg/l)	
		MO/AVG	WEEKLY AVG
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	70	110
BOD	QRTLY (1)	45	65
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF  
FEBRUARY, MAY, AUGUST, NOVEMBER

**OUTFALL 009  
INTAKE HEATER BLOWDOWN  
NO DISCHARGE**

**OUTFALLS 010 - 015**

DATE	OUTFALL	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	COD (mg/l)	pH
14	10	.038	5	1	40	8.36
14	11	.173	29	1	43	8.39
14	12	.013	28	3 (2)	23	9.42
14	13	.015	103	1	40	9.56
14	14	.062	69	1	48	8.82
14	15	.025	11	1	50	8.38

**STORM WATER RUNOFF PONDS**

PARAMETER	FREQ.	LIMITS (mg/l)	
		MO/AVG	DAILY MAX
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	N.A.	N.A.
COD	QRTLY (1)	N.A.	N.A.
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	>6.0	>6.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS  
OF FEBRUARY, MAY, AUGUST, NOVEMBER.

**OUTFALL 016**

DATE	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	pH	TRC (ug/l)
14	6.8	4	1	8.32	<50
21					148

**COOLING TOWER BYPASS**

PARAMETER	FREQ.	LIMITS (mg/l)	
		MO/AVG	DAILY MAX
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	30	100
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0
TRC	QRTLY (1)	N.A.	190

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF  
FEBRUARY, MAY, AUGUST, NOVEMBER.

**OUTFALL 017**

ULTIMATE HEAT SINK  
No Discharge

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
OPERATIONS LABORATORY USING METHODS SPECIFIED  
UNDER IOCSR 20-7.015

COMMENTS:

(2) Sample for oil and grease taken 11-09-05.

Ameren UE Callaway Plant

PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) NOVEMBER, 2005

PAGE 4 OF 4

NPDES MONITORING REPORT

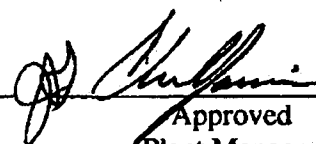
"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage 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."



Preparer



Reviewer



Approved  
Plant Manager

UOTCR 06-009

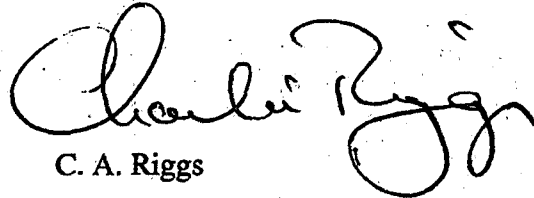
March 10, 2006

Steven S. Weiss  
Mail Code 602

**Callaway NPDES Monthly Report**

Attached is the NPDES Monthly Report for February, 2006. Results are noted in comment section of each Outfall.

Please let me know if you have any questions or need additional information.

  
C. A. Riggs

CAR/RSB:lmb

**Attachments**

cc: G. P. Gary (470)  
C170.0005  
R/C Clerk  
A160.0998

5  
3/1





**Ameren UE Callaway Plant**

**PERMIT NO. MO-0098001**  
**REPORTING PERIOD (MO/YR) FEBRUARY, 2006**  
**PAGE 2 OF 4**

**NPDES MONITORING REPORT**

**OUTFALL 002**  
**COOLING TOWER BLOWDOWN**

DATE	PH	TSS (mg/L)	TDS (mg/L)
1	4.2	73	111
2	3.4	70	53
3	4.3	67	63
4	4.2	61	94
5	4.3	65	104
6	4.4	63	<50
7	4.3	66	<50
8	4.3	64	<50
9	4.2	63	87
10	4.3	63	68
11	4.3	60	68
12	4.2	55	155
13	2.8	62	185
14	4.1	71	66
15	4.1	72	<50
16	4.9	73	<50
17	6.8	65	64
18	4.4	59	<50
19	4.3	62	133
20	4.2	67	114
21	4.1	72	<50
22	4.3	68	59
23	4.9	71	114
24	3.6	74	<50
25	4.2	67	133
26	4.7	66	117
27	5.0	76	139
28	4.0	78	<50

DATE	TSS (mg/L)	TDS (mg/L)
6	43	4000
8		2384
13	57	2168
20	40	2028
27	70	2024

DATE	TSS (mg/L)	TDS (mg/L)
6	1226	14

PARAMETER	UNITS	FEV	NOV
FLOW	CONT.	N.A.	N.A.
TOTAL SUSPENDED SOLIDS	WKLY.	N.A.	N.A.
TOTAL DISSOLVED SOLIDS	WKLY.	N.A.	N.A.
OIL AND GREASE	QRTLY (1)	15	20
SULFATE	QRTLY (1)	N.A.	N.A.
TEMPERATURE (MAXIMUM)	DAILY	110 ° F	110 ° F
pH	CONT.	6.0 - 9.0	6.0 - 9.0
TOTAL RESIDUAL CHLORINE	DAILY	N.A.	190 ug/L

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
 OPERATIONS LAB USING METHODS SPECIFIED UNDER  
 10CSR20-7.015.

- (1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF  
 FEBRUARY, MAY, AUGUST, NOVEMBER.

COMMENTS: No pH excursions occurred this month.

**Ameren UE Callaway Plant**

PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) **FEBRUARY, 2006**

PAGE 3 OF 4

**NPDES MONITORING REPORT**

**OUTFALL 003  
WATER TREATMENT PLANT  
NO DISCHARGE**

**OUTFALL 007**

DATE	FLOW (MGD)	TSS (mg/L)	BOD (mg/L)	pH
9	.013	4	9	8.26

**SANITARY WASTE**

PARAMETER	FREQ	LIMITS (mg/L)	
		MO AVG	WEEKLY AVG
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	70	110
BOD	QRTLY (1)	45	65
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER

**OUTFALL 009  
INTAKE HEATER BLOWDOWN  
NO DISCHARGE**

**OUTFALLS 010 - 015**

DATE	OUTFALL	FLOW (MGD)	TSS (mg/L)	O and G (mg/L)	COD (mg/L)	pH
16	10	.002	7	2	15	8.44
16	11	.011	32	2	40	8.29
6	12	.001	116	1	23	8.57
(1)	13					
16	14	.004	22	2	24	8.10
6	15	.002	8	1	26	8.71

**STORM WATER RUNOFF PONDS**

PARAMETER	FREQ	LIMITS	
		MO AVG	WEEKLY AVG
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	N.A.	N.A.
COD	QRTLY (1)	N.A.	N.A.
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	>6.0	>6.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER.

**OUTFALL 016**

DATE	FLOW (MGD)	TSS (mg/L)	O and G (mg/L)	pH	TRC (ug/l)
16	3.29	10	1	8.32	<50

**COOLING TOWER BYPASS**

PARAMETER	FREQ	LIMITS	
		MO AVG	WEEKLY AVG
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	30	100
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0
TRC	QRTLY (1)	N.A.	190

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER.

**OUTFALL 017**

ULTIMATE HEAT SINK  
No Discharge

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
OPERATIONS LABORATORY USING METHODS SPECIFIED  
UNDER 10CSR 20-7.015

COMMENTS: (1) No Discharge noted.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Ameren UE Callaway Plant


PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) FEBRUARY, 2006

PAGE 4 OF 4

NPDES MONITORING REPORT

"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."



Preparer



Reviewer



Approved  
Plant Manager

UOTCR 06-0021

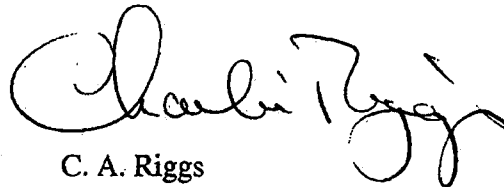
June 7, 2006

Steven S. Weiss  
Mail Code 602

*Callaway NPDES Monthly Report*

Attached is the NPDES Monthly Report for May 2006. Results are noted in comment section of each Outfall.

Please let me know if you have any questions or need additional information.

  
C. A. Riggs

CAR/RSB:mad

Attachments

cc: G. P. Gary (470)  
C170.0005  
R/C Clerk  
A160.0998

8  
su

PERMIT NO. MO-0098001  
REPORTING PERIOD (MO/YR) MAY 2006  
PAGE 1 OF 4

**OUTFALL 001  
RADWASTE SYSTEM**

[illegible]

Parameter	Frequency	Unit	Value
FLOW (MGD)	EB	N.A.	N.A.
pH (STD)	EB	6.0-9.0	6.0-9.0
TSS (mg/l)	EB	30	45
Baron (mg/l)	EB	N.A.	N.A.
TRC (ug/l)	Monthly	N.A.	190
BOD (mg/l)	Monthly	N.A.	N.A.
O&G (mg/l)	Monthly	15	20

## SOURCES

- 1 = WASTE MONITOR TANK A  
2 = WASTE MONITOR TANK B  
3 = STEAM GENERATOR BLOWDOWN  
4 = SEC. LIQ. WASTE MONITOR TANK A  
5 = SEC. LIQ. WASTE MONITOR TANK B  
6 = LIQ. RADWASTE DISCHARGE TANK A  
7 = LIQ. RADWASTE DISCHARGE TANK B  
EB = EACH BATCH

1	5	90	11

COMMENTS: (1) Monthly Average 20.8

**Ameren UE Callaway Plant**

**PERMIT NO. MO-0098001**

**REPORTING PERIOD (MO/YR) MAY 2006**

**PAGE 2 OF 4**

**NPDES MONITORING REPORT**

**OUTFALL 002**  
**COOLING TOWER BLOWDOWN**

DATE	PH	TEMPERATURE (°F)	TOTAL SUSPENDED SOLIDS (mg/L)
1	8.0	79	51
2	3.3	84	50
3	3.5	84	<50
4	3.9	78	<50
5	5.9	76	<50
6	4.3	76	<50
7	3.3	79	<50
8	3.5	80	<50
9	3.4	86	<50
10	5.7	83	<50
11	2.0	77	50
12	3.0	67	132
13	3.3	73	107
14	2.9	75	99
15	2.6	79	61
16	2.5	82	<50
17	3.5	83	50
18	1.6	69	<50
19	0	65	189
20	0	62	61
21	0.1	63	158
22	0.3	63	<50
23	0	63	<50
24	0	64	<50
25	0	70	<50
26	0	70	<50
27	0	71	<50
28	0	73	<50
29	0	74	<50
30	0	74	<50
31	2.0	78	50

DATE	PH	TEMPERATURE (°F)
1	39	2080
8	48	1972
15	59	1444
22	36	1904
29	41	992

DATE	PH	TEMPERATURE (°F)
1	824	0.4

PARAMETER	UNIT	10/1/05	11/1/05
FLOW	CONT.	N.A.	N.A.
TOTAL SUSPENDED SOLIDS	WKLY.	N.A.	N.A.
TOTAL DISSOLVED SOLIDS	WKLY.	N.A.	N.A.
OIL AND GREASE	QRTLY (1)	15	20
SULFATE	QRTLY (1)	N.A.	N.A.
TEMPERATURE (MAXIMUM)	DAILY	110° F	110° F
pH	CONT.	6.0 - 9.0	6.0 - 9.0
TOTAL RESIDUAL CHLORINE	DAILY	N.A.	190 ug/L

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
OPERATIONS LAB USING METHODS SPECIFIED UNDER  
10CSR20-7.015.

- (1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF  
FEBRUARY, MAY, AUGUST, NOVEMBER.

COMMENTS: No pH excursion occurred this month.

**Ameren UE Callaway Plant**

**PERMIT NO. MO-0098001**  
**REPORTING PERIOD (MO/YR) MAY 2006**  
**PAGE 3 OF 4**

**NPDES MONITORING REPORT**

**OUTFALL 003**  
**WATER TREATMENT PLANT**  
**NO DISCHARGE**

**OUTFALL 007**

DATE	COU (MGD)	TSS (mg/L)	BOD (mg/L)	pH
4	.031	3	2	7.58

**SANITARY WASTE**

PARAMETER	FREQ	MO. AVG	MAX/MIN
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	70	110
BOD	QRTLY (1)	45	65
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER

**OUTFALL 009**  
**INTAKE HEATER BLOWDOWN**  
**NO DISCHARGE**

**OUTFALLS 010 - 015**

		DO (mg/L)	BOD (mg/L)	pH		
2	10	.020	4	5	25	8.56
2	11	.094	6	2	47	8.17
2	12	.007	26	1	20	8.15
2	13	.008	5	1	27	7.9
2	14	.034	23	3	32	8.25
2	15	.014	4	1	30	8.79

**STORM WATER RUNOFF PONDS**

PARAMETER	FREQ	MO. AVG	MAX/MIN
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	N.A.	N.A.
COD	QRTLY (1)	N.A.	N.A.
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	>6.0	>6.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER.

**OUTFALL 016**

DATE	COU (MGD)	TSS (mg/L)	BOD (mg/L)	pH	DO (mg/L)
8	2.25	12	2	7.95	<50

**COOLING TOWER BYPASS**

PARAMETER	FREQ	MO. AVG	MAX/MIN
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	30	100
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0
TRC	QRTLY (1)	N.A.	190

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER.

**OUTFALL 017**

**ULTIMATE HEAT SINK**  
 No Discharge

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
 OPERATIONS LABORATORY USING METHODS SPECIFIED  
 UNDER 10CSR 20-7.015

COMMENTS: See Attachment 1 for additional TRC results for  
 Outfall 016

Ameren UE Callaway Plant

PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) MAY 2006

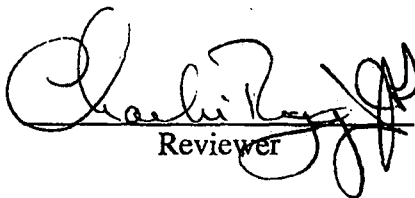
PAGE 4 OF 4

NPDES MONITORING REPORT

"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."



Preparer



Reviewer



Approved  
Plant Manager



**ATTACHMENT 1**  
**DATE: MAY 2006**

**Cooling tower bypass after addition total residual chlorine (TRC) results (ug/ml).**

<u>Date</u>	<u>TRC (ug/ml)</u>
2	116
3	154
4	163
9	101
11	134
15	<50

**Chemical Analysis Report**  
**Laboratory Services Department**  
**AmerenUE**

CC: M. Bollinger 602

Requestor or Contact: Ron Boutelle  
Department: Callaway  
Date Received: 22-May-06

Report Date: 25-May-06  
Login Record File: 06050403

**General Sample Description:** Callaway Plant NPDES Sample  
**Sample Point:** CAL Stormwtr Runoff Outfall 10  
**Lab Sample No.:** UU09135

**Collection Date:** 02-May-06  
**Collection Time:** 3:50 PM  
**Original Sample ID:** 010

<u>Parameter</u>	<u>Results</u>	<u>Units</u>	<u>MDL</u>	<u>Analysis Code</u>	<u>Analyst</u>
COD	25	mg/L	1	U3013A	ARD

**General Sample Description:** Callaway Plant NPDES Sample  
**Sample Point:** CAL Stormwtr Runoff Outfall 11  
**Lab Sample No.:** UU09136

**Collection Date:** 02-May-06  
**Collection Time:** 4:00 PM  
**Original Sample ID:** 011

<u>Parameter</u>	<u>Results</u>	<u>Units</u>	<u>MDL</u>	<u>Analysis Code</u>	<u>Analyst</u>
COD	47	mg/L	1	U3013A	ARD

**General Sample Description:** Callaway Plant NPDES Sample  
**Sample Point:** CAL Stormwtr Runoff Outfall 12  
**Lab Sample No.:** UU09137

**Collection Date:** 02-May-06  
**Collection Time:** 4:25 PM  
**Original Sample ID:** 012

<u>Parameter</u>	<u>Results</u>	<u>Units</u>	<u>MDL</u>	<u>Analysis Code</u>	<u>Analyst</u>
COD	20	mg/L	1	U3013A	ARD

**General Sample Description:** Callaway Plant NPDES Sample  
**Sample Point:** CAL Stormwtr Runoff Outfall 13  
**Lab Sample No.:** UU09138

**Collection Date:** 02-May-06  
**Collection Time:** 4:15 PM  
**Original Sample ID:** 013

<u>Parameter</u>	<u>Results</u>	<u>Units</u>	<u>MDL</u>	<u>Analysis Code</u>	<u>Analyst</u>
COD	27	mg/L	1	U3013A	ARD

Requestor or Contact: Ron Boutelle  
Department: Callaway  
Date Received: 22-May-06

Report Date: 25-May-06  
Login Record File: 06050403

General Sample Description: Callaway Plant NPDES Sample  
Sample Point: CAL Stormwtr Runoff Outfall 14  
Lab Sample No.: UU09139

Collection Date: 02-May-06  
Collection Time: 3:40 PM  
Original Sample ID: 014

<u>Parameter</u>	<u>Results</u>	<u>Units</u>	<u>MDL</u>	<u>Analysis Code</u>	<u>Analyst</u>
COD	32	mg/L	1	U3013A	ARD

General Sample Description: Callaway Plant NPDES Sample  
Sample Point: CAL Stormwtr Runoff Outfall 15  
Lab Sample No.: UU09140

Collection Date: 02-May-06  
Collection Time: 3:45 PM  
Original Sample ID: 015

<u>Parameter</u>	<u>Results</u>	<u>Units</u>	<u>MDL</u>	<u>Analysis Code</u>	<u>Analyst</u>
COD	30	mg/L	1	U3013A	ARD

Comments:

Approved By:



Carol Zale

Digitally signed by  
Carol Zale  
DN: cn=Carol Zale,  
ou=Environment/E, ou=US  
Date: 2006.05.23  
15:30:28 -0500

AmerenUE  
Callaway Plant

PO Box 620  
Fulton, MO 65251

UOTCR060030

September 14, 2006

Steven S. Weiss  
Mail Code 602

**Callaway NPDES Monthly Report**



Attached is the NPDES Monthly Report for August 2006. Results are noted in comment section of each Outfall.

Please let me know if you have any questions or need additional information.

  
C. A. Riggs

CAR/RSB:mad

Attachments

cc: G. P. Gary (470)  
C170.0005  
R/C Clerk  
A160.0998



**Ameren UE Callaway Plant**

**PERMIT NO. MO-0098001**

**REPORTING PERIOD (MO/YR)** 8/6/2006

**PAGE** 2 **OF** 4

**NPDES MONITORING REPORT**

**OUTFALL 002  
COOLING TOWER BLOWDOWN**

DATE	FLOW (MGD)	TEMP (MAX °F)	TRC (ug/l)
1	9.6	97	<50
2	7.9	98	<50
3	8.8	92	69
4	5.1	91	65
5	4.9	92	65
6	5.0	96	72
7	6.4	97	85
8	5.1	95	<50
9	5.2	99	<50
10	6.3	95	<50
11	5.0	94	70
12	5.8	93	84
13	6.5	95	61
14	7.1	95	<50
15	3.7	91	77
16	5.9	90	60
17	4.8	96	179
18	5.3	97	88
19	6.9	95	57
20	6.5	92	<50
21	7.3	93	62
22	4.2	92	76
23	5.9	93	<50
24	5.3	93	76
25	8.0	93	96
26	5.8	94	81
27	6.1	94	67
28	6.6	91	92
29	5.4	89	<50
30	1.7	87	<50
31	4.3	88	<50

DATE	TSS (mg/l)	TDS (mg/l)
7	54	2084
14	56	2140
21	70	1676
28	54	1880

DATE	Sulfate (mg/l)	O&G (mg/l)
7	1532	3

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	CONT.	N.A.	N.A.
TOTAL SUSPENDED SOLIDS	WKLY.	N.A.	N.A.
TOTAL DISSOLVED SOLIDS	WKLY.	N.A.	N.A.
OIL AND GREASE	QRTLY (1)	15	20
SULFATE	QRTLY (1)	N.A.	N.A.
TEMPERATURE (MAXIMUM)	DAILY	110 ° F	110 ° F
pH	CONT.	6.0 - 9.0	6.0 - 9.0
TOTAL RESIDUAL CHLORINE	DAILY	N.A.	190 ug/L

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
OPERATIONS LAB USING METHODS SPECIFIED UNDER  
10CSR20-7.015.

