Tennessee Valley Authority, 1101 Market Street, BR4A, Chattanooga, Tennessee 37402

July 31, 2015

Ms. Deborah DeLong
Solid Waste Branch
Kentucky Division of Waste Management (KDWM)
200 Fair Oaks Lane
Frankfort, Kentucky 40601

Dear Ms. DeLong:

TENNESSEE VALLEY AUTHORITY (TVA) – PARADISE FOSSIL PLANT (PAF) – RESIDUAL LANDFILL PERMIT NO. 089-00012 – SEMI-ANNUAL GROUNDWATER – SURFACE WATER MONITORING REPORT – FIRST HALF 2015 REPORTING

The enclosed reports include the analytical results for the groundwater and surface water sampling for the residual landfill referenced above. This sampling event fulfills the monitoring requirement for the first half of 2015. There was no waste added to the residual landfill during this reporting period.

While there were historically consistent statistical exceedances noted for boron and chloride (well 97-44) and Total Dissolved Solids (TDS) (well 97-43) the analytical results for the this sampling event indicate no exceedances of Groundwater Protection Standards or Maximum Contaminant Levels (MCLs).

All results for these sampling events are shown in the enclosed reports on tables supplied by the Kentucky Division of Waste Management. Included are the facility information sheets, sample results, and the statistical analysis. For clarity, a Table of Contents immediately follows this letter.

If you have any questions regarding this report, please contact Amos Smith at (423) 751-7636 in Chattanooga, Tennessee.

Sincerely,

for Sam Hixson

Sam W. Hixson
Manager
Waste Permits, Compliance, and Monitoring

Enclosures
cc: Mr. Allan Shingleton
Geologist
Kentucky Division of Waste Management
Madisonville Regional Office
625 Hospital Drive
Madisonville, Kentucky 42431

ALS:SMF
Enclosures
cc (w/o Enclosures):
B. S. Fowler, BR 4A-C
T. L. Gamble, PAF 1A-DRK
J. K. Kirtley, PAF 1A-DRK (Enclosures)
A. L. Smith, BR 4A-C (Enclosures)
M. G. Tritapoe, BR 4A-C
ECM, ENVrecords (Enclosures)

TVA Paradise Fossil Plant
Residual Landfill – Permit # SW08900012
Groundwater and Surface Water Monitoring Report
June 2015
First Half 2015 Reporting

TABLE OF CONTENTS

JAMES E. BICKFORD
SECRETARY

PAUL E. PATTON
GOVERNOR

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
FRANKFORT OFFICE PARK
14 REILLY RD
FRANKFORT KY 40601

March 31, 1999

Joseph R. Bynum, Executive Vice President
Tennessee Valley Authority
1101 Market Street
Chattanooga, Tennessee 37402-2801

RE: Signature Authority for:
TVA Paradise Steam Plant (Drakesboro)
Permit No. 089-00012
Muhlenberg County

Tennessee Valley Authority Shawnee Fossil Plant
Permit No. 073-00041
McCracken County

Dear Mr.Bynum:

Thank you for notifying the cabinet of personnel changes in your organization. Due to this change, I have revised the listing of those positions which have signature authority for the above referenced landfills, in accordance with 401 KAR 47:160, Section 6.

This signature authority pertains to reports and applications that are required to be submitted to the Division of Waste Management. The positions authorized are:

Position	Type of Authority (Permits and/or Reports)
Plant Manager	Reports
Manager of Permitted Programs for Advanced Production Technology and Regulatory Integration	Reports

RECEIVED
APR 30 1999
Environmental Affairs

A copy of this letter must accompany any report submitted to the Division of Waste Management. The Division must be notified immediately upon any change in authority. Should you have any questions concerning the above, please contact me at (502) 564-6716, ext. 276.

Sincerely,

Mary Ann Goins, Admin. Spec., Pr.
Permit Administration Section
Solid Waste Branch
Division of Waste Management

RECEIVED
25000337
APR 29 1999
Executive Vice President
Fossil Power Group

c: Charlie Ritchie, Supervisor West Section
Carol Sole, Supervisor, Permit Administration Section
Paducah Regional Office
Madisonville Regional Office

JKW--5/3/99
cc: H. C. Kolb, Paradise
J. M. Loney, WT 8C-K

EDUCATION PAYS
Printed on Recycled Paper
An Equal Opportunity Employer M/F/D

ENERGY AND ENVIRONMENT CABINET

DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WASTE MANAGEMENT
200 FAIR OAKS LANE, 2ND FLOOR
FRANKFORT, KY 40601
TELEPHONE NUMBER (502) 564-6716

Groundwater and Surface Water Monitoring Sample Data Reporting Form

This form is to be utilized by those sites required by regulation (Kentucky Waste Management Regulations - 401 KAR 48:300 and 45:160) or by statue (Kentucky Revised Statues Chapter 224) to conduct groundwater and surface water monitoring under the jurisdiction of the Division of Waste Management. **You must report any indication of contamination within forty-eight (48) hours of making the determination using statistical analyses, direct comparison, or other similar techniques. Submitting the lab report is NOT considered notification.** Instructions for completing the form are attached. Do not submit the instruction pages.