- (1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF  
FEBRUARY, MAY, AUGUST, NOVEMBER.

COMMENTS: No pH excursions occurred this month.

**Ameren UE Callaway Plant**

PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) 8/6/2006

PAGE 3 OF 4

**NPDES MONITORING REPORT**

**OUTFALL 003  
WATER TREATMENT PLANT  
NO DISCHARGE**

**OUTFALL 007**

DATE	FLOW (MGD)	TSS (mg/l)	BOD (mg/l)	pH
2	.0001	17	4	6.88

**SANITARY WASTE**

PARAMETER	FREQ.	LIMITS (mg/l)	
		MO. AVG.	WKLY. AVG.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	70	110
BOD	QRTLY (1)	45	65
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER

**OUTFALL 009  
INTAKE HEATER BLOWDOWN  
NO DISCHARGE**

**OUTFALLS 010 - 015**

DATE	OUTFALL	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	COD (mg/l)	pH
3	10	.013	32	1	42	8.61
3	11	.062	13	1	27	8.44
3	12	.005	22	3	32	9.47
28	13	.005	38	2	15	7.58
28	14	.023	12	5	17	7.76
	15					

No Discharge.

**STORM WATER RUNOFF PONDS**

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	N.A.	N.A.
COD	QRTLY (1)	N.A.	N.A.
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	>6.0	>6.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER.

**OUTFALL 016**

DATE	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	pH	TRC (ug/l)
9	3.5	12	1.0	8.46	<50

**COOLING TOWER BYPASS**

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	30	100
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0
TRC	QRTLY (1)	N.A.	190

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER.

**OUTFALL 017**

ULTIMATE HEAT SINK  
No Discharge

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
OPERATIONS LABORATORY USING METHODS SPECIFIED  
UNDER 10CSR 20-7.015

COMMENTS: After add TRC results for outfall 016 on  
Attachment 1.

Ameren UE Callaway Plant

PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) 8/6/2006

PAGE 4 OF 4

NPDES MONITORING REPORT

"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."

  
Preparer

  
Reviewer

  
Approved  
Plant Manager



# ATTACHMENT 1

8/6/2006

Cooling tower bypass after addition total residual chlorine (TRC) results (ug/ml).

<u>Date</u>	<u>TRC (ug/ml)</u>
17	179
22	66
23	<50
24	<50
28	115
29	<50
30	178

AmerenUE  
Callaway Plant

PO Box 620  
Fulton, MO 65251

**UOTCR060037**

December 18, 2006

Steven S. Weiss  
Mail Code 602

**Callaway NPDES Monthly Report**



Attached is the NPDES Monthly Report for November 2006. Results are noted in comment section of each Outfall.

Please let me know if you have any questions or need additional information.

A handwritten signature in black ink, appearing to read "Charlie Riggs".

C. A. Riggs

CAR/RSB:sl

**Attachments**

cc: G. P. Gary (470)  
C170.0005  
R/C Clerk  
A160.0998

6  
sl

**PERMIT NO. MO-0098001**  
**REPORTING PERIOD (MO/YR) 11-06**  
**PAGE 1 OF 4**

**OUTFALL 001  
RADWASTE SYSTEM**

[illegible]

<i>PARAMETER</i>	<i>FREQ.</i>	<i>LIMITS</i>	
		<i>MONTHLY AVERAGE</i>	<i>DAILY MAX.</i>
FLOW (MGD)	EB	N.A.	N.A.
pH (STD)	EB	6.0-9.0	6.0-9.0
TSS (mg/l)	EB	30	45
Boron (mg/l)	EB	N.A.	N.A.
TRC (ug/l)	Monthly	N.A.	190
BOD (mg/l)	Monthly	N.A.	N.A.
O&G (mg/l)	Monthly	15	20

ALL SAMPLES ANALYZED BY Ameren UE Callaway  
Plant OPERATIONS LABORATORY USING  
METHODS SPECIFIED UNDER 10CSR 20-7.015

1 = WASTE MONITOR TANK A  
2 = WASTE MONITOR TANK B  
3 = STEAM GENERATOR BLOWDOWN  
4 = SEC. LIQ. WASTE MONITOR TANK A  
5 = SEC. LIQ. WASTE MONITOR TANK B  
6 = LIQ. RADWASTE DISCHARGE TANK A  
7 = LIQ. RADWASTE DISCHARGE TANK B

**EB = EACH BATCH**

Date	BOD (mg/l)	TRC (ug/l)	O&G (mg/l)
8	19	10	5

COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Ameren UE Callaway Plant**

**PERMIT NO. MO-0098001**  
**REPORTING PERIOD (MO/YR) 11-06**  
**PAGE 2 OF 4**

**NPDES MONITORING REPORT**

**OUTFALL 002**  
**COOLING TOWER BLOWDOWN**

DATE	FLOW (MGD)	TEMP (MAX °F)	TRC (ug/l)
1	6.8	70	50 (2)
2	6.2	70	64
3	6.2	74	82
4	7.2	74	50 (2)
5	7.1	76	50 (2)
6	4.2	75	50 (2)
7	4.4	76	50 (2)
8	5.3	84	50 (2)
9	2.8	84	50 (2)
10	6.0	85	80
11	7.3	68	105
12	6.8	74	54
13	5.0	74	50 (2)
14	6.0	75	50 (2)
15	6.7	75	50 (2)
16	7.0	70	50 (2)
17	6.6	74	50 (2)
18	7.9	69	50 (2)
19	5.7	69	50 (2)
20	6.1	69	50 (2)
21	1.5	76	85
22	6.0	79	86
23	4.5	81	59
24	4.4	83	74
25	5.2	84	76
26	6.3	83	50 (2)
27	2.8	78	50 (2)
28	5.9	81	50 (2)
29	5.8	82	50 (2)
30	5.0	61	50 (2)

DATE	TSS (mg/l)	TDS (mg/l)
6	93	1582
13	68	1732
20	46	1708
27	45	2188

DATE	Sulfate (mg/l)	O&G (mg/l)
6	892	3

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	CONT.	N.A.	N.A.
TOTAL SUSPENDED SOLIDS	WKLY.	N.A.	N.A.
TOTAL DISSOLVED SOLIDS	WKLY.	N.A.	N.A.
OIL AND GREASE	QRTLY (1)	15	20
SULFATE	QRTLY (1)	N.A.	N.A.
TEMPERATURE (MAXIMUM)	DAILY	110 ° F	110 ° F
pH	CONT.	6.0 - 9.0	6.0 - 9.0
TOTAL RESIDUAL CHLORINE	DAILY	N.A.	190 ug/L

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
 OPERATIONS LAB USING METHODS SPECIFIED UNDER  
 10CSR20-7.015.

- (1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF  
 FEBRUARY, MAY, AUGUST, NOVEMBER.

COMMENTS: No pH excursions occurred this month

- (2) <LOQ

**Ameren UE Callaway Plant**

**PERMIT NO. MO-0098001**  
**REPORTING PERIOD (MO/YR) 11-06**  
**PAGE 3 OF 4**

**NPDES MONITORING REPORT**

**OUTFALL 003**  
**WATER TREATMENT PLANT**  
**NO DISCHARGE**

**OUTFALL 007**

DATE	FLOW (MGD)	TSS (mg/l)	BOD (mg/l)	pH
2	.002	4	4	7.11

**SANITARY WASTE**

PARAMETER	FREQ.	LIMITS (mg/l)	
		MO. AVG.	WKLY. AVG.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	70	110
BOD	QRTLY (1)	45	65
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF  
 FEBRUARY, MAY, AUGUST, NOVEMBER

**OUTFALL 002**  
**INTAKE HEATER BLOWDOWN**  
**NO DISCHARGE**

**OUTFALLS 010 - 015**

DATE	OUTFALL	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	COD (mg/l)	pH
7	10	.033	22	1	-	7.99
7	11	.153	68	2	-	8.12
7	12	.012	32	5	-	8.39
27	10	-	-	-	27	-
27	11	-	-	-	17	-
27	12	-	-	-	15	-

\*See comments

**STORM WATER RUNOFF PONDS**

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	N.A.	N.A.
COD	QRTLY (1)	N.A.	N.A.
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	>6.0	>6.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS  
 OF FEBRUARY, MAY, AUGUST, NOVEMBER.

**OUTFALL 016**

DATE	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	pH	TRC (ug/l)
7	1.44	19	3	8.26	<50

**COOLING TOWER BYPASS**

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	30	100
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0
TRC	QRTLY (1)	N.A.	190

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF  
 FEBRUARY, MAY, AUGUST, NOVEMBER.

**OUTFALL 017**

**ULTIMATE HEAT SINK**  
 No Discharge

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
 OPERATIONS LABORATORY USING METHODS SPECIFIED  
 UNDER 10CSR 20-7.015

COMMENTS: Outfall 016 TRC results on Attachment 1

\*No discharge noted on outfalls 13, 14, and 15.

Ameren UE Callaway Plant

PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) 11-06

PAGE 4 OF 4

NPDES MONITORING REPORT

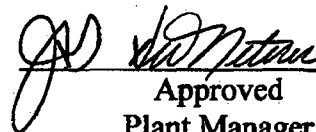
"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage 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."



Preparer



Reviewer



Approved  
Plant Manager

# ATTACHMENT 1

November 2006

Cooling tower bypass after addition total residual chlorine (TRC) results (ug/ml).

<u>Date</u>	<u>TRC (ug/ml)</u>
10	164
28	<50

AmerenUE  
Callaway Plant

PO Box 620  
Fulton, MO 65251

**UOTCR 07-0016**

March 14, 2007

Steven S. Weiss  
Mail Code 602



**Callaway NPDES Monthly Report**

Attached is the NPDES Monthly Report for February 2007. Results are noted in comment section of each Outfall.

Please let me know if you have any questions or need additional information.

  
C. A. Riggs

CAR/RSB:sll

Attachments

cc: G. P. Gary (470)  
C170.0005  
R/C Clerk  
A160.0998

(5) sll



COMMENTS: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Ameren UE Callaway Plant**

**PERMIT NO. MO-0098001**

**REPORTING PERIOD (MO/YR) 02/07**

**PAGE 2 OF 4**

**NPDES MONITORING REPORT**

**OUTFALL 002  
COOLING TOWER BLOWDOWN**

DATE	FLOW (MGD)	TEMP (MAX °F)	TRC (ug/l)
1	8.2	63	<50
2	3.6	61	<50
3	6.2	58	<50
4	4.2	63	84
5	4.5	58	<50
6	4.4	72	<50
7	4.4	59	<50
8	4.6	60	<50
9	4.4	62	<50
10	5.0	62	88
11	4.6	65	54
12	4.5	65	<50
13	4.5	62	<50
14	5.0	56	<50
15	4.5	57	<50
16	4.0	66	69
17	5.5	65	<50
18	4.3	67	80
19	4.7	76	53
20	5.1	74	<50
21	5.0	77	68
22	5.8	72	<50
23	5.2	76	<50
24	5.5	78	<50
25	4.3	72	79
26	7.9	68	<50
27	8.7	71	<50
28	7.4	81	<50

DATE	TSS (mg/l)	TDS (mg/l)
5	50	1824
12	64	2076
19	74	2016
26	63	1352

DATE	Sulfate (mg/l)	O&G (mg/l)
5	988	2

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	CONT.	N.A.	N.A.
TOTAL SUSPENDED SOLIDS	WKLY.	N.A.	N.A.
TOTAL DISSOLVED SOLIDS	WKLY.	N.A.	N.A.
OIL AND GREASE	QRTLY (1)	15	20
SULFATE	QRTLY (1)	N.A.	N.A.
TEMPERATURE (MAXIMUM)	DAILY	110 ° F	110 ° F
pH	CONT.	6.0 - 9.0	6.0 - 9.0
TOTAL RESIDUAL CHLORINE	DAILY	N.A.	190 ug/L

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
OPERATIONS LAB USING METHODS SPECIFIED UNDER  
10CSR20-7.015.

- (1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF  
FEBRUARY, MAY, AUGUST, NOVEMBER.

COMMENTS: No pH excursions occurred this month.

**Ameren UE Callaway Plant**

**PERMIT NO. MO-0098001**

**REPORTING PERIOD (MO/YR) 02/07**

**PAGE 3 OF 4**

**NPDES MONITORING REPORT**

**OUTFALL 003  
WATER TREATMENT PLANT  
NO DISCHARGE**

**OUTFALL 007**

DATE	FLOW (MGD)	TSS (mg/l)	BOD (mg/l)	pH
8	.003	2	0	8.56

**SANITARY WASTE**

PARAMETER	FREQ.	LIMITS (mg/l)	
		MO. AVG.	WKLY. AVG.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	70	110
BOD	QRTLY (1)	45	65
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER

**OUTFALL 009  
INTAKE HEATER BLOWDOWN  
NO DISCHARGE**

**OUTFALLS 010 - 015**

DATE	OUTFALL	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	COD (mg/l)	pH
6	11	.154	23	1	20	7.72
6	12	.012	4	2	22	9.01
28	13	.014	37	3	27	9.08
28	14	.055	119	3	22	8.32
6	15	.022	9	1	20	8.20

**STORM WATER RUNOFF PONDS**

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	N.A.	N.A.
COD	QRTLY (1)	N.A.	N.A.
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	>6.0	>6.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER.

**OUTFALL 016**

DATE	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	pH	TRC (ug/l)
5	3.7	15	7	8.21	<50

**COOLING TOWER BYPASS**

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	30	100
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0
TRC	QRTLY (1)	N.A.	190

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER.

**OUTFALL 017**

**ULTIMATE HEAT SINK**  
No Discharge

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
OPERATIONS LABORATORY USING METHODS SPECIFIED  
UNDER 10CSR 20-7.015

COMMENTS: \_\_\_\_\_

Ameren UE Callaway Plant

PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) 02/07

PAGE 4 OF 4

NPDES MONITORING REPORT

"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."

  
Preparer

  
Reviewer

  
Approved  
Plant Manager

**UOTCR 07-0032**

June 12, 2007

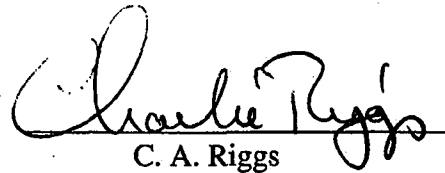
Steven S. Weiss  
Mail Code 602

**Callaway NPDES Monthly Report**

Attached is the NPDES Monthly Report for May, 2007. Results are noted in comment section of each Outfall.

Outfall 015 COD was missed on 5-07-07, and the Outfall did not discharge the rest of the month.

Please let me know if you have any questions or need additional information.

  
C. A. Riggs

CAR/RSB:sl

Attachments

cc: G. P. Gary (470)  
C170.0005  
R/C Clerk  
A160.0998

(17)

PERMIT NO. MO-0098001  
REPORTING PERIOD (MO/YR) 05/2007  
PAGE 1 OF 5

**OUTFALL 001  
RADWASTE SYSTEM**

[illegible]

<b>PARAMETER</b>	<b>FREQ.</b>	<b>LIMITS</b>	
		<b>MONTHLY AVERAGE</b>	<b>DAILY MAX.</b>
<b>FLOW (MGD)</b>	EB	N.A.	N.A.
<b>pH (STD)</b>	EB	6.0-9.0	6.0-9.0
<b>TSS (mg/l)</b>	EB	30	45
<b>Boron (mg/l)</b>	EB	N.A.	N.A.
<b>TRC (ug/l)</b>	Monthly	N.A.	190
<b>BOD (mg/l)</b>	Monthly	N.A.	N.A.
<b>O&amp;G (mg/l)</b>	Monthly	15	20

ALL SAMPLES ANALYZED BY Ameren UE Callaway  
Plant OPERATIONS LABORATORY USING  
METHODS SPECIFIED UNDER 10CSR 20-7.015

1 = WASTE MONITOR TANK A  
2 = WASTE MONITOR TANK B  
3 = STEAM GENERATOR BLOWDOWN  
4 = SEC. LIQ. WASTE MONITOR TANK A  
5 = SEC. LIQ. WASTE MONITOR TANK B  
6 = LIQ. RADWASTE DISCHARGE TANK A  
7 = LIQ. RADWASTE DISCHARGE TANK B  
EB = EACH BATCH

Date	BOD (mg/l)	TRC (ug/l)	O&G (mg/l)
2	7	10	4

**COMMENTS:**

(\*1) Monthly average for TSS was 15.8 mg/L.

**Ameren UE Callaway Plant**

**PERMIT NO. MO-0098001**

**REPORTING PERIOD (MO/YR)** 05/2007

**PAGE** 2 **OF** 5

**NPDES MONITORING REPORT**

**OUTFALL 002  
COOLING TOWER BLOWDOWN**

DATE	FLOW (MGD)	TEMP (MAX °F)	TRC (ug/l)
1	(*2) 0	68	<50
2	4.3	63	<50
3	(*2) 0	65	<50
4	(*2) 0	71	<50
5	(*2) 0	69	<50
6	(*2) 0	71	<50
7	(*2) 0	66	<50
8	1.0	72	<50
9	(*2) 0	72	<50
10	(*2) 0	78	<50
11	(*2) 0	81	64
12	0.5	85	<50
13	(*2) 0	85	<50
14	(*2) 0	89	<50
15	5.2	88	<50
16	1.6	80	<50
17	1.8	78	<50
18	4.0	80	65
19	3.5	83	<50
20	2.9	84	<50
21	4.1	85	<50
22	1.7	86	79
23	5.1	87	<50
24	5.0	87	<50
25	4.5	83	53
26	5.4	86	73
27	4.3	87	98
28	4.6	87	<50
29	4.1	88	<50
30	7.2	87	57
31	3.7	87	<50

DATE	TSS (mg/l)	TDS (mg/l)
2	10	396
7 (*2)	15	320
14 (*2)	53	1458
21	115	1390
28	34	2188

DATE	Sulfate (mg/l)	O&G (mg/l)
14 (*2)	776	0.1

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	CONT.	N.A.	N.A.
TOTAL SUSPENDED SOLIDS	WKLY.	N.A.	N.A.
TOTAL DISSOLVED SOLIDS	WKLY.	N.A.	N.A.
OIL AND GREASE	QRTLY (1)	15	20
SULFATE	QRTLY (1)	N.A.	N.A.
TEMPERATURE (MAXIMUM)	DAILY	110 ° F	110 ° F
pH	CONT.	6.0 - 9.0	6.0 - 9.0
TOTAL RESIDUAL CHLORINE	DAILY	N.A.	190 ug/L

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
OPERATIONS LAB USING METHODS SPECIFIED UNDER  
10CSR20-7.015.

- (1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF  
FEBRUARY, MAY, AUGUST, NOVEMBER.

COMMENTS: No pH excursions occurred this month  
(\*2) All samples taken by dip sample from C Circ Water Pump Bay due to  
no discharge.

## Ameren UE Callaway Plant

PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) 05/2007

PAGE 3 OF 5

## NPDES MONITORING REPORT

OUTFALL 003  
WATER TREATMENT PLANT  
NO DISCHARGE

## OUTFALL 007

DATE	FLOW (MGD)	TSS (mg/l)	BOD (mg/l)	pH
19	.0001	12	—	8.47
31	.0001	—	5.1	—

## SANITARY WASTE

PARAMETER	FREQ.	LIMITS (mg/l)	
		MO. AVG.	WKLY. AVG.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	70	110
BOD	QRTLY (1)	45	65
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF  
FEBRUARY, MAY, AUGUST, NOVEMBEROUTFALL 009  
INTAKE HEATER BLOWDOWN  
NO DISCHARGE

## OUTFALLS 010 - 015

DATE	OUTFALL	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	COD (mg/l)	pH
7	10	.042	16	0	(*3)	8.14
7	11	.192	10	1	(*3)	7.64
7	12	.015	18	3	(*3)	9.00
7	13		No	Discharge		
7	14	.069	98	1	(*3)	7.78
7	15	.028	26	1	(*4)	9.00

## STORM WATER RUNOFF PONDS

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	N.A.	N.A.
COD	QRTLY (1)	N.A.	N.A.
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	>6.0	>6.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS  
OF FEBRUARY, MAY, AUGUST, NOVEMBER.

## OUTFALL 016

DATE	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	pH	TRC (ug/l)
17	2.27	8	7	7.7	<50

## COOLING TOWER BYPASS

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	30	100
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0
TRC	QRTLY (1)	N.A.	190

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF  
FEBRUARY, MAY, AUGUST, NOVEMBER.

## OUTFALL 017

ULTIMATE HEAT SINK  
No DischargeALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
OPERATIONS LABORATORY USING METHODS SPECIFIED  
UNDER 10CSR 20-7.015COMMENTS: See Attachment 1 for additional outfall -016 TRC  
analyses.

(\*3) see page 4 of 5 for COD values.

(\*4) Outfall 15 COD was missed on 5-07-07 and outfall did not discharge  
the rest of the month.



## Ameren UE Callaway Plant

PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) 05/2007

PAGE 4 OF 5

## NPDES MONITORING REPORT

**OUTFALL 003**  
**WATER TREATMENT PLANT**  
**NO DISCHARGE**

**OUTFALL 007**

DATE	FLOW (MGD)	TSS (mg/l)	BOD (mg/l)	pH
	Not	Applicable		

**SANITARY WASTE**

PARAMETER	FREQ.	LIMITS (mg/l)	
		MO. AVG.	WKLY. AVG.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	70	110
BOD	QRTLY (1)	45	65
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF  
 FEBRUARY, MAY, AUGUST, NOVEMBER

**OUTFALL 009**  
**INTAKE HEATER BLOWDOWN**  
**NO DISCHARGE**

**OUTFALLS 010 - 015**

DATE	OUTFALL	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	CO D (mg/l)	pH
19	10	.042	---	---	30	---
19	11	.192	---	---	39	---
19	12	.015	---	---	42	---
31	14	.069	---	---	25	---

**STORM WATER RUNOFF PONDS**

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	N.A.	N.A.
COD	QRTLY (1)	N.A.	N.A.
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	>6.0	>6.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS  
 OF FEBRUARY, MAY, AUGUST, NOVEMBER.

**OUTFALL 016**

DATE	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	pH	TRC (ug/l)

**COOLING TOWER BYPASS**

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	30	100
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0
TRC	QRTLY (1)	N.A.	190

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF  
 FEBRUARY, MAY, AUGUST, NOVEMBER.

**OUTFALL 017**

ULTIMATE HEAT SINK  
 No Discharge

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
 OPERATIONS LABORATORY USING METHODS SPECIFIED  
 UNDER 10CSR 20-7.015

COMMENTS:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Ameren UE Callaway Plant

PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) 05/2007

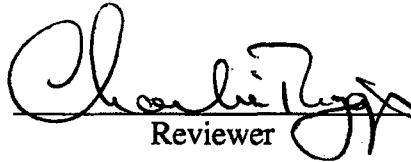
PAGE 5 OF 5

NPDES MONITORING REPORT

"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."



Preparer



Reviewer



Approved  
Plant Manager

**ATTACHMENT 1**

**DATE:** 05/2007

**Cooling tower bypass after addition total residual chlorine (TRC) results (ug/ml).**

<u>Date</u>	<u>TRC (ug/ml)</u>
8	<50
29	<50
31	<50

7004289000361167040

Ameren Services  
Environmental, Safety & Health  
314.554.3480 (Telephone)  
314.554.4182 (Facsimile)  
ssweiss@ameren.com

One Ameren Plaza  
1901 Chouteau Avenue  
PO Box 66149  
St. Louis, MO 63166-6149  
314.621.3222

October 22, 2007

Department of Natural Resources  
Northeast Regional Office  
1709 Prospect Drive  
Macon, Missouri 63552-2602

Re: **Ameren UE Callaway Power Plant**  
**NPDES Permit No. MO-0098001**  
**Third Quarter, 2007 NPDES Discharge Monitoring Report (DMR)**



CERTIFIED MAIL

Dear Sir or Madam:

In accordance with requirements of the Union Electric Company, d/b/a Ameren UE Callaway Power Plant, NPDES Permit MO-0098001, please find enclosed the **Third Quarter 2007 (July, August, and September) DMR**.

Please call me at 314-554-3480 if you have any questions concerning the enclosed reports.

Sincerely,

A handwritten signature in black ink, appearing to read "Steven S. Weiss", is written over a horizontal line.

Steven S. Weiss  
Environmental Scientist, NPDES DMR Coordinator  
Environmental, Safety & Health  
Ameren Services as Affiliated Agent for Union Electric Company, d/b/a AmerenUE

Attachment

bcc: R.S. Boutelle (CA-460)  
JCP / SSW  
WQ3121

PERMIT NO. MO-0098001  
REPORTING PERIOD (MO/YR) 07/2007  
PAGE 1 OF 4

**OUTFALL 001  
RADWASTE SYSTEM**

[illegible]

PARAMETER	FREQ.	LIMITS	
		MONTHLY AVERAGE	DAILY MAX.
FLOW (MGD)	EB	N.A.	N.A.
pH (STD)	EB	6.0-9.0	6.0-9.0
TSS (mg/l)	EB	30	45
Boron (mg/l)	EB	N.A.	N.A.
TRC (ug/l)	Monthly	N.A.	190
BOD (mg/l)	Monthly	N.A.	N.A.
O&G (mg/l)	Monthly	15	20

ALL SAMPLES ANALYZED BY Ameron UE Callaway  
Plant OPERATIONS LABORATORY USING  
METHODS SPECIFIED UNDER 10CSR 20-7.015

1 = WASTE MONITOR TANK A  
2 = WASTE MONITOR TANK B  
3 = STEAM GENERATOR BLOWDOWN  
4 = SEC. LIQ. WASTE MONITOR TANK A  
5 = SEC. LIQ. WASTE MONITOR TANK B  
6 = LIQ. RADWASTE DISCHARGE TANK A  
7 = LIQ. RADWASTE DISCHARGE TANK B  
EB = EACH BATCH

Date	BOD (mg/l)	TRC (ug/l)	O&G (mg/l)
3	-----	<10	7
20	10.5	-----	-----

**COMMENTS:**

**Ameren UE Callaway Plant**

**PERMIT NO. MO-0098001**

**REPORTING PERIOD (MO/YR) 07/2007**

**PAGE 2 OF 4**

**NPDES MONITORING REPORT**

**OUTFALL 002  
COOLING TOWER BLOWDOWN**

DATE	FLOW (MGD)	TEMP (MAX °F)	TRC (ug/l)
1	5.3	86	<50
2	4.9	87	<50
3	6.4	90	<50
4	4.4	91	<50
5	6.5	91	113
6	4.0	89	<50
7	2.7	91	<50
8	4.0	92	<50
9	4.0	92	<50
10	3.9	91	<50
11	4.0	87	<50
12	4.2	88	<50
13	4.4	88	<50
14	5.9	90	<50
15	5.5	90	<50
16	5.3	92	<50
17	5.1	91	83
18	7.8	93	<50
19	6.0	93	178
20	3.4	89	116
21	6.0	87	127
22	4.5	87	<50
23	4.5	88	<50
24	4.9	90	<50
25	1.9	91	111
26	3.8	92	87
27	4.8	93	142
28	6.3	91	124
29	7.3	91	78
30	7.4	90	93
31	5.8	90	<50

DATE	TSS (mg/l)	TDS (mg/l)
2	49	2002
9	46	2224
16	52	2128
23	38	1624
30	46	2032

DATE	Sulfate (mg/l)	O&G (mg/l)
No	Sample	Required

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	CONT.	N.A.	N.A.
TOTAL SUSPENDED SOLIDS	WKLY.	N.A.	N.A.
TOTAL DISSOLVED SOLIDS	WKLY.	N.A.	N.A.
OIL AND GREASE	QRTLY (1)	15	20
SULFATE	QRTLY (1)	N.A.	N.A.
TEMPERATURE (MAXIMUM)	DAILY	110 ° F	110 ° F
pH	CONT.	6.0 - 9.0	6.0 - 9.0
TOTAL RESIDUAL CHLORINE	DAILY	N.A.	190 ug/L

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
OPERATIONS LAB USING METHODS SPECIFIED UNDER  
10CSR20-7.015.

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF  
FEBRUARY, MAY, AUGUST, NOVEMBER.

COMMENTS: No pH excursions occurred this month.

**Ameren UE Callaway Plant**

PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) 07/2007

PAGE 3 OF 4

**NPDES MONITORING REPORT**

**OUTFALL 003  
WATER TREATMENT PLANT  
NO DISCHARGE**

**OUTFALL 007**

DATE	FLOW (MGD)	TSS (mg/l)	BOD (mg/l)	pH
	No	Samples	Required	

**SANITARY WASTE**

PARAMETER	FREQ.	LIMITS (mg/l)	
		MO. AVG.	WKLY. AVG.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	70	110
BOD	QRTLY (1)	45	65
pH	QRTLY (1)	6.0-9.0	6.0-9.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER

**OUTFALL 009  
INTAKE HEATER BLOWDOWN  
NO DISCHARGE**

**OUTFALLS 010 - 015**

DATE	OUTFALL	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	CO D (mg/l)	pH
		No	Samples	Required		

**STORM WATER RUNOFF PONDS**

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	N.A.	N.A.
COD	QRTLY (1)	N.A.	N.A.
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	>6.0	>6.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER.

**OUTFALL 016**

DATE	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	pH	TRC (ug/l)
	No	Sample	Required		

**COOLING TOWER BYPASS**

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	30	100
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	6.0-9.0	6.0-9.0
TRC	QRTLY (1)	N.A.	190

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER.

**OUTFALL 017**

ULTIMATE HEAT SINK  
No Discharge

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
OPERATIONS LABORATORY USING METHODS SPECIFIED  
UNDER 10CSR 20-7.015

COMMENTS: See Attachment I for Outfall 16 TRC.

Ameren UE Callaway Plant

PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) 07/2007

PAGE 4 OF 4

NPDES MONITORING REPORT

"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."

Ronald S. Loutello  
Preparer

J. Amiel  
Reviewer

[Signature]  
Approved  
Plant Manager



**ATTACHMENT 1**

**DATE:** 072007

**Cooling tower bypass after addition total residual chlorine (TRC) results (ug/ml).**

<u>Date</u>	<u>TRC (ug/ml)</u>
3	<50
4	<50
6	<50
19	<50
24	119
25	<50
26	<50
27	<50
31	<50

## Ameren UE Callaway Plant

PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) 08/2007

PAGE 1 OF 4

# NPDES MONITORING REPORT

**OUTFALL 001  
RADWASTE SYSTEM**

[illegible]

PARAMETER	FREQ.	LIMITS	
		MONTHLY AVERAGE	DAILY MAX.
FLOW (MGD)	EB	N.A.	N.A.
pH (STD)	EB	6.0-9.0	6.0-9.0
TSS (mg/l)	EB	30	45
Boron (mg/l)	EB	N.A.	N.A.
TRC (ug/l)	Monthly	N.A.	190
BOD (mg/l)	Monthly	N.A.	N.A.
O&G (mg/l)	Monthly	15	20

ALL SAMPLES ANALYZED BY Ameren UE Callaway

## Plant OPERATIONS LABORATORY USING

**METHODS SPECIFIED UNDER 10CSR 20-7.015**

## SOURCES

- 1 = WASTE MONITOR TANK A  
2 = WASTE MONITOR TANK B  
3 = STEAM GENERATOR BLOWDOWN  
4 = SEC. LIQ. WASTE MONITOR TANK A  
5 = SEC. LIQ. WASTE MONITOR TANK B  
6 = LIQ. RADWASTE DISCHARGE TANK A  
7 = LIQ. RADWASTE DISCHARGE TANK B  
EB = EACH BATCH

Date	BOD (mg/l)	TRC (ug/l)	O&G (mg/l)
3	24	20	11

COMMENTS:

**Ameren UE Callaway Plant**

PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) 08/2007

PAGE 2 OF 4

**NPDES MONITORING REPORT**

**OUTFALL 002  
COOLING TOWER BLOWDOWN**

DATE	FLOW (MGD)	TEMP (MAX °F)	TRC (ug/l)
1	4.0	91	<50
2	4.3	92	<50
3	4.3	93	<50
4	5.6	93	83
5	5.7	94	90
6	6.0	94	168
7	7.7	95	60
8	6.3	95	<50
9	7.5	94	74
10	3.9	93	<50
11	3.8	95	<50
12	3.7	94	55
13	3.5	92	<50
14	3.9	95	52
15	4.1	95	<50
16	5.4	95	<50
17	10.4	93	80
18	5.4	94	<50
19	5.4	94	<50
20	4.0	93	<50
21	4.7	94	<50
22	4.3	95	<50
23	4.5	94	<50
24	4.5	91	<50
25	4.1	91	<50
26	5.9	90	<50
27	5.7	93	<50
28	4.7	93	<50
29	5.0	95	<50
30	6.1	93	69
31	5.8	89	<50

DATE	TSS (mg/l)	TDS (mg/l)
6	38	1900
13	52	2822
20	45	1706
27	98 (2)	1992

DATE	Sulfate (mg/l)	O&G (mg/l)
6	1200	0

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	CONT.	N.A.	N.A.
TOTAL SUSPENDED SOLIDS	WKLY.	N.A.	N.A.
TOTAL DISSOLVED SOLIDS	WKLY.	N.A.	N.A.
OIL AND GREASE	QRTLY (1)	15	20
SULFATE	QRTLY (1)	N.A.	N.A.
TEMPERATURE (MAXIMUM)	DAILY	110 ° F	110 ° F
pH	CONT.	6.0 - 9.0	6.0 - 9.0
TOTAL RESIDUAL CHLORINE	DAILY	N.A.	190 ug/L

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
OPERATIONS LAB USING METHODS SPECIFIED UNDER  
10CSR20-7.015.

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF  
FEBRUARY, MAY, AUGUST, NOVEMBER.

COMMENTS: No pH excursions occurred this month.

(2) Verified by back-up sample.

**Ameren UE Callaway Plant**

PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) 08/2007

PAGE 3 OF 4

**NPDES MONITORING REPORT**

**OUTFALL 003  
WATER TREATMENT PLANT  
NO DISCHARGE**

**OUTFALL 007**

DATE	FLOW (MGD)	TSS (mg/l)	BOD (mg/l)	pH
	No	Discharge		

**SANITARY WASTE**

PARAMETER	FREQ.	LIMITS (mg/l)	
		MO. AVG.	WKLY. AVG.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	70	110
BOD	QRTLY (1)	45	65
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER

**OUTFALL 009  
INTAKE HEATER BLOWDOWN  
NO DISCHARGE**

**OUTFALLS 010 - 015**

DATE	OUTFALL	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	CO D (mg/l)	pH
20	10	.017	44	3	17	7.96
20	11	.079	99	5	30	8.14
20	12	.006	11	4	25	8.90
	13	No	Discharge			
	14	No	Discharge			
	15	No	Discharge			

**STORM WATER RUNOFF PONDS**

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	N.A.	N.A.
COD	QRTLY (1)	N.A.	N.A.
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	>6.0	>6.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER.

**OUTFALL 016\***

DATE	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	pH	TRC (ug/l)
10	4.34	9	1	8.5	<50

**COOLING TOWER BYPASS**

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	30	100
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0
TRC	QRTLY (1)	N.A.	190

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER.

**OUTFALL 017**

ULTIMATE HEAT SINK  
No Discharge

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
OPERATIONS LABORATORY USING METHODS SPECIFIED  
UNDER IOCSR 20-7.015

COMMENTS: \*See TRC results for Outfall 16 on Attachment I.

Ameren UE Callaway Plant

PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) 08/2007

PAGE 4 OF 4

NPDES MONITORING REPORT

"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."



Preparer



Reviewer



Approved

Plant Manager

Director

SHH

9-26-07

**ATTACHMENT 1**

**DATE:** 08/2007

**Cooling tower bypass after addition total residual chlorine (TRC) results (ug/ml).**

<u>Date</u>	<u>TRC (ug/ml)</u>
1	<50
2	174
7	<50
8	78
9	<50
15	<50
16	<50
21	<50
22	<50
23	<50
28	<50
29	<50
30	75

# NPDES MONITORING REPORT

**OUTFALL 001  
RADWASTE SYSTEM**

[illegible]

PARAMETER	FREQ.	LIMITS	
		MONTHLY AVERAGE	DAILY MAX.
FLOW (MGD)	EB	N.A.	N.A.
pH (STD)	EB	6.0-9.0	6.0-9.0
TSS (mg/l)	EB	30	45
Boron (mg/l)	EB	N.A.	N.A.
TRC (ug/l)	Monthly	N.A.	190
BOD (mg/l)	Monthly	N.A.	N.A.
O&G (mg/l)	Monthly	15	20

ALL SAMPLES ANALYZED BY Ameren UE Callaway  
Plant OPERATIONS LABORATORY USING  
METHODS SPECIFIED UNDER 10CSR 20-7.015

## SOURCES

- 1 = WASTE MONITOR TANK A  
2 = WASTE MONITOR TANK B  
3 = STEAM GENERATOR BLOWDOWN  
4 = SEC. LIQ. WASTE MONITOR TANK A  
5 = SEC. LIQ. WASTE MONITOR TANK B  
6 = LIQ. RADWASTE DISCHARGE TANK A  
7 = LIQ. RADWASTE DISCHARGE TANK B  
EB = EACH BATCH

Date	BOD (mg/l)	TRC (ug/l)	O&G (mg/l)
12	0	20	3

**COMMENTS:**

**Ameren UE Callaway Plant**

**PERMIT NO. MO-0098001**

**REPORTING PERIOD (MO/YR) 09/2007**

**PAGE 2 OF 4**

**NPDES MONITORING REPORT**

**OUTFALL 002  
COOLING TOWER BLOWDOWN**

DATE	FLOW (MGD)	TEMP (MAX °F)	TRC (%0)
1	6.1	89	64
2	6.4	91	<50
3	6.5	93	<50
4	6.4	94	<50
5	6.1	93	<50
6	5.4	93	64
7	5.3	93	<50
8	5.5	91	97
9	5.5	91	<50
10	6.0	91	<50
11	5.3	84	<50
12	6.0	83	<50
13	2.8	88	127
14	5.5	82	122
15	4.6	78	172
16	4.2	83	<50
17	4.9	90	93
18	4.0	92	<50
19	4.8	92	<50
20	4.6	92	<50
21	4.6	90	71
22	4.7	90	77
23	4.6	93	99
24	4.6	93	107
25	4.6	91	99
26	4.7	87	<50
27	4.8	85	79
28	3.7	85	104
29	4.6	86	71
30	4.2	91	<50

DATE	TSS (mg/l)	TDS (mg/l)
3	50	2520
10	57	1500
17	71	2002
24	55	2153

DATE	Sulfate (mg/l)	OAG (mg/l)
No	Sample	Required

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	CONT.	N.A.	N.A.
TOTAL SUSPENDED SOLIDS	WKLY.	N.A.	N.A.
TOTAL DISSOLVED SOLIDS	WKLY.	N.A.	N.A.
OIL AND GREASE	QRTLY (1)	15	20
SULFATE	QRTLY (1)	N.A.	N.A.
TEMPERATURE (MAXIMUM)	DAILY	110 ° F	110 ° F
pH	CONT.	6.0 - 9.0	6.0 - 9.0
TOTAL RESIDUAL CHLORINE	DAILY	N.A.	190 ug/L

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
OPERATIONS LAB USING METHODS SPECIFIED UNDER  
10CSR20-7.015.