1. Facility Name: Tennesee Valley Authority Paradise Fossil Plant

2. Activity: Residual Landfill

3. Agency Interest #:

4. Permit #: SW08900012

5. Finds/Unit No: KY1-640-013-156/1

6. Quarter & Year: 1st Half 2015

7. Check **one** of the following:

☐ Characterization ☐ Quarterly ☒ Semi-Annual ☐ Annual ☐ Assessment

8. Check applicable submittal: ☒ Groundwater ☐ Surface Water

FACILITY INFORMATION

9. Facility Name: Tennesessee Vally Authority Paradise Fossil Plant

10. Facility Address: 13246 Route 176, Suite 10, Drakesboro, KY 42337

11. County: Muhlenburg **12.** Latitude: N37° 15' 04" **13.** Longitude: W87° 00' 08"

14. Sampling date: 06/16/15

OWNER INFORMATION

15. Facility owner: Tennessee Valley Authority **16.** Phone number: (270) 476 - 3300

17. Contact person: Emma M. Taul **18.** Phone number: (270) 476 - 4366

19. Contact person title: Environmental Scientist

20. Mailing address: 13246 State Route 176, Suite 10, Drakesboro, KY 42337

SAMPLING PERSONNEL

(IF OTHER THAN LANDFILL OR LABORATORY)

21. Company: Tennessee Valley Autority

22. Contact person: Amos L. Smith **23.** Phone number: (423) 751 - 7636

24. TVA BR 4A-C, Mailing address: 1101 Market Street, Chattanooga, TN 37402-2801

LABORATORY RECORD

25. Laboratory: Environmental Science Corporation **26.** Lab ID No.: TN-2006

27. Contact person: Pam Langford **28.** Phone number: (800) 767-5859

29. Mailing address: 12065 Lebanon Road, Mt. Juliet, TN 37122

35. Certification statement: This certification clause shall be signed by the responsible person(s) described in 401 KAR 47:160, Section 6(1), and/or (2) and is required by 401 KAR 47:160, Section 6(4). This clause may be incorporated into a cover letter and attached to this submission. This clause shall accompany <u>every</u> report/application submitted to this office.

"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 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 such violations."

Terry L. Gamble — 7/30/15

SIGNATURE — DATE

Terry L. Gamble, Paradise Fossil Plant Manager

NAME and TITLE - PLEASE PRINT

TABLE 1

RESIDUAL LANDFILL - SEMIANNUAL MONITORING RESULTS - 1ST HALF 2015

Division of Waste Management
Solid Waste Branch
14 Reilly Road
Frankfort, KY 40601 (502) 564-6716