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF  
FEBRUARY, MAY, AUGUST, NOVEMBER.

COMMENTS: No pH excursions occurred this month.



# NPDES MONITORING REPORT

## OUTFALL 003 WATER TREATMENT PLANT NO DISCHARGE

### OUTFALL 007

DATE	FLOW (MGD)	TSS (mg/l)	BOD (mg/l)	pH
	No	Sample	Required	

### SANITARY WASTE

PARAMETER	FREQ.	LIMITS (mg/l)	
		MO. AVG.	WEEKLY AVG.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	70	110
BOD	QRTLY (1)	45	65
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER

## OUTFALL 009 INTAKE HEATER BLOWDOWN NO DISCHARGE

### OUTFALLS 010 - 015

DATE	OUTFALL	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	CO D (mg/l)	pH
	No	Sample	Required			

### STORM WATER RUNOFF PONDS

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	N.A.	N.A.
COD	QRTLY (1)	N.A.	N.A.
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	>6.0	>6.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER.

### OUTFALL 016\*

DATE	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	pH	TRC (ug/l)
	No	Sample	Required		

### COOLING TOWER BYPASS

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	30	100
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0
TRC	QRTLY (1)	N.A.	190

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER.

### OUTFALL 017

ULTIMATE HEAT SINK  
No Discharge

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
OPERATIONS LABORATORY USING METHODS SPECIFIED  
UNDER 10CSR 20-7.015

COMMENTS: Outfall 016 TRC results on Attachment 1

Ameren UE Callaway Plant

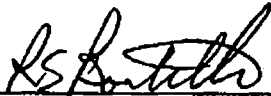
PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) 09/2007

PAGE 4 OF 4

NPDES MONITORING REPORT

"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."



Preparer



Reviewer



Approved  
Plant Manager

**ATTACHMENT 1**  
**09/2007**

**Cooling tower bypass after addition total residual chlorine (TRC) results (ug/ml).**

<u>Date</u>	<u>TRC (ug/ml)</u>
4	146
5	85
6	180
13	61
18	<50
19	132
20	<50
25	<50
26	<50

**Ameren Services**  
**Environmental, Safety & Health**  
**314.554.3480 (Telephone)**  
**314.554.4182 (Facsimile)**  
**ssweiss@ameren.com**

**One Ameren Plaza**  
**1801 Chouteau Avenue**  
**PO Box 66149**  
**St. Louis, MO 63166-6149**  
**314.621.3222**

January 22, 2008

Department of Natural Resources  
Northeast Regional Office  
1709 Prospect Drive  
Macon, Missouri 63552-2602

**Re: Ameren UE Callaway Power Plant**  
**NPDES Permit No. MO-0098001**  
**Fourth Quarter, 2007 NPDES Discharge Monitoring Report (DMR)**



Dear Sir or Madam:

In accordance with requirements of the Union Electric Company, d/b/a Ameren UE Callaway Power Plant, NPDES Permit MO-0098001, please find enclosed the **Fourth Quarter 2007 (October, November, and December) DMR**.

Per our NPDES Permit Reportable Event Report that was submitted to you on October 15, 2007, the Total Residual Chlorine (TRC) permit limit was exceeded on October 10<sup>th</sup> from Outfall 002 (Cooling Tower Blowdown). The TRC exceedance is also documented in the Comments section on Page 2 of the October DMR.

Please call me at 314-554-3480 if you have any questions concerning the enclosed reports.

Sincerely,

A handwritten signature in black ink, appearing to read "Steven S. Weiss".

Steven S. Weiss  
Environmental Scientist, NPDES DMR Coordinator  
Environmental, Safety & Health  
Ameren Services as Affiliated Agent for Union Electric Company, d/b/a AmerenUE

Attachment

bcc: R.S. Boutelle (CA-460)  
JCP / SSW  
WQ3.1.2.1

PERMIT NO. MO-0098001  
REPORTING PERIOD (MO/YR) 10/2007  
PAGE 1 OF 4

**OUTFALL 001  
RADWASTE SYSTEM**

[illegible]

PARAMETER	FREQ.	LIMITS	
		MONTHLY AVERAGE	DAILY MAX.
FLOW (MGD)	EB	N.A.	N.A.
pH (STD)	EB	6.0-9.0	6.0-9.0
TSS (mg/l)	EB	30	45
Boron (mg/l)	EB	N.A.	N.A.
TRC (ug/l)	Monthly	N.A.	190
BOD (mg/l)	Monthly	N.A.	N.A.
O&G (mg/l)	Monthly	15	20

## SOURCES

- 1 = WASTE MONITOR TANK A  
2 = WASTE MONITOR TANK B  
3 = STEAM GENERATOR BLOWDOWN  
4 = SEC. LIQ. WASTE MONITOR TANK A  
5 = SEC. LIQ. WASTE MONITOR TANK B  
6 = LIQ. RADWASTE DISCHARGE TANK A  
7 = LIQ. RADWASTE DISCHARGE TANK B  
EB = EACH BATCH

Date	BOD (mg/l)	TRC (ug/l)	O&G (mg/l)
5	---	30	5
20	10	---	---

**COMMENTS:**

**Ameren UE Callaway Plant**

**PERMIT NO. MO-0098001**

**REPORTING PERIOD (MO/YR)** 10/2007

**PAGE** 2 **OF** 4

**NPDES MONITORING REPORT**

**OUTFALL 002  
COOLING TOWER BLOWDOWN**

DATE	FLOW (MGD)	TEMP (MAX °F)	TRC (ug/l)
1	4.3	86	91
2	6.0	90	72
3	6.7	85	94
4	0.6	92	127
5	7.9	92	88
6	7.1	93	<50
7	7.0	93	87
8	6.9	89	<50
9	6.7	76	117
10	5.5	80	203/98 (2)
11	4.1	77	113
12	3.0	78	66
13	3.0	80	72
14	3.8	84	<50
15	4.5	83	<50
16	4.8	81	<50
17	5.2	85	73
18	4.8	84	<50
19	4.4	80	<50
20	5.7	83	<50
21	4.6	85	<50
22	3.6	79	<50
23	3.4	77	<50
24	2.8	76	<50
25	4.4	74	<50
26	4.4	74	<50
27	4.3	74	<50
28	4.3	73	<50
29	5.0	75	<50
30	6.4	78	<50
31	2.7	77	<50

DATE	TSS (mg/l)	TDS (mg/l)
1	77	2425
8	72	1952
15	63	2116
22	69	1560
29	56	2032

DATE	Sulfate (mg/l)	O&G (mg/l)
No	Sample	Required

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	CONT.	N.A.	N.A.
TOTAL SUSPENDED SOLIDS	WKLY.	N.A.	N.A.
TOTAL DISSOLVED SOLIDS	WKLY.	N.A.	N.A.
OIL AND GREASE	QRTLY (1)	15	20
SULFATE	QRTLY (1)	N.A.	N.A.
TEMPERATURE (MAXIMUM)	DAILY	110 ° F	110 ° F
pH	CONT.	6.0 - 9.0	6.0 - 9.0
TOTAL RESIDUAL CHLORINE	DAILY	N.A.	190 ug/L

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
OPERATIONS LAB USING METHODS SPECIFIED UNDER  
10CSR20-7.015.

- (1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF  
FEBRUARY, MAY, AUGUST, NOVEMBER.

COMMENTS: No pH excursions occurred this month.  
(2) exceeded 190 ug/L TRC for approximately 32 minutes.

**Ameren UE Callaway Plant**

PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) 102007

PAGE 3 OF 4

**NPDES MONITORING REPORT**

**OUTFALL 003  
WATER TREATMENT PLANT  
NO DISCHARGE**

**OUTFALL 007**

DATE	FLOW (MGD)	TSS (mg/l)	BOD (mg/l)	pH
	No	Sample	Required	

**SANITARY WASTE**

PARAMETER	FREQ.	LIMITS (mg/l)	
		MO. AVG.	WKLY. AVG.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	70	110
BOD	QRTLY (1)	45	65
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER

**OUTFALL 009  
INTAKE HEATER BLOWDOWN  
NO DISCHARGE**

**OUTFALLS 010 - 015**

DATE	OUTFALL L	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	CO D (mg/l)	pH
	No	Sample	Required			

**STORM WATER RUNOFF PONDS**

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	N.A.	N.A.
COD	QRTLY (1)	N.A.	N.A.
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	>6.0	>6.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER.

**OUTFALL 016\***

DATE	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	pH	TRC (ug/l)
	No	Sample	Required		

**COOLING TOWER BYPASS**

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	30	100
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0
TRC	QRTLY (1)	N.A.	190

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER.

**OUTFALL 017**

ULTIMATE HEAT SINK  
No Discharge

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
OPERATIONS LABORATORY USING METHODS SPECIFIED  
UNDER 10CSR 20-7.015

COMMENTS: Outfall 016 Cooling Tower Bypass TRC results  
on Attachment I.



Ameren UE Callaway Plant

PERMIT NO. MO-8098001

REPORTING PERIOD (MO/YR) 10/2007

PAGE 4 OF 4

NPDES MONITORING REPORT

"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."

RS Buntell 638  
Preparer (Pin#)

Denise Smith 12267  
Reviewer (Pin#)

John D. D. 19532  
Approved (Pin#)  
Plant Manager

**ATTACHMENT 1**  
**10/2007**

**Cooling tower bypass after addition total residual chlorine (TRC) results (ug/ml).**

<u>Date</u>	<u>TRC (ug/ml)</u>
2	<50
3	<50
9	<50
10	<50
11	80
16	<50
17	148
18	126
25	<50
29	<50
30	<50
31	<50

## Ameren UE Callaway Plant

**PERMIT NO. MO-0098001**

REPORTING PERIOD (MO/YR) 11/2007

**PAGE 1 OF 4**

## NPDES MONITORING REPORT

**OUTFALL 001  
RADWASTE SYSTEM**

[illegible]

PARAMETER	FREQ.	LIMITS	
		MONTHLY AVERAGE	DAILY MAX.
FLOW (MGD)	EB	N.A.	N.A.
pH (STD)	EB	6.0-9.0	6.0-9.0
TSS (mg/l)	EB	30	45
Boron (mg/l)	EB	N.A.	N.A.
TRC (ug/l)	Monthly	N.A.	190
BOD (mg/l)	Monthly	N.A.	N.A.
O&G (mg/l)	Monthly	15	20

ALL SAMPLES ANALYZED BY Ameren UE Callaway  
Plant OPERATIONS LABORATORY USING  
METHODS SPECIFIED UNDER 10CSR 20-7.015

## SOURCES

- 1 = WASTE MONITOR TANK A  
2 = WASTE MONITOR TANK B  
3 = STEAM GENERATOR BLOWDOWN  
4 = SEC. LIQ. WASTE MONITOR TANK A  
5 = SEC. LIQ. WASTE MONITOR TANK B  
6 = LIQ. RADWASTE DISCHARGE TANK A  
7 = LIQ. RADWASTE DISCHARGE TANK B  
EB = EACH BATCH

Date	BOD (mg/l)	TRC (ug/l)	O&G (mg/l)
2	2	<10	11

**COMMENTS:**

(1) TSS monthly average was 24.3 mg/L.

**Ameren UE Callaway Plant**

PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) 11/2007

PAGE 2 OF 4

**NPDES MONITORING REPORT**

**OUTFALL 002  
COOLING TOWER BLOWDOWN**

DATE	FLOW (MGD)	TEMP (MAX °F)	TRC (ug/l)
1	4.4	73	70
2	5.1	73	<50
3	4.4	72	60
4	4.9	74	65
5	4.6	77	<50
6	7.3	68	<50
7	9.1	70	<50
8	4.3	72	53
9	6.2	72	<50
10	4.9	74	<50
11	4.3	81	<50
12	4.5	80	<50
13	5.0	77	<50
14	5.7	75	<50
15	5.9	69	<50
16	5.5	72	<50
17	6.8	73	<50
18	3.9	71	<50
19	4.1	79	<50
20	4.1	80	<50
21	5.2	72	<50
22	6.3	66	58
23	6.1	63	62
24	6.1	62	<50
25	6.6	62	<50
26	6.0	64	76
27	6.1	66	57
28	7.0	69	<50
29	4.7	66	<50
30	4.8	65	<50

DATE	TSS (mg/l)	TDS (mg/l)
5	63	1996
12	52	2036
19	64	1916
26	59	1710

DATE	Sulfate (mg/l)	O&G (mg/l)
12	1330	0.4

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	CONT.	N.A.	N.A.
TOTAL SUSPENDED SOLIDS	WKLY.	N.A.	N.A.
TOTAL DISSOLVED SOLIDS	WKLY.	N.A.	N.A.
OIL AND GREASE	QRTLY (1)	15	20
SULFATE	QRTLY (1)	N.A.	N.A.
TEMPERATURE (MAXIMUM)	DAILY	110 ° F	110 ° F
pH	CONT.	6.0 - 9.0	6.0 - 9.0
TOTAL RESIDUAL CHLORINE	DAILY	N.A.	190 ug/L

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
OPERATIONS LAB USING METHODS SPECIFIED UNDER  
10CSR20-7.015.

- (1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF  
FEBRUARY, MAY, AUGUST, NOVEMBER.

COMMENTS: No pH excursions occurred this month

**Ameren UE Callaway Plant**

PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) 11/2007

PAGE 3 OF 4

**NPDES MONITORING REPORT**

**OUTFALL 003  
WATER TREATMENT PLANT  
NO DISCHARGE**

**OUTFALL 007**

DATE	FLOW (MGD)	TSS (mg/l)	BOD (mg/l)	pH

**SANITARY WASTE**

PARAMETER	FREQ.	LIMITS (mg/l)	
		MO. AVG.	WKLY. AVG.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	70	110
BOD	QRTLY (1)	45	65
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER

**OUTFALL 002  
INTAKE HEATER BLOWDOWN  
NO DISCHARGE**

**OUTFALLS 010 - 015**

DATE	OUTFALL	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	COD (mg/l)	pH
21	10	.020	11	2	17	8.19
21	12	.007	18	2	10	9.44
21	13	.008	9	3	7	8.30
21	14	.034	23	2	21	7.82

**STORM WATER RUNOFF PONDS**

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	N.A.	N.A.
COD	QRTLY (1)	N.A.	N.A.
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	>6.0	>6.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER.

**OUTFALL 016\***

DATE	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	pH	TRC (ug/l)
14	2.6	10	0	8.26	<50

**COOLING TOWER BYPASS**

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	30	100
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0
TRC	QRTLY (1)	N.A.	190

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER.

**OUTFALL 017**

ULTIMATE HEAT SINK  
No Discharge

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
OPERATIONS LABORATORY USING METHODS SPECIFIED  
UNDER 10CSR 20-7.015

COMMENTS: No discharge from Outfalls 11 and 15.

Ameren UE Callaway Plant

PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) 11/2007

PAGE 4 OF 4

NPDES MONITORING REPORT

"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."

RS Bouthillier 638  
Preparer (Pin#)

Devin Schults 12267  
Reviewer (Pin#)

John J. [Signature] 494  
Approved (Pin#)  
Plant Manager



## Ameren UE Callaway Plant

PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) 12/2007

PAGE 2 OF 4

## NPDES MONITORING REPORT

OUTFALL 002  
COOLING TOWER BLOWDOWN

DATE	FLOW (MGD)	TEMP (MAX °F)	TRC (ug/l)
1	4.4	66	<50
2	4.3	69	<50
3	4.3	60	<50
4	4.4	64	<50
5	5.3	64	<50
6	4.6	59	<50
7	4.1	59	54
8	4.1	59	123
9	4.2	58	55
10	4.1	56	72
11	4.0	59	<50
12	8.0	58	<50
13	4.0	57	<50
14	4.0	57	65
15	4.0	57	<50
16	5.5	58	100
17	4.8	60	131
18	4.9	61	<50
19	5.2	62	<50
20	5.1	63	<50
21	4.2	64	<50
22	4.2	66	<50
23	4.1	60	58
24	4.4	59	<50
25	5.4	62	52
26	4.3	61	<50
27	4.2	58	54
28	4.3	58	67
29	4.4	58	<50
30	4.3	59	148
31	5.8	60	<50

DATE	TSS (mg/l)	TDS (mg/l)
3	53	2064
10	50	1944
17	63	3280
24	55	1512
31	72	1452

DATE	Sulfate (mg/l)	O&G (mg/l)
No	Sample	Required

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	CONT.	N.A.	N.A.
TOTAL SUSPENDED SOLIDS	WKLY.	N.A.	N.A.
TOTAL DISSOLVED SOLIDS	WKLY.	N.A.	N.A.
OIL AND GREASE	QRTLY (1)	15	20
SULFATE	QRTLY (1)	N.A.	N.A.
TEMPERATURE (MAXIMUM)	DAILY	110 ° F	110 ° F
pH	CONT.	6.0 - 9.0	6.0 - 9.0
TOTAL RESIDUAL CHLORINE	DAILY	N.A.	190 ug/L

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
OPERATIONS LAB USING METHODS SPECIFIED UNDER  
10CSR20-7.015.

- (1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF  
FEBRUARY, MAY, AUGUST, NOVEMBER.

COMMENTS: No pH excursions occurred this month.



**Ameren UE Callaway Plant**

PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) 12/2007

PAGE 3 OF 4

**NPDES MONITORING REPORT**

**OUTFALL 003  
WATER TREATMENT PLANT  
NO DISCHARGE**

**OUTFALL 007**

DATE	FLOW (MGD)	TSS (mg/l)	BOD (mg/l)	pH
	No	Sample	Required	

**SANITARY WASTE**

PARAMETER	FREQ.	LIMITS (mg/l)	
		MO. AVG.	WKLY. AVG.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	70	110
BOD	QRTLY (1)	45	65
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER

**OUTFALL 002  
INTAKE HEATER BLOWDOWN  
NO DISCHARGE**

**OUTFALLS 010 - 015**

DATE	OUTFALL	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	CO D (mg/l)	pH
		No	Samples	Required		

**STORM WATER RUNOFF PONDS**

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	N.A.	N.A.
COD	QRTLY (1)	N.A.	N.A.
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	>6.0	>6.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER.

**OUTFALL 016**

DATE	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	pH	TRC (ug/l)
	No	Sample	Required		

**COOLING TOWER BYPASS**

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	30	100
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0
TRC	QRTLY (1)	N.A.	190

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER.

**OUTFALL 017**

ULTIMATE HEAT SINK  
No Discharge

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
OPERATIONS LABORATORY USING METHODS SPECIFIED  
UNDER 10CSR 20-7.015

COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Ameren UE Callaway Plant

PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) 12/2007

PAGE 4 OF 4

NPDES MONITORING REPORT

"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."

Ronald S. Routh 638  
Preparer (Pin#)

Denise Oschultz 12267  
Reviewer (Pin#)

W. M. M. 4194  
Approved (Pin#)  
Plant Manager

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Ameren Services  
Environmental Services  
314.554.3480 (Telephone)  
314.554.4182 (Facsimile)  
ssweiss@ameren.com

One Ameren Plaza  
1901 Chouteau Avenue  
PO Box 66149  
St. Louis, MO 63166-6149  
314.621.3222

April 28, 2008

Department of Natural Resources  
Northeast Regional Office  
1709 Prospect Drive  
Macon, Missouri 63552-2602

Re: **Ameren UE Callaway Power Plant**  
**NPDES Permit No. MO-0098001**  
**First Quarter, 2008 NPDES Discharge Monitoring Reports (DMRs)**



Dear Sir or Madam:

In accordance with requirements of the Union Electric Company, d/b/a Ameren UE Callaway Power Plant, NPDES Permit MO-0098001, please find enclosed the DMRs for the *First Quarter 2008 (months of January, February, and March)*.

There were two incidents in the month of March involving overflow of fully treated effluent from the sewage lagoon lift station. Both overflow incidents did not involve "bypass of a treatment system", did not pose any risk to health or environment, and did not reach "waters of the state". Samples of the treated effluent overflow indicated it was in compliance with the NPDES permit limitations for pH, Total Suspended Solids (TSS), and Biochemical Oxygen Demand (BOD). Per NPDES permit Standard Conditions, both incidents were deemed not reportable as 24-hour or 5-day notification reporting requirements.

The first incident was discovered at 1510 hours on March 17<sup>th</sup> 2008 and involved the sewage lagoon #3 lift station overflowing onto the ground and into an adjacent excavation trench for installation of our discharge line piping replacement project. The outlet valve of the lift station was shut immediately to stop the flow. The control panel for the lift station transfer pumps was found de-energized. It was discovered, during investigation, that power was lost to the lift station pumps when a portion of the excavation embankment sloughed off during heavy rains and pulled the power cable from conduit that supplied the power to the control panel of the lift station pumps.

Chemistry personnel collected samples from the lift station. Results for pH, TSS, and BOD were in compliance with NPDES permit limits. The water released was fully treated effluent it posed no threat to the environment or human health.

Based on evaluation of the spill path and proximity of the excavation trench, Callaway concluded that water could not have made its way to navigable waters of the state. Additionally, the large amount of rainfall received during this period, commingling of storm water on the ground and in the trench it was not feasible to recover the treated effluent.

bcc: R.S. Boutelle (CA-460)  
JCP / SSW  
WQ3.1.2.1

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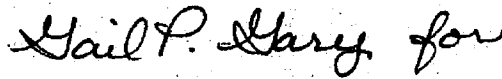
As a contingency for preventing additional overflow of lift station, two sump pumps were staged at Sewage Lagoon #3 overflow standpipe and pumped from Lagoon #3 to Wetlands Pond #1. This configuration was chosen to maintain a flow path consistent with the current NPDES permit process flow. Temporary power has since been run to the lift station to supply the lift station pumps until a permanent modification could be put in place.

Mike Bollinger of Ameren Environmental Services reported this overflow incident to Troy Lalond of MDNR's Northeast Regional Office on March 20<sup>th</sup> approximately 0845 hours. Mr. Lalond concurred there was no risk to the environment and there was no bypass of the treatment system, and it was determined the treated effluent was contained on-site within the pipeline excavation and did not reach "waters of the state". Mr. Lalond and Mr. Bollinger agreed this overflow incident be reported on the 1<sup>st</sup> Quarter NPDES DMR.

The second incident occurred on March 29<sup>th</sup>, 2008 when the Sewage Lagoon #3 lift station pumps were not able to keep up with influent flow combined with substantial rainfall. Similarly, the overflow was immediately stopped. Runoff of the treated effluent ended up in the adjacent excavation trench could not have made its way to navigable "waters of the state" and posed no threat to human health or environment. Results of samples collected from the overflow resulted within NPDES permit limits for pH, TSS, and BOD. Both pumps have since been repaired.

Please call me at 314-554-3480 if you have any questions concerning the enclosed reports.

Sincerely,



Steven S. Weiss  
Environmental Scientist, NPDES DMR Coordinator  
Ameren Environmental Services  
Ameren Services as Affiliated Agent for Union Electric Company, d/b/a AmerenUE

Attachment

PERMIT NO. MO-0098001  
REPORTING PERIOD (MO/YR) 01/2008  
PAGE 1 OF 4

**OUTFALL 001  
RADWASTE SYSTEM**

[illegible]

PARAMETER	FREQ.	LIMITS	
		MONTHLY AVERAGE	DAILY MAX.
FLOW (MGD)	EB	N.A.	N.A.
pH (STD)	EB	6.0-9.0	6.0-9.0
TSS (mg/l)	EB	30	45
Baron (mg/l)	EB	N.A.	N.A.
TRC (ug/l)	Monthly	N.A.	190
BOD (mg/l)	Monthly	N.A.	N.A.
O&G (mg/l)	Monthly	15	20

## SOURCES

- 1 = WASTE MONITOR TANK A  
2 = WASTE MONITOR TANK B  
3 = STEAM GENERATOR BLOWDOWN  
4 = SEC. LIQ. WASTE MONITOR TANK A  
5 = SEC. LIQ. WASTE MONITOR TANK B  
6 = LIQ. RADWASTE DISCHARGE TANK A  
7 = LIQ. RADWASTE DISCHARGE TANK B  
EB = EACH BATCH

Date	BOD (mg/l)	TRC (ug/l)	O&G (mg/l)
4	1.7	10	5

**COMMENTS:**

**Ameren UE Callaway Plant**

**PERMIT NO. MO-0098001**

**REPORTING PERIOD (MO/YR) 01/2008**

**PAGE 2 OF 4**

**NPDES MONITORING REPORT**

**OUTFALL 002  
COOLING TOWER BLOWDOWN**

DATE	FLOW (MGD)	TEMP (MAX °F)	TRC (ug/l)
1	4.1	58	<50
2	4.4	54	168
3	4.7	58	114
4	4.6	63	<50
5	4.7	67	120
6	5.8	70	69
7	5.9	73	<50
8	6.1	72	59
9	5.2	64	128
10	4.4	64	<50
11	4.4	63	<50
12	4.3	63	66
13	4.4	59	110
14	4.4	57	<50
15	4.5	57	<50
16	5.8	60	<50
17	4.5	56	<50
18	4.4	56	<50
19	6.7	52	<50
20	4.6	54	<50
21	4.6	57	56
22	3.6	55	<50
23	3.6	64	86
24	5.7	52	<50
25	5.7	53	<50
26	5.1	58	69
27	4.9	60	<50
28	4.7	64	<50
29	4.6	66	<50
30	4.8	67	67
31	5.6	57	<50

DATE	TSS (mg/l)	TDS (mg/l)
7	71	1612
14	52	1710
21	40	1352
28	58	1440

DATE	Sulfate (mg/l)	O&G (mg/l)
No	Sample	Required

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	CONT.	N.A.	N.A.
TOTAL SUSPENDED SOLIDS	WKLY.	N.A.	N.A.
TOTAL DISSOLVED SOLIDS	WKLY.	N.A.	N.A.
OIL AND GREASE	QRTLY (1)	15	20
SULFATE	QRTLY (1)	N.A.	N.A.
TEMPERATURE (MAXIMUM)	DAILY	110 ° F	110 ° F
pH	CONT.	6.0 - 9.0	6.0 - 9.0
TOTAL RESIDUAL CHLORINE	DAILY	N.A.	190 ug/L

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant OPERATIONS LAB USING METHODS SPECIFIED UNDER 10CSR20-7.015.

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER.

COMMENTS: No pH excursions occurred this month.



**Ameren UE Callaway Plant**

PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) 01/2008

PAGE 3 OF 4

**NPDES MONITORING REPORT**

**OUTFALL 003  
WATER TREATMENT PLANT  
NO DISCHARGE**

**OUTFALL 007**

DATE	FLOW (MGD)	TSS (mg/l)	BOD (mg/l)	pH
	No	Sample	Required	

**SANITARY WASTE**

PARAMETER	FREQ.	LIMITS (mg/l)	
		MO. AVG.	WKLY. AVG.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	70	110
BOD	QRTLY (1)	45	65
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER

**OUTFALL 009  
INTAKE HEATER BLOWDOWN  
NO DISCHARGE**

**OUTFALLS 010 - 015**

DATE	OUTFALL	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	CO D (mg/l)	pH
		No	Samples	Required		

**STORM WATER RUNOFF PONDS**

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	N.A.	N.A.
COD	QRTLY (1)	N.A.	N.A.
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	>6.0	>6.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER.

**OUTFALL 016**

DATE	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	pH	TRC (ug/l)
	No	Sample	Required		

**COOLING TOWER BYPASS**

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	30	100
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0
TRC	QRTLY (1)	N.A.	190

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER.

**OUTFALL 017**

ULTIMATE HEAT SINK  
No Discharge

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
OPERATIONS LABORATORY USING METHODS SPECIFIED  
UNDER 10CSR 20-7.015

COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Ameren UE Callaway Plant  
PERMIT NO. MO-0098001  
REPORTING PERIOD (MO/YR) 01/2008  
PAGE 4 OF 4

NPDES MONITORING REPORT

"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."

RS Bontath 638  
Preparer (Pin#)

Daniel Smith 12267  
Reviewer (Pin#)

JP 19532  
Approved (Pin#)  
Plant Manager

PERMIT NO. MO-0098001  
REPORTING PERIOD (MO/YR) 02/2008  
PAGE 1 OF 4

**OUTFALL 001  
RADWASTE SYSTEM**

[illegible]

PARAMETER	FREQ.	LIMITS	
		MONTHLY AVERAGE	DAILY MAX.
FLOW (MGD)	EB	N.A.	N.A.
pH (STD)	EB	6.0-9.0	6.0-9.0
TSS (mg/l)	EB	30	45
Boron (mg/l)	EB	N.A.	N.A.
TRC (ug/l)	Monthly	N.A.	190
BOD (mg/l)	Monthly	N.A.	N.A.
O&G (mg/l)	Monthly	15	20

**Plant OPERATIONS LABORATORY USING  
METHODS SPECIFIED UNDER 10CSR 20-7.015**

1 = WASTE MONITOR TANK A  
2 = WASTE MONITOR TANK B  
3 = STEAM GENERATOR BLOWDOWN  
4 = SEC. LIQ. WASTE MONITOR TANK A  
5 = SEC. LIQ. WASTE MONITOR TANK B  
6 = LIQ. RADWASTE DISCHARGE TANK A  
7 = LIQ. RADWASTE DISCHARGE TANK B  
EB = EACH BATCH

Date	BOD (mg/l)	TRC (ug/l)	O&G (mg/l)
8	7	10	2

COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Ameren UE Callaway Plant**

**PERMIT NO. MO-0098001**

**REPORTING PERIOD (MO/YR)** 02/2008

**PAGE** 2 **OF** 4

**NPDES MONITORING REPORT**

**OUTFALL 002  
COOLING TOWER BLOWDOWN**

DATE	FLOW (MGD)	TEMP (MAX °F)	TRC (mg/l)
1	5.8	56	72
2	5.4	57	80
3	4.6	60	<50
4	5.0	68	103
5	4.5	63	115
6	5.0	57	125
7	4.4	63	<50
8	5.1	67	<50
9	4.2	63	<50
10	4.2	56	55
11	4.2	52	<50
12	4.5	53	151
13	3.9	53	<50
14	5.3	57	<50
15	5.1	56	<50
16	5.2	64	<50
17	5.4	70	<50
18	5.5	55	<50
19	5.5	52	51
20	4.7	54	<50
21	4.6	53	<50
22	4.4	53	<50
23	4.5	53	<50
24	4.5	54	<50
25	1.7	56	<50
26	4.4	55	<50
27	4.8	54	<50
28	5.8	55	<50
29	4.9	58	<50

DATE	TSS (mg/l)	TDS (mg/l)
4	57	1152
11	47	1360
18	34	1376
25	30	892

DATE	Sulfate (mg/l)	O&G (mg/l)
4	1110	4

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	CONT.	N.A.	N.A.
TOTAL SUSPENDED SOLIDS	WKLY.	N.A.	N.A.
TOTAL DISSOLVED SOLIDS	WKLY.	N.A.	N.A.
OIL AND GREASE	QRTLY (1)	15	20
SULFATE	QRTLY (1)	N.A.	N.A.
TEMPERATURE (MAXIMUM)	DAILY	110° F	110° F
pH	CONT.	6.0 - 9.0	6.0 - 9.0
TOTAL RESIDUAL CHLORINE	DAILY	N.A.	190 ug/L

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
OPERATIONS LAB USING METHODS SPECIFIED UNDER  
10CSR20-7.015.

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF  
FEBRUARY, MAY, AUGUST, NOVEMBER.

COMMENTS: No pH excursions occurred this month.

**Ameren UE Callaway Plant**

PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) 02/2008

PAGE 3 OF 4

**NPDES MONITORING REPORT**

**OUTFALL 003  
WATER TREATMENT PLANT  
NO DISCHARGE**

**OUTFALL 007**

DATE	FLOW (MGD)	TSS (mg/l)	BOD (mg/l)	pH
28	.031	6	7	7.72

**SANITARY WASTE**

PARAMETER	FREQ.	LIMITS (mg/l)	
		MO. AVG.	WEEKLY AVG.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	70	110
BOD	QRTLY (1)	45	65
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER

**OUTFALL 009  
INTAKE HEATER BLOWDOWN  
NO DISCHARGE**

**OUTFALLS 010 - 015**

DATE	OUTFALL	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	COD (mg/l)	pH
14	10	.032	19	1	22	8.02
14	11	.149	99	1	24	7.61
14	12	.011	28	2	13	8.74
	13	NO	DISCHARGE			
	14	NO	DISCHARGE			
	15	NO	DISCHARGE			

**STORM WATER RUNOFF PONDS**

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	N.A.	N.A.
COD	QRTLY (1)	N.A.	N.A.
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	>6.0	>6.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER.

**OUTFALL 016**

DATE	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	pH	TRC (ug/l)
8	4.46	12	3	8.15	<50

**COOLING TOWER BYPASS**

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	30	100
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0
TRC	QRTLY (1)	N.A.	190

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER.

**OUTFALL 017**

ULTIMATE HEAT SINK  
No Discharge

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
OPERATIONS LABORATORY USING METHODS SPECIFIED  
UNDER 10CSR 20-7.015

COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Ameren UE Callaway Plant

PERMIT NO: MO-0098001

REPORTING PERIOD (MO/YR) 02/2008

PAGE 4 OF 4

NPDES MONITORING REPORT

"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."

RS Buntich 638  
Preparer (Pin#)

Denise Schmitt 12207  
Reviewer (Pin#)

gs [Signature] 10532  
Approved (Pin#)  
Plant Manager

PERMIT NO. MO-0098001  
REPORTING PERIOD (MO/YR) 03/2008  
PAGE 1 OF 4

**OUTFALL 001  
RADWASTE SYSTEM**

[illegible]

PARAMETER	FREQ.	LIMITS	
		MONTHLY AVERAGE	DAILY MAX.
FLOW (MGD)	EB	N.A.	N.A.
pH (STD)	EB	6.0-9.0	6.0-9.0
TSS (mg/l)	EB	30	45
Boron (mg/l)	EB	N.A.	N.A.
TRC (ug/l)	Monthly	N.A.	190
BOD (mg/l)	Monthly	N.A.	N.A.
O&G (mg/l)	Monthly	15	20

**ALL SAMPLES ANALYZED BY Ameren UE Callaway  
Plant OPERATIONS LABORATORY USING  
METHODS SPECIFIED UNDER 10CSR 20-7.015**

1 = WASTE MONITOR TANK A  
2 = WASTE MONITOR TANK B  
3 = STEAM GENERATOR BLOWDOWN  
4 = SEC. LIQ. WASTE MONITOR TANK A  
5 = SEC. LIQ. WASTE MONITOR TANK B  
6 = LIQ. RADWASTE DISCHARGE TANK A  
7 = LIQ. RADWASTE DISCHARGE TANK B  
EB = EACH BATCH

Date	BOD (mg/l)	TRC (ug/l)	O&G (mg/l)
12	12.9	<10	0

COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Ameren UE Callaway Plant**

**PERMIT NO. MO-0098001**

**REPORTING PERIOD (MO/YR) 03/2008**

**PAGE 2 OF 4**

**NPDES MONITORING REPORT**

**OUTFALL 002  
COOLING TOWER BLOWDOWN**

DATE	FLOW (MGD)	TEMP (MAX °F)	TRC (ug/l)
1	4.5	63	<50
2	4.7	67	<50
3	4.6	66	<50
4	4.4	57	<50
5	3.7	66	90
6	4.7	62	50
7	4.4	57	<50
8	4.4	55	80
9	4.3	58	<50
10	4.5	59	50
11	4.4	61	<50
12	4.9	64	<50
13	4.6	65	<50
14	5.1	64	<50
15	4.9	64	<50
16	4.9	61	<50
17	4.7	63	<50
18	3.8	64	<50
19	1.1	62	<50
20	4.0	65	<50
21	5.1	67	<50
22	5.2	62	<50
23	4.5	60	<50
24	4.3	64	<50
25	4.6	64	<50
26	1.2	65	<50
27	4.9	65	<50
28	2.1	63	<50
29	2.9	66	<50
30	4.5	66	<50
31	4.4	67	<50

DATE	TSS (mg/l)	TDS (mg/l)
3	51	1540
10	39	1040
17	57	1484
24	62	1004
31	55	1812

DATE	Sulfate (mg/l)	O&G (mg/l)
No	Sample	Required

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	CONT.	N.A.	N.A.
TOTAL SUSPENDED SOLIDS	WKLY.	N.A.	N.A.
TOTAL DISSOLVED SOLIDS	WKLY.	N.A.	N.A.
OIL AND GREASE	QRTLY (1)	15	20
SULFATE	QRTLY (1)	N.A.	N.A.
TEMPERATURE (MAXIMUM)	DAILY	110 ° F	110 ° F
pH	CONT.	6.0 - 9.0	6.0 - 9.0
TOTAL RESIDUAL CHLORINE	DAILY	N.A.	190 ug/L

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
OPERATIONS LAB USING METHODS SPECIFIED UNDER  
10CSR20-7.015.

- (1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF  
FEBRUARY, MAY, AUGUST, NOVEMBER.

COMMENTS: No pH excursions occurred this month.



**Ameren UE Callaway Plant**

PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) 03/2008

PAGE 3 OF 4

**NPDES MONITORING REPORT**

**OUTFALL 003  
WATER TREATMENT PLANT  
NO DISCHARGE**

**OUTFALL 007**

DATE	FLOW (MGD)	TSS (mg/l)	BOD (mg/l)	pH
17 (*)	--	16	13	8.54
29 (*)	--	17	13	8.64

**SANITARY WASTE**

PARAMETER	FREQ.	LIMITS (mg/l)	
		MO. AVG.	WELY. AVG.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	70	110
BOD	QRTLY (1)	45	65
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER

**OUTFALL 002  
INTAKE HEATER BLOWDOWN  
NO DISCHARGE**

**OUTFALLS 010 - 015**

DATE	OUTFALL	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	COD (mg/l)	pH
		No	Sample	Required		

**STORM WATER RUNOFF PONDS**

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	N.A.	N.A.
COD	QRTLY (1)	N.A.	N.A.
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	>6.0	>6.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER.

**OUTFALL 016**

DATE	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	pH	TRC (ug/l)
	No	Sample	Required		

**COOLING TOWER BYPASS**

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	30	100
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0
TRC	QRTLY (1)	N.A.	190

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER.

**OUTFALL 017**

ULTIMATE HEAT SINK  
No Discharge

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
OPERATIONS LABORATORY USING METHODS SPECIFIED  
UNDER 10CSR 20-7.015

COMMENTS: (\*) Sewage lagoon lift station overflow samples  
Note that the discharge from the converted wetland and the flows  
reported herein are NOT discharged, as this Outfall (#007) is  
recycled to the head of the Water Treatment Plant for further  
treatment and reuse.

Ameren UE Callaway Plant

PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) 03/2008

PAGE 4 OF 4

NPDES MONITORING REPORT

"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."

RS Bontell (638)  
Preparer (Pin#)

Devin Schults (12267)  
Reviewer (Pin#)

Sam Salter (5061)  
Approved (Pin#)  
Plant Manager 4/28/08  
Fu Fadi Diya

LEFT

INTENT 10NBL

BLANK

Ameren Services  
Environmental Services  
314.554.3480 (Telephone)  
314.554.4182 (Facsimile)  
ssweiss@ameren.com

One Ameren Plaza  
1801 Chouteau Avenue  
PO Box 66149  
St. Louis, MO 63166-8149  
314.621.3222

July 18, 2008

Department of Natural Resources  
Northeast Regional Office  
1709 Prospect Drive  
Macon, Missouri 63552-2602

Re: **Ameren UE Callaway Power Plant**  
**NPDES Permit No. MO-0098001**  
**Second Quarter, 2008 NPDES Discharge Monitoring Reports (DMRs)**



Dear Sir or Madam:

In accordance with requirements of the Union Electric Company, d/b/a Ameren UE Callaway Power Plant, NPDES Permit MO-0098001, please find enclosed the DMRs for the **Second Quarter 2008 (April, May, and June)**.

Please call me at 314-554-3480 if you have any questions concerning the enclosed reports.

Sincerely,

A handwritten signature in black ink, appearing to read "Steven S. Weiss", is written over a horizontal line.

Steven S. Weiss  
Environmental Scientist, NPDES DMR Coordinator  
Ameren Environmental Services  
Ameren Services as Affiliated Agent for Union Electric Company, d/b/a AmerenUE

Attachment

bcc: R.S. Boutelle (CA-460)

JCP / SSW

WQ3.1.2.1

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## Ameren UE Callaway Plant

PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) 04/2008

PAGE 1 OF 4

## NPDES MONITORING REPORT

**OUTFALL 001  
RADWASTE SYSTEM**

[illegible]

PARAMETER	FREQ.	LIMITS	
		MONTHLY AVERAGE	DAILY MAX.
FLOW (MGD)	EB	N.A.	N.A.
pH (STD)	EB	6.0-9.0	6.0-9.0
TSS (mg/l)	EB	30	45
Boron (mg/l)	EB	N.A.	N.A.
TRC (ug/l)	Monthly	N.A.	190
BOD (mg/l)	Monthly	N.A.	N.A.
O&G (mg/l)	Monthly	15	20

ALL SAMPLES ANALYZED BY Ameren UE Callaway

# Plant OPERATIONS LABORATORY USING

**METHODS SPECIFIED UNDER 10CSR 20-7.015**

## SOURCES

- 1 = WASTE MONITOR TANK A  
2 = WASTE MONITOR TANK B  
3 = STEAM GENERATOR BLOWDOWN  
4 = SEC. LIQ. WASTE MONITOR TANK A  
5 = SEC. LIQ. WASTE MONITOR TANK B  
6 = LIQ. RADWASTE DISCHARGE TANK A  
7 = LIQ. RADWASTE DISCHARGE TANK B

EB = EACH BATCH

Date	BOD (mg/l)	TRC (ug/l)	O&G (mg/l)
2	2.2	20	8.4

**COMMENTS:**

**Ameren UE Callaway Plant**

PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) 04/2008

PAGE 2 OF 4

**NPDES MONITORING REPORT**

**OUTFALL 002  
COOLING TOWER BLOWDOWN**

DATE	FLOW (MGD)	TEMP (MAX °F)	TRC (ug/l)
1	4.2	66	<50
2	3.8	64	<50
3	3.5	71	<50
4	3.6	64	<50
5	4.0	66	<50
6	3.7	68	<50
7	2.1	67	<50
8	5.6	66	<50
9	4.0	67	<50
10	3.7	68	<50
11	5.5	69	<50
12	5.4	65	<50
13	5.9	64	<50
14	4.3	65	<50
15	5.7	67	<50
16	4.3	71	<50
17	4.2	70	<50
18	4.6	69	<50
19	4.8	68	51
20	4.9	78	<50
21	5.9	75	<50
22	5.9	77	<50
23	4.6	77	<50
24	5.2	76	<50
25	4.5	78	<50
26	4.3	72	<50
27	4.1	71	<50
28	3.3	69	<50
29	3.9	68	<50
30	1.5	74	<50

DATE	TSS (mg/l)	TDS (mg/l)
7	46	1356
14	42	792 (2)
21	49	1276
28	58	1428

DATE	Sulfate (mg/l)	O&G (mg/l)
No	Sample	Required

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	CONT.	N.A.	N.A.
TOTAL SUSPENDED SOLIDS	WKLY.	N.A.	N.A.
TOTAL DISSOLVED SOLIDS	WKLY.	N.A.	N.A.
OIL AND GREASE	QRTLY (1)	15	20
SULFATE	QRTLY (1)	N.A.	N.A.
TEMPERATURE (MAXIMUM)	DAILY	110° F	110° F
pH	CONT.	6.0 - 9.0	6.0 - 9.0
TOTAL RESIDUAL CHLORINE	DAILY	N.A.	190 ug/L

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
OPERATIONS LAB USING METHODS SPECIFIED UNDER  
10CSR20-7.015.

- (1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF  
FEBRUARY, MAY, AUGUST, NOVEMBER.

COMMENTS: (2) Verified with back-up sample.

No pH excursions occurred this month.

**Ameren UE Callaway Plant**

**PERMIT NO. MO-0098001**

**REPORTING PERIOD (MO/YR) 04/2008**

**PAGE 3 OF 4**

**NPDES MONITORING REPORT**

**OUTFALL 003  
WATER TREATMENT PLANT  
NO DISCHARGE**

**OUTFALL 007**

DATE	FLOW (MGD)	TSS (mg/l)	BOD (mg/l)	pH
	No	Samples	Required	

**SANITARY WASTE**

PARAMETER	FREQ.	LIMITS (mg/l)	
		MO. AVG.	WKLY. AVG.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	70	110
BOD	QRTLY (1)	45	65
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER

**OUTFALL 009  
INTAKE HEATER BLOWDOWN  
NO DISCHARGE**

**OUTFALLS 010 - 015**

DATE	OUTFALL	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	COD (mg/l)	pH
		No	Samples	Required		

**STORM WATER RUNOFF PONDS**

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	N.A.	N.A.
COD	QRTLY (1)	N.A.	N.A.
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	>6.0	>6.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER.

**OUTFALL 016**

DATE	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	pH	TRC (ug/l)
	No	Samples	Required		

**COOLING TOWER BYPASS**

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	30	100
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0
TRC	QRTLY (1)	N.A.	190

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER.

**OUTFALL 017**

**ULTIMATE HEAT SINK**  
No Discharge

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
OPERATIONS LABORATORY USING METHODS SPECIFIED  
UNDER 10CSR 20-7.015

COMMENTS: Outfall 016 TRC results on Attachment 1.



Ameren UE Callaway Plant

PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) 04/2008

PAGE 4 OF 4

NPDES MONITORING REPORT

"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."

R S Buntell 1638  
Preparer (Pin#)

Debbie Schults (12267)  
Reviewer (Pin#)

[Signature] 19532  
Approved (Pin#)  
Plant Director

**ATTACHMENT 1**  
**DATE: 04/08**

**Cooling tower bypass after addition total residual chlorine (TRC) results (ug/ml).**

<u>Date</u>	<u>TRC (ug/ml)</u>
16	139
17	100
22	<50
25	<50

PAGE 1 OF 4

## NPDES MONITORING REPORT

**OUTFALL 001  
RADWASTE SYSTEM**

[illegible]

PARAMETER	FREQ.	LIMITS	
		MONTHLY AVERAGE	DAILY MAX.
FLOW (MGD)	EB	N.A.	N.A.
pH (STD)	EB	6.0-9.0	6.0-9.0
TSS (mg/l)	EB	30	45
Baron (mg/l)	EB	N.A.	N.A.
TRC (ug/l)	Monthly	N.A.	190
BOD (mg/l)	Monthly	N.A.	N.A.
O&G (mg/l)	Monthly	15	20

ALL SAMPLES ANALYZED BY Ameren UE Callaway.

Plant OPERATIONS LABORATORY USING

**METHODS SPECIFIED UNDER 10CSR 20-7.015**

## SOURCES

- 1 = WASTE MONITOR TANK A
- 2 = WASTE MONITOR TANK B
- 3 = STEAM GENERATOR BLOWDOWN
- 4 = SEC. LIQ. WASTE MONITOR TANK A
- 5 = SEC. LIQ. WASTE MONITOR TANK B
- 6 = LIQ. RADWASTE DISCHARGE TANK A
- 7 = LIQ. RADWASTE DISCHARGE TANK B

EB = EACH BATCH

Date	BOD (mg/l)	TRC (ug/l)	O&G (mg/l)
6	---	10	6
12	4.8	---	--

COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Ameren UE Callaway Plant**

**PERMIT NO. MO-0098001**

**REPORTING PERIOD (MO/YR) 05/2008**

**PAGE 2 OF 4**

**NPDES MONITORING REPORT**

**OUTFALL 002  
COOLING TOWER BLOWDOWN**

DATE	FLOW (MGD)	TEMP (MAX °F)	TRC (mg/l)
1	1.5	76	<50
2	4.2	75	<50
3	5.9	71	<50
4	4.2	72	64
5	4.2	75	<50
6	4.2	76	<50
7	5.7	76	<50
8	4.4	74	<50
9	4.8	73	71
10	3.5	72	<50
11	4.6	71	<50
12	4.7	78	<50
13	5.9	76	<50
14	5.8	75	<50
15	5.0	72	<50
16	4.1	75	<50
17	3.3	77	<50
18	6.7	76	<50
19	3.5	78	<50
20	4.6	82	<50
21	6.2	75	<50
22	0	78	<50
23	8.2	77	<50
24	7.1	76	<50
25	5.1	81	<50
26	5.1	80	<50
27	4.7	80	<50
28	5.2	76	70
29	3.8	80	<50
30	4.7	82	<50
31	5.5	82	<50

DATE	TSS (mg/l)	TDS (mg/l)
5	44	1784
12	50	1756
19	43	1828
26	37	1744

DATE	Sulfate (mg/l)	O&G (mg/l)
5	990	2

PARAMETER	FREQ.	LIMITS	
		MO. AVG	DAILY MAX
FLOW	CONT.	N.A.	N.A.
TOTAL SUSPENDED SOLIDS	WKLY.	N.A.	N.A.
TOTAL DISSOLVED SOLIDS	WKLY.	N.A.	N.A.
OIL AND GREASE	QRTLY (1)	15	20
SULFATE	QRTLY (1)	N.A.	N.A.
TEMPERATURE (MAXIMUM)	DAILY	110 °F	110 °F
pH	CONT.	6.0 - 9.0	6.0 - 9.0
TOTAL RESIDUAL CHLORINE	DAILY	N.A.	190 ug/L

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
OPERATIONS LAB USING METHODS SPECIFIED UNDER  
10CSR20-7.015.

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF  
FEBRUARY, MAY, AUGUST, and NOVEMBER.

COMMENTS: No pH excursions occurred this month.

**Ameren UE Callaway Plant**

PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) 05/2008

PAGE 3 OF 4

**NPDES MONITORING REPORT**

**OUTFALL 003  
WATER TREATMENT PLANT  
NO DISCHARGE**

**OUTFALL 007**

DATE	FLOW (MGD)	TSS (mg/l)	BOD (mg/l)	pH
17	.04	1.0	---	7.67
31	---	---	8.4	---

**SANITARY WASTE**

PARAMETER	FREQ.	LIMITS (mg/l)	
		MO. AVG.	WELY. AVG.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	70	110
BOD	QRTLY (1)	45	65
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER

**OUTFALL 009  
INTAKE HEATER BLOWDOWN  
NO DISCHARGE**

**OUTFALLS 010 - 015**

DATE	OUTFALL	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	COD (mg/l)	pH
14	10	0.11	7	3	17.5	8.1
14	11	0.51	51	3	32.5	7.8
14	12	0.04	28	6	15.0	8.3
14	14	0.18	19	6	22.5	8.0
14	15	0.07	5	2	25.5	8.5

**STORM WATER RUNOFF PONDS**

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	N.A.	N.A.
COD	QRTLY (1)	N.A.	N.A.
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	>6.0	>6.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER.

**OUTFALL 016**

DATE	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	pH	TRC (ug/l)
12	2.28	12	1.0	8.11	<50

**COOLING TOWER BYPASS**

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	30	100
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0
TRC	QRTLY (1)	N.A.	190

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, and NOVEMBER.

**OUTFALL 017**

ULTIMATE HEAT SINK  
No Discharge

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
OPERATIONS LABORATORY USING METHODS SPECIFIED  
UNDER 10CSR 20-7.015

COMMENTS: Note that the discharge from the converted wetland and the flows reported herein are NOT discharged, as this Outfall (#007) is recycled to the head of the Water Treatment Plant for further treatment and reuse.  
No discharge noted on Outfall 013.  
Outfall 016 TRC results on Attachment 1.

Ameren UE Callaway Plant

PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) 05/2008

PAGE 4 OF 4

NPDES MONITORING REPORT

"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."

Denise D. Schults (12207) James J. Mall 5408 DeM. M. M. 444  
Preparer (Pin#) Reviewer (Pin#) Approved (Pin#)  
Plant Director

# ATTACHMENT 1

DATE: 05/08

Cooling tower bypass after addition total residual chlorine (TRC) results (ug/ml).

<u>Date</u>	<u>TRC (ug/ml)</u>
7	<50
8	57
9	91
13	160
14	80
15	155
20	118
21	<50
27	180
28	<50

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ATTACHMENT 1

PERMIT NO. MO-0098001  
REPORTING PERIOD (MO/YR) 06/2008  
PAGE 1 OF 4

**OUTFALL 001  
RADWASTE SYSTEM**

[illegible]

PARAMETER	FREQ.	LIMITS	
		MONTHLY AVERAGE	DAILY MAX.
FLOW (MGD)	EB	N.A.	N.A.
pH (STD)	EB	6.0-9.0	6.0-9.0
TSS (mg/l)	EB	30	45
Boron (mg/l)	EB	N.A.	N.A.
TRC (ug/l)	Monthly	N.A.	190
BOD (mg/l)	Monthly	N.A.	N.A.
O&G (mg/l)	Monthly	15	20

ALL SAMPLES ANALYZED BY Ameren UE Callaway  
Plant OPERATIONS LABORATORY USING  
METHODS SPECIFIED UNDER 10CSR 20-7.015

## SOURCES

- 1 = WASTE MONITOR TANK A  
2 = WASTE MONITOR TANK B  
3 = STEAM GENERATOR BLOWDOWN  
4 = SEC. LIQ. WASTE MONITOR TANK A  
5 = SEC. LIQ. WASTE MONITOR TANK B  
6 = LIQ. RADWASTE DISCHARGE TANK A  
7 = LIQ. RADWASTE DISCHARGE TANK B  
EB = EACH BATCH

Date	BOD (mg/l)	TRC (ug/l)	O&G (mg/l)
2	2	20	6

COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



**Ameren UE Callaway Plant**

PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) 06/2008

PAGE 2 OF 4

**NPDES MONITORING REPORT**

**OUTFALL 002  
COOLING TOWER BLOWDOWN**

DATE	FLOW (MGD)	TEMP (MAX °F)	TRC (ug/l)
1	5.5	82	60
2	6.7	81	<50
3	4.9	83	<50
4	6.0	83	<50
5	4.3	84	<50
6	4.7	84	<50
7	5.2	85	<50
8	5.5	86	<50
9	5.6	84	<50
10	4.4	83	<50
11	3.9	84	<50
12	4.9	85	<50
13	4.5	83	<50
14	4.5	83	<50
15	4.5	84	<50
16	4.5	83	<50
17	4.4	81	<50
18	1.5	82	<50
19	4.5	82	<50
20	5.8	88	<50
21	4.1	89	<50
22	3.9	86	<50
23	4.3	83	<50
24	6.3	83	<50
25	8.2	84	<50
26	7.1	88	<50
27	2.3	83	123
28	5.2	83	88
29	5.7	80	69
30	4.5	82	88

DATE	TSS (mg/l)	TDS (mg/l)
2	31	1738
9	22	1168
16	43	1306
23	49	888
30	47	1776

DATE	Sulfate (mg/l)	O&G (mg/l)
No	Sample	Required

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	CONT.	N.A.	N.A.
TOTAL SUSPENDED SOLIDS	WKLY.	N.A.	N.A.
TOTAL DISSOLVED SOLIDS	WKLY.	N.A.	N.A.
OIL AND GREASE	QRTLY (1)	15	20
SULFATE	QRTLY (1)	N.A.	N.A.
TEMPERATURE (MAXIMUM)	DAILY	110 ° F	110 ° F
pH	CONT.	6.0 - 9.0	6.0 - 9.0
TOTAL RESIDUAL CHLORINE	DAILY	N.A.	190 ug/L

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
OPERATIONS LAB USING METHODS SPECIFIED UNDER  
10CSR20-7.015.

- (1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF  
FEBRUARY, MAY, AUGUST, and NOVEMBER.

COMMENTS: No pH excursions occurred this month.

PERMIT NO. MO-0098001  
REPORTING PERIOD (MO/YR) 06/2008  
PAGE 3 OF 4

Ameren UE Callaway Plant

NPDES MONITORING REPORT

OUTFALL 003  
WATER TREATMENT PLANT  
NO DISCHARGE

OUTFALL 007

DATE	FLOW (MGD)	TSS (mg/l)	BOD (mg/l)	pH
	No	Sample	Required	

SANITARY WASTE

PARAMETER	FREQ.	LIMITS (mg/l)	
		MO. AVG.	WELY. AVG.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	70	110
BOD	QRTLY (1)	45	65
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF  
FEBRUARY, MAY, AUGUST, NOVEMBER

OUTFALL 009  
INTAKE HEATER BLOWDOWN  
NO DISCHARGE

OUTFALLS 010 - 015

DATE	OUTFALL	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	COD (mg/l)	pH
		No	Sample	Required		

STORM WATER RUNOFF PONDS

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	N.A.	N.A.
COD	QRTLY (1)	N.A.	N.A.
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	>6.0	>6.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS  
OF FEBRUARY, MAY, AUGUST, NOVEMBER.

OUTFALL 016

DATE	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	pH	TRC (ug/l)
	No	Sample	Required		

COOLING TOWER BYPASS

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	30	100
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0
TRC	QRTLY (1)	N.A.	190

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF  
FEBRUARY, MAY, AUGUST, and NOVEMBER.

OUTFALL 017

ULTIMATE HEAT SINK  
No Discharge

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
OPERATIONS LABORATORY USING METHODS SPECIFIED  
UNDER 10CSR 20-7.015

COMMENTS: Note that the discharge from the converted wetland and  
the flows reported herein are NOT discharged, as this Outfall (#007) is  
recycled to the head of the Water Treatment Plant for further treatment and  
reuse.

No discharge noted on Outfall 013.

Outfall 016 TRC results on Attachment I.

Ameren UE Callaway Plant

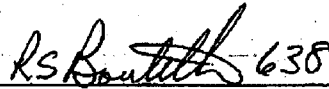
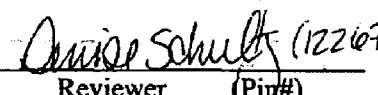

PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) 06/2008

PAGE 4 OF 4

NPDES MONITORING REPORT

"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."

		
Preparer (Pin#) 638	Reviewer (Pin#) 12267	Approved (Pin#) 4194 Plant Director

# ATTACHMENT 1

DATE: 06/08

Cooling tower bypass after addition total residual chlorine (TRC) results (ug/ml).

<u>Date</u>	<u>TRC (ug/ml)</u>
3	<50
4	<50
5	<50
10	<50
11	<50
12	<50
17	<50
18	<50
19	<50
24	<50
26	<50

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ATTACHMENT 1

10 TENTIONALLY  
BLANK

**Ameren Services  
Environmental Services**  
314.554.3480 (Telephone)  
314.554.4182 (Facsimile)  
ssweiss@ameren.com

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1901 Chouteau Avenue  
PO Box 66149  
St. Louis, MO 63166-6149  
314.621.3222

October 23, 2008

Department of Natural Resources  
Northeast Regional Office  
1709 Prospect Drive  
Macon, Missouri 63552-2602

**Re: Ameren UE Callaway Power Plant  
NPDES Permit No. MO-0098001  
Third Quarter, 2008 NPDES Discharge Monitoring Reports (DMRs)**



Dear Sir or Madam:

In accordance with requirements of the Union Electric Company, d/b/a Ameren UE Callaway Power Plant, NPDES Permit MO-0098001, please find enclosed the DMRs for the **Third Quarter 2008 (July, August, and September)**.

Please call me at 314-554-3480 if you have any questions concerning the enclosed reports.

Sincerely,

A handwritten signature in black ink, appearing to read "Steven S. Weiss", written over a horizontal line.

Steven S. Weiss  
Environmental Scientist, NPDES DMR Coordinator  
Ameren Environmental Services  
Ameren Services as Affiliated Agent for Union Electric Company, d/b/a AmerenUE

Attachment

bcc: R.S. Boutelle (CA-460)  
JCP / SSW  
WQ3.1.2.1

PERMIT NO. MO-0098001  
REPORTING PERIOD (MO/YR) 07/2008  
PAGE 1 OF 4

**OUTFALL 001  
RADWASTE SYSTEM**

PARAMETER	FREQ.	LIMITS	
		MONTHLY AVERAGE	DAILY MAX.
FLOW (MGD)	EB	N.A.	N.A.
pH (STD)	EB	6.0-9.0	6.0-9.0
TSS (mg/l)	EB	30	45
Baron (mg/l)	EB	N.A.	N.A.
TRC (ug/l)	Monthly	N.A.	190
BOD (mg/l)	Monthly	N.A.	N.A.
O&G (mg/l)	Monthly	15	20

ALL SAMPLES ANALYZED BY Ameren UE Callaway  
Plant OPERATIONS LABORATORY USING  
METHODS SPECIFIED UNDER 10CSR 20-7.015

1 = WASTE MONITOR TANK A  
2 = WASTE MONITOR TANK B  
3 = STEAM GENERATOR BLOWDOWN  
4 = SEC. LIQ. WASTE MONITOR TANK A  
5 = SEC. LIQ. WASTE MONITOR TANK B  
6 = LIQ. RADWASTE DISCHARGE TANK A  
7 = LIQ. RADWASTE DISCHARGE TANK B  
EB = EACH BATCH

Date	BOD (mg/l)	TRC (ug/l)	O&G (mg/l)
10	<1	<10	3

COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



**Ameren UE Callaway Plant**

**PERMIT NO. MO-0098001**

**REPORTING PERIOD (MO/YR) 07/2008**

**PAGE 2 OF 4**

**NPDES MONITORING REPORT**

**OUTFALL 002  
COOLING TOWER BLOWDOWN**

DATE	FLOW (MGD)	TEMP (MAX 9F)	TRC (ug/l)
1	5.5	82	145
2	5.7	82	<50
3	5.0	81	<50
4	5.3	80	<50
5	4.7	80	<50
6	5.2	82	<50
7	5.4	84	<50
8	5.6	85	<50
9	4.8	84	<50
10	7.5	84	<50
11	4.6	94	<50
12	4.9	86	<50
13	5.8	84	<50
14	5.3	84	<50
15	7.1	85	<50
16	4.7	85	<50
17	6.2	86	<50
18	5.2	87	<50
19	4.7	88	<50
20	4.9	88	<50
21	1.4	92	<50
22	3.1	87	<50
23	6.1	85	<50
24	6.0	85	<50
25	6.2	84	<50
26	5.9	89	53
27	6.1	86	66
28	8.0	89	<50
29	7.7	92	<50
30	9.9	86	<50
31	9.0	85	<50

DATE	TSS (mg/l)	TDS (mg/l)
7	50	868 (2)
14	38	1530
21	46	1964
28	100	1392

DATE	Sulfate (mg/l)	O&G (mg/l)
No	Sample	Required

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	CONT.	N.A.	N.A.
TOTAL SUSPENDED SOLIDS	WKLY.	N.A.	N.A.
TOTAL DISSOLVED SOLIDS	WKLY.	N.A.	N.A.
OIL AND GREASE	QRTLY (1)	15	20
SULFATE	QRTLY (1)	N.A.	N.A.
TEMPERATURE (MAXIMUM)	DAILY	110 ° F	110 ° F
pH	CONT.	6.0 - 9.0	6.0 - 9.0
TOTAL RESIDUAL CHLORINE	DAILY	N.A.	190 ug/L

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
OPERATIONS LAB USING METHODS SPECIFIED UNDER  
10CSR20-7.015.

- (1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF  
FEBRUARY, MAY, AUGUST, and NOVEMBER.

COMMENTS: No pH excursions occurred this month.

(2) Back-up sample (920 ppm) done to confirm low number.

**Ameren UE Callaway Plant**

PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) 07/2008

PAGE 3 OF 4

**NPDES MONITORING REPORT**

**OUTFALL 003  
WATER TREATMENT PLANT  
NO DISCHARGE**

**OUTFALL 007**

DATE	FLOW (MGD)	TSS (mg/l)	BOD (mg/l)	pH
	No	Sample	Required	

**SANITARY WASTE**

PARAMETER	FREQ.	LIMITS (mg/l)	
		MO. AVG.	WKLY. AVG.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	70	110
BOD	QRTLY (1)	45	65
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER

**OUTFALL 002  
INTAKE HEATER BLOWDOWN  
NO DISCHARGE**

**OUTFALLS 010 - 015**

DATE	OUTFALL	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	COD (mg/l)	pH
		No	Sample	Required		

**STORM WATER RUNOFF PONDS**

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	N.A.	N.A.
COD	QRTLY (1)	N.A.	N.A.
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	>6.0	>6.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER

**OUTFALL 016**

DATE	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	pH	TRC (ug/l)
	No	Sample	Required		

**COOLING TOWER BYPASS**

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	30	100
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0
TRC	QRTLY (1)	N.A.	190

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, and NOVEMBER.

**OUTFALL 017**

ULTIMATE HEAT SINK  
No Discharge

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
OPERATIONS LABORATORY USING METHODS SPECIFIED  
UNDER 10CSR 20-7.015

COMMENTS:

Outfall 016 TRC sample results on Attachment

Ameren UE Callaway Plant

PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) 07/2008

PAGE 4 OF 4

NPDES MONITORING REPORT

"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."

<u>RS Boutelle</u>	<u>638</u>	<u>James J. Hall</u>	<u>5468</u>	<u>W. D. Martin</u>	<u>4194</u>
Preparer	(Pin#)	Reviewer	(Pin#)	Approved	(Pin#)
				Plant Director	

**ATTACHMENT 1****DATE: 07/08****Cooling tower bypass after addition total residual chlorine (TRC) results (ug/ml).**

<u>Date</u>	<u>TRC (ug/ml)</u>
1	<50
2	<50
3	<50
9	<50
11	<50
15	<50
16	<50
17	<50
23	<50
24	<50
29	<50
30	<50
31	<50

I:\CHEMISTRY\ADMIN\NPDES\ATTACHMENT 1 WORKSHEET.DOC

**ATTACHMENT 1**



**Ameren UE Callaway Plant**

**PERMIT NO. MO-0098001**

**REPORTING PERIOD (MO/YR) 08/2008**

**PAGE 2 OF 4**

**NPDES MONITORING REPORT**

**OUTFALL 002  
COOLING TOWER BLOWDOWN**

DATE	FLOW (MGD)	TEMP (MAX °F)	TRC (ug/l)
1	6.7	89	<50
2	4.4	88	<50
3	4.7	90	<50
4	4.5	98	<50
5	2.5	98	86
6	4.0	90	<50
7	5.0	90	<50
8	4.1	86	<50
9	5.3	89	<50
10	3.3	90	<50
11	6.2	86	<50
12	4.6	88	<50
13	5.5	87	<50
14	5.7	88	<50
15	5.6	84	178/53
16	4.9	82	<50
17	4.9	82	64
18	5.0	82	<50
19	5.0	82	<50
20	4.8	82	54
21	7.3	83	89
22	4.9	83	64
23	4.8	85	60
24	5.8	83	63
25	4.8	83	64
26	5.8	82	<50
27	7.0	83	56
28	5.0	85	<50
29	2.9	83	<50
30	4.3	83	61
31	4.4	83	59

DATE	TSS (mg/l)	TDS (mg/l)
4	48	1296
11	46	1800
18	33	2252
25	45	1876

DATE	Sulfate (mg/l)	O&G (mg/l)
4	725	3

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	CONT.	N.A.	N.A.
TOTAL SUSPENDED SOLIDS	WKLY.	N.A.	N.A.
TOTAL DISSOLVED SOLIDS	WKLY.	N.A.	N.A.
OIL AND GREASE	QRTLY (1)	15	20
SULFATE	QRTLY (1)	N.A.	N.A.
TEMPERATURE (MAXIMUM)	DAILY	110 ° F	110 ° F
pH	CONT.	6.0 - 9.0	6.0 - 9.0
TOTAL RESIDUAL CHLORINE	DAILY	N.A.	190 ug/L

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
OPERATIONS LAB USING METHODS SPECIFIED UNDER  
10CSR20-7.015.

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF  
FEBRUARY, MAY, AUGUST, and NOVEMBER.

COMMENTS: No pH excursions occurred this month.

**Ameren UE Callaway Plant**

PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) 08/2008

PAGE 3 OF 4

**NPDES MONITORING REPORT**

**OUTFALL 003  
WATER TREATMENT PLANT  
NO DISCHARGE**

**OUTFALL 007**

DATE	FLOW (MGD)	TSS (mg/l)	BOD (mg/l)	pH
13	.0006	3	---	7.87
20	---	---	<1	---

**SANITARY WASTE**

PARAMETER	FREQ.	LIMITS (mg/l)	
		MO. AVG.	WKLY. AVG.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	70	110
BOD	QRTLY (1)	45	65
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER

**OUTFALL 009  
INTAKE HEATER BLOWDOWN  
NO DISCHARGE**

**OUTFALLS 010 - 015**

DATE	OUTFALL	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	COD (mg/l)	pH
13	10	.029	59	2	12	7.49
13	11	.133	28	1	12	7.88
27	12	.010	28	1	12	9.2
27	13	.012	196	3	12	7.95
13	14	.048	17	1	22	8.58
27	15	.019	23	2	18	9.32

**STORM WATER RUNOFF PONDS**

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	N.A.	N.A.
COD	QRTLY (1)	N.A.	N.A.
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	>6.0	>6.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER.

**OUTFALL 016**

DATE	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	pH	TRC (ug/l)
6	3.79	5	2	7.88	<50

**COOLING TOWER BYPASS**

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	30	100
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0
TRC	QRTLY (1)	N.A.	190

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, and NOVEMBER.

**OUTFALL 017**

ULTIMATE HEAT SINK  
No Discharge

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
OPERATIONS LABORATORY USING METHODS SPECIFIED  
UNDER 10CSR 20-7.015

COMMENTS: Note that the discharge from the converted welland and the flows reported herein are NOT discharged, as this Outfall (#007) is recycled to the head of the Water Treatment Plant for further treatment and reuse.

Outfall 016 TRC sample results on Attachment I.

Ameren UE Callaway Plant

PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) 08/2008

PAGE 4 OF 4

NPDES MONITORING REPORT

"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."

Ronald S. Lantieri 638  
Preparer (Pin#)

Denise Schults (12267)  
Reviewer (Pin#)

[Signature] 4194  
Approved (Pin#)  
Plant Director



**ATTACHMENT 1****DATE:** 08/08**Cooling tower bypass after addition total residual chlorine (TRC) results (ug/ml).**

<u>Date</u>	<u>TRC (ug/ml)</u>
6	<50
7	95
11	<50
12	<50
13	<50
15	<50
19	<50
20	<50
21	147
26	<50
27	<50

## Ameren UE Callaway Plant

PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) 09/2008

PAGE 1 OF 4

## NPDES MONITORING REPORT

**OUTFALL 001  
RADWASTE SYSTEM**

[illegible]

PARAMETER	FREQ.	LIMITS	
		MONTHLY AVERAGE	DAILY MAX.
FLOW (MGD)	EB	N.A.	N.A.
pH (STD)	EB	6.0-9.0	6.0-9.0
TSS (mg/l)	EB	30	45
Baron (mg/l)	EB	N.A.	N.A.
TRC (ug/l)	Monthly	N.A.	190
BOD (mg/l)	Monthly	N.A.	N.A.
O&G (mg/l)	Monthly	15	20

ALL SAMPLES ANALYZED BY Ameren UE Callaway  
Plant OPERATIONS LABORATORY USING  
METHODS SPECIFIED UNDER 10CSR 20-7.015

## SOURCES

- 1 = WASTE MONITOR TANK A  
2 = WASTE MONITOR TANK B  
3 = STEAM GENERATOR BLOWDOWN  
4 = SEC. LIQ. WASTE MONITOR TANK A  
5 = SEC. LIQ. WASTE MONITOR TANK B  
6 = LIQ. RADWASTE DISCHARGE TANK A  
7 = LIQ. RADWASTE DISCHARGE TANK B  
EB = EACH BATCH

Date	BOD (mg/l)	TRC (ug/l)	O&G (mg/l)
10	-	20	2
21	<1	-	-

COMMENTS: \_\_\_\_\_

**Ameren UE Callaway Plant**

**PERMIT NO. MO-0098001**

**REPORTING PERIOD (MO/YR) 09/2008**

**PAGE 2 OF 4**

**NPDES MONITORING REPORT**

**OUTFALL 002  
COOLING TOWER BLOWDOWN**

DATE	FLOW (MGD)	TEMP (MAX °F)	TRC (ug/l)
1	5.4	86	<50
2	5.2	87	78
3	4.8	83	87
4	4.8	85	<50
5	3.7	82	<50
6	7.3	79	<50
7	3.9	79	54
8	8.1	79	<50
9	8.8	76	<50
10	7.1	77	<50
11	4.5	80	<50
12	6.9	80	<50
13	9.3	80	<50
14	6.6	81	<50
15	5.9	81	<50
16	6.7	79	<50
17	3.4	77	<50
18	2.4	78	185
19	5.9	84	<50
20	6.0	82	<50
21	5.8	82	<50
22	6.8	84	<50
23	5.2	85	<50
24	6.3	85	<50
25	7.4	82	<50
26	6.4	82	<50
27	6.4	80	<50
28	6.8	80	<50
29	4.3	79	<50
30	4.6	77	94

DATE	TSS (mg/l)	TDS (mg/l)
1	57	1724
8	66	1272
15	70	896 *
22	49	386 *
29	55	1180

DATE	Sulfate (mg/l)	O&G (mg/l)
No	Sample	Required

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	CONT.	N.A.	N.A.
TOTAL SUSPENDED SOLIDS	WKLY.	N.A.	N.A.
TOTAL DISSOLVED SOLIDS	WKLY.	N.A.	N.A.
OIL AND GREASE	QRTLY (1)	15	20
SULFATE	QRTLY (1)	N.A.	N.A.
TEMPERATURE (MAXIMUM)	DAILY	110 ° F	110 ° F
pH	CONT.	6.0 - 9.0	6.0 - 9.0
TOTAL RESIDUAL CHLORINE	DAILY	N.A.	190 ug/L

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
OPERATIONS LAB USING METHODS SPECIFIED UNDER  
10CSR20-7.015.

- (1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF  
FEBRUARY, MAY, AUGUST, NOVEMBER.

COMMENTS: No pH excursions occurred this month  
\*Back up analysis done to verify

**Ameren UE Callaway Plant**

**PERMIT NO. MO-0098001**

**REPORTING PERIOD (MO/YR) 09/2008**

**PAGE 3 OF 4**

**NPDES MONITORING REPORT**

**OUTFALL 003  
WATER TREATMENT PLANT  
NO DISCHARGE**

**OUTFALL 007**

DATE	FLOW (MGD)	TSS (mg/l)	BOD (mg/l)	pH
5 (*)	-	34	15	7.46
30 (*)	-	Not captured	22	Not captured

**SANITARY WASTE**

PARAMETER	FREQ.	LIMITS (mg/l)	
		MO. AVG.	WKLY. AVG.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	70	110
BOD	QRTLY (1)	45	65
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER

**OUTFALL 009  
INTAKE HEATER BLOWDOWN  
NO DISCHARGE**

**OUTFALLS 010 - 015**

DATE	OUTFALL	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	COD (mg/l)	pH
		No	Sample	Required		

**STORM WATER RUNOFF PONDS**

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	N.A.	N.A.
COD	QRTLY (1)	N.A.	N.A.
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	>6.0	>6.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER.

**OUTFALL 016**

DATE	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	pH	TRC (ug/l)
	No	Sample	Required		

**COOLING TOWER BYPASS**

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	30	100
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0
TRC	QRTLY (1)	N.A.	190

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER.

**OUTFALL 017**

**ULTIMATE HEAT SINK**  
No Discharge

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant OPERATIONS LABORATORY USING METHODS SPECIFIED UNDER 10CSR 20-7.015

COMMENTS: \*Sewage lagoon lift station overflow samples  
Note that the discharge from the converted wetland and the flows reported herein are NOT discharged, as this Outfall (#007) is recycled to the head of the Water Treatment Plant for further treatment and reuse.  
Outfall # 016 TRC Results on Attachment 1

Ameren UE Callaway Plant

PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) 09/2008

PAGE 4 OF 4

NPDES MONITORING REPORT

"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."

RS Boudette

Preparer

Christine Schults (12267)

Reviewer

10/20/2008

Approved  
Plant Manager

# **ATTACHMENT 1**

**DATE: 09/2008**

**Cooling tower bypass after addition total residual chlorine (TRC) results (ug/ml).**

<b>Date</b>	<b>TRC (ug/ml)</b>
2	107
3	<50
4	82
8	<50
9	<50
10	115
11	189
16	<50
17	<50
18	<50
26	125
30	87

Ameren Services  
Environmental Services  
314.554.3480 (Telephone)  
314.554.4182 (Facsimile)  
ssweiss@ameren.com

One Ameren Plaza  
1901 Chouteau Avenue  
PO Box 66149  
St. Louis, MO 63166-6149  
314.621.3222

January 23, 2009

Department of Natural Resources  
Northeast Regional Office  
1709 Prospect Drive  
Macon, Missouri 63552-2602

Re: **Ameren UE Callaway Power Plant**  
**NPDES Permit No. MO-0098001**  
**Fourth Quarter, 2008 NPDES Discharge Monitoring Reports (DMRs)**



Dear Sir or Madam:

In accordance with requirements of the Union Electric Company, d/b/a Ameren UE Callaway Power Plant, NPDES Permit MO-0098001, please find enclosed the DMRs for the **Fourth Quarter 2008 (October, November, and December)**.

Please note, on November 23<sup>rd</sup>, the Total Residual Chlorine (TRC) permit limit was exceeded from Outfall 002 (Cooling Tower Blowdown). An NPDES Permit Exception Report was submitted to your office on November 25<sup>th</sup> notifying of the TRC limit violation.

Please call me at 314-554-3480 if you have any questions concerning the enclosed reports.

Sincerely,

A handwritten signature in black ink, appearing to read "Steven S. Weiss".

Steven S. Weiss  
Environmental Scientist, NPDES DMR Coordinator  
Ameren Environmental Services  
Ameren Services as Affiliated Agent for Union Electric Company, d/b/a AmerenUE

Attachment

bcc: R.S. Boutelle (CA-460)  
JCP / SSW  
WQ3.1.2.1



**PAGE 1 OF 4**

# NPDES MONITORING REPORT

**OUTFALL 001  
RADWASTE SYSTEM**

[illegible]

PARAMETER	FREQ.	LIMITS	
		MONTHLY AVERAGE	DAILY MAX.
FLOW (MGD)	EB	N.A.	N.A.
pH (STD)	EB	6.0-9.0	6.0-9.0
TSS (mg/l)	EB	30	45
Boron (mg/l)	EB	N.A.	N.A.
TRC (ug/l)	Monthly	N.A.	190
BOD (mg/l)	Monthly	N.A.	N.A.
O&G (mg/l)	Monthly	15	20

**ALL SAMPLES ANALYZED BY Ameren UE Callaway**

## Plant OPERATIONS LABORATORY USING

**METHODS SPECIFIED UNDER 10CSR 20-7.015**

## SOURCES

- 1 = WASTE MONITOR TANK A  
2 = WASTE MONITOR TANK B  
3 = STEAM GENERATOR BLOWDOWN  
4 = SEC. LIQ. WASTE MONITOR TANK A  
5 = SEC. LIQ. WASTE MONITOR TANK B  
6 = LIQ. RADWASTE DISCHARGE TANK A  
7 = LIQ. RADWASTE DISCHARGE TANK B  
EB = EACH BATCH

Date	BOD (mg/l)	TRC (ug/l)	O&G (mg/l)
1	—	10	4
6	<1.0	—	—

COMMENTS:

**Ameren UE Callaway Plant**

**PERMIT NO. MO-0098001**

**REPORTING PERIOD (MO/YR) 10/2008**

**PAGE 2 OF 4**

**NPDES MONITORING REPORT**

**OUTFALL 002  
COOLING TOWER BLOWDOWN**

DATE	FLOW (MGD)	TEMP (MAX °F)	TRC (ug/l)
1	5.2	76	<50
2	5.9	77	<50
3	6.3	76	59
4	5.6	77	<50
5	6.0	77	<50
6	4.4	80	<50
7	4.2	83	<50
8	6.5	76	50
9	8.7	79	58
10	8.5	79	67
11	7.5	70	50
12	8.8	74	<50
13	12.9	74	<50
14	9.8	73	<50
15	10.3	73	<50
16	9.3	72	<50
17	10.5	67	<50
18	8.8	64	<50
19	9.3	68	<50
20	10.0	69	<50
21	10.1	63	<50
22	9.0	64	<50
23	9.2	60	<50
24	9.8	67	<50
25	3.2	59	<50
26	0.1	57	<50
27	0.5	55	<50
28	0.5	57	<50
29	0	55	<50
30	1.7	63	<50
31	10.6	60	<50

DATE	TSS (mg/l)	TDS (mg/l)
6	65	1804
13	26	760
20	2	376
29	13	572

DATE	Sulfate (mg/l)	O&G (mg/l)
No	Sample	Required

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	CONT.	N.A.	N.A.
TOTAL SUSPENDED SOLIDS	WKLY.	N.A.	N.A.
TOTAL DISSOLVED SOLIDS	WKLY.	N.A.	N.A.
OIL AND GREASE	QRTLY (1)	15	20
SULFATE	QRTLY (1)	N.A.	N.A.
TEMPERATURE (MAXIMUM)	DAILY	110 ° F	110 ° F
pH	CONT.	6.0 - 9.0	6.0 - 9.0
TOTAL RESIDUAL CHLORINE	DAILY	N.A.	190 ug/L

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
OPERATIONS LAB USING METHODS SPECIFIED UNDER  
10CSR20-7.015.

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF  
FEBRUARY, MAY, AUGUST, NOVEMBER.

COMMENTS: No pH excursions occurred this month.

PERMIT NO. MO-0098001  
 REPORTING PERIOD (MO/YR) 10/2008  
 PAGE 3 OF 4

Ameren UE Callaway Plant

NPDES MONITORING REPORT

**OUTFALL 003**  
 WATER TREATMENT PLANT  
 NO DISCHARGE

**OUTFALL 007**

DATE	FLOW (MGD)	TSS (mg/l)	BOD (mg/l)	pH
	No	Sample	Required	

**SANITARY WASTE**

PARAMETER	FREQ.	LIMITS (mg/l)	
		MO. AVG.	WKLY. AVG.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	70	110
BOD	QRTLY (1)	45	65
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER

**OUTFALL 009**  
 INTAKE HEATER BLOWDOWN  
 NO DISCHARGE

**OUTFALLS 010 - 015**

DATE	OUTFALL	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	COD (mg/l)	pH
		No	Sample	Required		

**STORM WATER RUNOFF PONDS**

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	N.A.	N.A.
COD	QRTLY (1)	N.A.	N.A.
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	>6.0	>6.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER.

**OUTFALL 016**

DATE	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	pH	TRC (ug/l)
	No	Sample	Required		

**COOLING TOWER BYPASS**

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	30	100
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0
TRC	QRTLY (1)	N.A.	190

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER.

**OUTFALL 017**

ULTIMATE HEAT SINK  
 No Discharge

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
 OPERATIONS LABORATORY USING METHODS SPECIFIED  
 UNDER 10CSR 20-7.015

COMMENTS: Note that the discharge from the converted wetland and the flows reported herein are NOT discharged, as Outfall (#007) is recycled to the head of the Water Treatment Plant for further treatment and reuse.  
 Outfall #016 TRC results on Attachment I.

Ameren UE Callaway Plant

PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) 10/2008

PAGE 4 OF 4

NPDES MONITORING REPORT

"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."

Denise Schuelly (12217)  
Preparer

Maile P. Mary (2119)  
Reviewer

J. H. 4430  
Approved  
Plant Manager

**ATTACHMENT 1**  
**DATE: 10/2008**

**Cooling tower bypass after addition total residual chlorine (TRC) results (ug/ml).**

<u>Date</u>	<u>TRC (ug/ml)</u>
6	50
7	165
8	135
10	50

I:\CHEMISTRY\ADMIN\NPDES\ATTACHMENT 1 WORKSHEET.DOC

PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) 11/2008

**PAGE 1 OF 4**

# NPDES MONITORING REPORT

**OUTFALL 001  
RADWASTE SYSTEM**

[illegible]

PARAMETER	FREQ.	LIMITS	
		MONTHLY AVERAGE	DAILY MAX.
FLOW (MGD)	EB	N.A.	N.A.
pH (STD)	EB	6.0-9.0	6.0-9.0
TSS (mg/l)	HB	30	45
Boron (mg/l)	EB	N.A.	N.A.
TRC (ug/l)	Monthly	N.A.	190
BOD (mg/l)	Monthly	N.A.	N.A.
O&G (mg/l)	Monthly	15	20

**ALL SAMPLES ANALYZED BY Ameren UE Callaway**

# Plant OPERATIONS LABORATORY USING

**METHODS SPECIFIED UNDER 10CSR 20-7.015**

## SOURCES

- 1 = WASTE MONITOR TANK A  
2 = WASTE MONITOR TANK B  
3 = STEAM GENERATOR BLOWDOWN  
4 = SEC. LIQ. WASTE MONITOR TANK A  
5 = SEC. LIQ. WASTE MONITOR TANK B  
6 = LIQ. RADWASTE DISCHARGE TANK A  
7 = LIQ. RADWASTE DISCHARGE TANK B

EB = EACH BATCH

Date	BOD (mg/l)	TRC (ug/l)	O&G (mg/l)
3	---	<10	7
15	2.0	---	---

**COMMENTS:**

**Ameren UE Callaway Plant**

PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) 11/2008

PAGE 2 OF 4

**NPDES MONITORING REPORT**

**OUTFALL 002  
COOLING TOWER BLOWDOWN**

DATE	FLOW (MGD)	TEMP (MAX °F)	TRC (ug/d)
1	8.2	63	<50
2	5.5	62	<50
3	3.0	65	<50
4	0	62	<50 *
5	0	64	<50 *
6	0	66	<50 *
7	0	61	<50 *
8	0	64	<50 *
9	4.2	57	79
10	5.8	60	177
11	4.8	64	<50
12	4.7	63	<50
13	8.7	66	<50
14	6.6	72	<50
15	5.5	65	<50
16	6.0	62	<50
17	7.2	62	<50
18	5.2	60	70
19	0.7	62	108
20	1.0	63	101
21	6.4	59	70
22	5.0	58	51
23	3.3	61	237/50 (2)
24	4.4	60	<50
25	4.4	60	<50
26	4.0	60	<50
27	5.6	60	<50
28	5.6	60	<50
29	5.6	58	<50
30	5.5		<50

DATE	TSS (mg/l)	TDS (mg/l)
3	7	500
10	34	792
17	52	1130
24	55	1946

DATE	Sulfate (mg/l)	O&G (mg/l)
10	380	6

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	CONT.	N.A.	N.A.
TOTAL SUSPENDED SOLIDS	WKLY.	N.A.	N.A.
TOTAL DISSOLVED SOLIDS	WKLY.	N.A.	N.A.
OIL AND GREASE	QRTLY (1)	15	20
SULFATE	QRTLY (1)	N.A.	N.A.
TEMPERATURE (MAXIMUM)	DAILY	110 ° F	110 ° F
pH	CONT.	6.0 - 9.0	6.0 - 9.0
TOTAL RESIDUAL CHLORINE	DAILY	N.A.	190 ug/L

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
OPERATIONS LAB USING METHODS SPECIFIED UNDER  
10CSR20-7.015.

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF  
FEBRUARY, MAY, AUGUST, and NOVEMBER.

COMMENTS: No pH excursions occurred this month.

\*Dip samples

(2) NPDES exceedance of 237 ug/l TRC. Five-day report  
submitted.

**Ameren UE Callaway Plant**

PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) 11/2008

PAGE 3 OF 4

**NPDES MONITORING REPORT**

**OUTFALL 003  
WATER TREATMENT PLANT  
NO DISCHARGE**

**OUTFALL 007**

DATE	FLOW (MGD)	TSS (mg/l)	BOD (mg/l)	pH
18	0.018	5	<1	7.43

**SANITARY WASTE**

PARAMETER	FREQ.	LIMITS (mg/l)	
		MO. AVG.	WEEKLY AVG.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	70	110
BOD	QRTLY (1)	45	65
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER

**OUTFALL 002  
INTAKE HEATER BLOWDOWN  
NO DISCHARGE**

**OUTFALLS 010 - 015**

DATE	OUTFALL	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	CO D (mg/l)	pH
14	10	.015	107	3	15	8.12
14	11	.066	24	2	18	8.2
14	12	.005	8	4	10	8.91
14	15	.010	0	2	5	8.24

**STORM WATER RUNOFF PONDS**

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	N.A.	N.A.
COD	QRTLY (1)	N.A.	N.A.
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	>6.0	>6.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER.

**OUTFALL 016**

DATE	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	pH	TRC (ug/l)
13	5.18	9	2	7.82	93

**COOLING TOWER BYPASS**

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	30	100
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0
TRC	QRTLY (1)	N.A.	190

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, and NOVEMBER.

**OUTFALL 017**

ULTIMATE HEAT SINK  
No Discharge

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
OPERATIONS LABORATORY USING METHODS SPECIFIED  
UNDER 10CSR 20-7.015

COMMENTS: Note that the discharge from the converted wetland and the flows reported herein are NOT discharged, as this Outfall (#007) is recycled to the head of the Water Treatment Plant for further treatment and reuse.

No discharge noted on Outfall # 013

No discharge noted on Outfall # 014

Outfall 016 TRC sample results on Attachment 1.



Ameren UE Callaway Plant

PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) 11/2008

PAGE 4 OF 4

NPDES MONITORING REPORT

"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."

<u>Denise Schuff (12207)</u>	<u>Hail P. Gary (2119)</u>	<u>J. R. Hall 4430</u>
Preparer (Pin#)	Reviewer (Pin#)	Approved (Pin#) Plant Manager

# ATTACHMENT 1

DATE: 11/08

Cooling tower bypass after addition total residual chlorine (TRC) results (ug/ml).

<u>Date</u>	<u>TRC (ug/ml)</u>
10	<50
11	<50
12	167
13	93
15	<50
18	<50
19	<50

**PERMIT NO. MO-0098001**

**REPORTING PERIOD (MO/YR)** 12/2008

**PAGE** 1 **OF** 4

# NPDES MONITORING REPORT

**OUTFALL 001  
RADWASTE SYSTEM**

[illegible]

<i>PARAMETER</i>	<i>FREQ.</i>	<i>LIMITS</i>	
		<i>MONTHLY AVERAGE</i>	<i>DAILY MAX.</i>
FLOW (MGD)	EB	N.A.	N.A.
pH (STD)	EB	6.0-9.0	6.0-9.0
TSS (mg/l)	EB	30	45
Boron (mg/l)	EB	N.A.	N.A.
TRC (ug/l)	Monthly	N.A.	190
BOD (mg/l)	Monthly	N.A.	N.A.
O&G (mg/l)	Monthly	15	20

ALL SAMPLES ANALYZED BY Ameren UE Callaway

Plant OPERATIONS LABORATORY USING

**METHODS SPECIFIED UNDER 10CSR 20-7.015**

## SOURCES

- 1 = WASTE MONITOR TANK A  
2 = WASTE MONITOR TANK B  
3 = STEAM GENERATOR BLOWDOWN  
4 = SEC. LIQ. WASTE MONITOR TANK A  
5 = SEC. LIQ. WASTE MONITOR TANK B  
6 = LIQ. RADWASTE DISCHARGE TANK A  
7 = LIQ. RADWASTE DISCHARGE TANK B

EB = EACH BATCH

Date	BOD (mg/l)	TRC (ug/l)	O&G (mg/l)
3	220	<10	4

COMMENTS: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Ameren UE Callaway Plant**

PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) 12/2008

PAGE 2 OF 4

**NPDES MONITORING REPORT**

**OUTFALL 002**  
**COOLING TOWER BLOWDOWN**

DATE	FLOW (MGD)	TEMP (MAX °F)	TRC (ug/l)
1	5.7	87	<50
2	5.6	58	<50
3	7.3	59	<50
4	5.5	57	<50
5	5.3	57	<50
6	5.3	57	<50
7	5.5	57	84
8	5.3	58	182
9	5.4	59	<50
10	5.3	57	<50
11	5.0	56	86
12	5.3	57	104
13	4.8	59	<50
14	6.6	61	<50
15	3.6	55	<50
16	3.9	54	<50
17	4.0	55	<50
18	7.3	56	53
19	3.3	57	100
20	4.6	56	97
21	4.4	54	68
22	4.1	54	<50
23	4.2	53	57
24	5.5	55	<50
25	4.4	54	106
26	5.8	61	<50
27	4.6	62	<50
28	4.1	59	<50
29	4.3	60	<50
30	4.3	61	<50
31	4.3	57	<50

DATE	TSS (mg/l)	TDS (mg/l)
1	60	1888
8	44	1644
15	52	812
23	14	356
30	50	1414

DATE	Sulfate (mg/l)	O&G (mg/l)
No	Sample	Required

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	CONT.	N.A.	N.A.
TOTAL SUSPENDED SOLIDS	WKLY.	N.A.	N.A.
TOTAL DISSOLVED SOLIDS	WKLY.	N.A.	N.A.
OIL AND GREASE	QRTLY (1)	15	20
SULFATE	QRTLY (1)	N.A.	N.A.
TEMPERATURE (MAXIMUM)	DAILY	110 ° F	110 ° F
pH	CONT.	6.0 - 9.0	6.0 - 9.0
TOTAL RESIDUAL CHLORINE	DAILY	N.A.	190 ug/L

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
OPERATIONS LAB USING METHODS SPECIFIED UNDER  
10CSR20-7.015.

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF  
FEBRUARY, MAY, AUGUST, and NOVEMBER.

COMMENTS: No pH excursions occurred this month.

**Ameren UE Callaway Plant**

**PERMIT NO. MO-0098001**

**REPORTING PERIOD (MO/YR) 12/2008**

**PAGE 3 OF 4**

**NPDES MONITORING REPORT**

**OUTFALL 003  
WATER TREATMENT PLANT  
NO DISCHARGE**

**OUTFALL 007**

DATE	FLOW (MGD)	TSS (mg/l)	BOD (mg/l)	pH
	No	Samples	Required	

**SANITARY WASTE**

PARAMETER	FREQ.	LIMITS (mg/l)	
		MO. AVG.	WKLY. AVG.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	70	110
BOD	QRTLY (1)	45	65
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER

**OUTFALL 009  
INTAKE HEATER BLOWDOWN  
NO DISCHARGE**

**OUTFALLS 010 - 015**

DATE	OUTFALL	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	CO D (mg/l)	pH
		No	Samples	Required		

**STORM WATER RUNOFF PONDS**

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	N.A.	N.A.
COD	QRTLY (1)	N.A.	N.A.
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	>6.0	>6.0

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, NOVEMBER.

**OUTFALL 016**

DATE	FLOW (MGD)	TSS (mg/l)	O and G (mg/l)	pH	TRC (ug/l)
	No	Samples	Required		

**COOLING TOWER BYPASS**

PARAMETER	FREQ.	LIMITS	
		MO. AVG.	DAILY MAX.
FLOW	QRTLY (1)	N.A.	N.A.
TSS	QRTLY (1)	30	100
O and G	QRTLY (1)	15	20
pH	QRTLY (1)	6.0 - 9.0	6.0 - 9.0
TRC	QRTLY (1)	N.A.	190

(1) SAMPLES SHALL BE TAKEN DURING THE MONTHS OF FEBRUARY, MAY, AUGUST, and NOVEMBER.

**OUTFALL 017**

ULTIMATE HEAT SINK  
No Discharge

ALL SAMPLES ANALYZED BY Ameren UE Callaway Plant  
OPERATIONS LABORATORY USING METHODS SPECIFIED  
UNDER 10CSR 20-7.015

COMMENTS: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Ameren UE Callaway Plant

PERMIT NO. MO-0098001

REPORTING PERIOD (MO/YR) 12/2008

PAGE 4 OF 4

NPDES MONITORING REPORT

"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."

RS Boutelle 638  
Preparer (Pin#)

James J. Mall 5468  
Reviewer (Pin#)

John D. Patten 4430  
Approved (Pin#)  
Plant Manager