Permit Number: 089-00012

Facility: TVA - PARADISE FOSSIL PLANT

GROUNDWATER SAMPLE ANALYSES

AKGWA NUMBER [1], Facility Well/Spring Number				8001-3571		8001-3571		8001-3572		8001-3573		8003-0832		8003-0831	
Facility's Local Well or Spring Number (e.g. MW-1, etc.)				94-41		94-41		94-42		94-43		97-44		97-45	
Sample Date and Time (Month/Day/Year hour:minutes)				6/16/2015 10:35		6/16/2015 10:35		6/16/2015 12:50		6/16/2015 9:50		6/16/2015 11:45		6/16/2015 13:50	
Duplicate (Y" or "N") [2]				N		N		N		N		N		N	
Split ("Y" or "N") [3]				N		N		N		N		N		N	
Facility Sample ID Number (if applicable)				PAF-94-41-0615		PAF-94-41-0615-DUP		PAF-94-42-0615		PAF-93-43-0615		PAF-97-44-0615		PAF-97-45-0615	
Laboratory Sample ID Number (if applicable)				L771636-01		L771636-03		L771636-02		L771636-04		L771636-05		L771636-06	
Date of Analysis (Month/Day/Year)				6/17/15-6/25/15		6/17/15-6/25/15		6/17/15-6/25/15		6/17/15-6/25/15		6/17/15-6/25/15		6/17/15-6/25/15	
Gradient with respect to monitored unit (Up, Down, Side)				Down		Down		Up		Down		Down		Up	
CAS RN [4]	SYSTEMATIC PARAMETER NAME	T D [5]	UNITS OF MEAS.	METHOD	DETECTED VALUE OR PQL [6]	FLAG	DETECTED VALUE OR PQL [6]	FLAG	DETECTED VALUE OR PQL [6]	FLAG	DETECTED VALUE OR PQL [6]	FLAG	DETECTED VALUE OR PQL [6]	FLAG	DETECTED VALUE OR PQL [6]	FLAG
7440-38-2	Arsenic	T	mg/L	EPA 6020	<0.002		<0.002		<0.002		<0.002		0.00502		<0.002	
1332-21-4	Asbestos	T	Mf/L	EPA 600	<102		<102		<102		<102		<102		<102	
7440-39-3	Barium	T	mg/L	EPA 6020	0.015		0.0152		0.0105		0.0112		0.0122		0.014	
7440-42-8	Boron	T	mg/L	EPA 200.7	0.434		0.428		0.872		0.453		1.87		0.433	
7440-43-9	Cadmium	T	mg/L	EPA 6020	<0.001		<0.001		<0.001		<0.001		<0.001		<0.001	
S0130- -	Chemical Oxygen Demand	T	mg/L	EPA 410.4	<10		<10		<10		<10		<10		13.4	
16887-00-6	Chloride	T	mg/L	EPA 9056	4.15		2.7		7.08		16.1		56.6		3.47	
7440-47-3	Chromium	T	mg/L	EPA 6020	<2		<2		<2		<2		<2		<2	
7439-89-6	Iron	T	mg/L	EPA 200.7	1.76		1.66		0.845		0.692		2.95		<0.1	
7439-92-1	Lead	T	mg/L	EPA 6020	<0.002		<0.002		<0.002		<0.002		<0.002		<0.002	
7439-97-6	Mercury	T	mg/L	EPA 7470A	<0.2		<0.002		<0.002		<0.002		<0.002		<0.002	
S0595- -	Nitrate	T	mg/L	EPA 353.2	<0.1		<0.1		<0.1		0.127		<0.1		<0.1	
S0296- -	pH		STD	(Field)	6.2		--		6.3		6.3		6.3		6.3	
7782-49-2	Selenium	T	mg/L	EPA 6020	<0.002		<0.002		<0.002		<0.002		<0.002		<0.002	
7440-23-5	Sodium	T	mg/L	EPA 200.7	239		223		268		546		402		304	
S0145- -	Specific Conductance		umhos/cm	(Field)	3867		--		4214		5467		3632		3510	
S0906- -	Static Water Level Elevation		feet	(Field)	473.13		0.00		488.06		476.28		473.00		490.26	
S0907- -	Temperature		°F	(Field)	23.5		--		23.7		25.8		22.4		23.8	
S0266- -	Total Dissolved Solids	T	mg/L	SM 2540C	3000		2950		4280		5210		3260		3320	
S0268- -	Total Organic Carbon	T	mg/L	SM 9060A	14.4		11.8		9.98		13.3		9.5		9.14	

[1] AKGWA # is 0000-0000 for any type of blank.

[2] Respond 'Y' if the sample was a duplicate of another sample in this report.

[3] Respond 'Y' if the sample was split and analyzed by separate laboratories.

[4] Chemical Abstracts Service Registry Number or unique identifier number assigned by agency.

[5] "T" = Total; "D" = Dissolved

[6] "<" indicates a non-detect; do not use 'ND' or 'BDL'. Value then shown is Practical Quantitation Limit .

NS = No sample; insufficient water.

J = Estimated value
B = Analyte found in blank
A = Average value
N = Presumptive ID
D = Concentration from analysis of a secondary dilution factor

COMMENTS

TENNESSEE VALLEY AUTHORITY - PARADISE FOSSIL PLANT
PERMIT # 089-00012 FINDS # KY1640013156 / 1
RESIDUAL LANDFILL
GROUNDWATER MONITORING REPORT
1st HALF 2015

Introduction

This report contains semiannual groundwater monitoring results for samples collected June 16, 2015 at the Paradise Fossil Plant (PAF) residual landfill. Monitoring data and related facility information are reported on forms provided by the Kentucky Division of Waste Management (KDWM). Chemical analyses for all constituents except asbestos were performed by ESC Lab Services, Inc. (ESC) and completed on June 29, 2015. Asbestos analyses was conducted by McCall and Spero, Louisville, Kentucky.

Evaluation of Groundwater Monitoring Data

Table 2 summarizes the June 16, 2015 groundwater monitoring data for permit-required constituents listed in the revised facility permit dated March 19, 2012 having KDWM maximum contaminant levels (MCL). These constituents include arsenic, barium, cadmium, chromium, lead, mercury, nitrate and selenium. Results indicate that constituent concentrations are below MCLs for all samples.

Statistical evaluation of compliance (downgradient) data is limited to permit-listed parameters not having KDWM MCLs. These parameters include asbestos, boron, chloride, COD, iron, pH, sodium, specific conductivity, and TDS. In general, prediction intervals computed on pooled background sample data recorded since December 1997 from wells 94-42 and 97-45 are compared to sample measurements for each downgradient monitoring well. Poisson prediction intervals (PPI) based on counts (or number of detectable measurements in downgradient wells) are applied to asbestos which historically exhibits more than 90% nondetects. Prediction intervals are estimated at the 95% confidence level (i.e., α=0.05 false positive rate). Parametric prediction intervals (PPI) are used to evaluate boron, sodium, and specific conductance which have normally distributed data sets. PPI are calculated using a site-wide error rate and individual error rate of 0.05. Nonparametric prediction intervals (NPI) are used to evaluate the remaining constituents. One-sided upper prediction limits (UPL) derived from pooled background data having a 1-α^* probability of including at least one of two future measurements at downgradient wells are compared to constituent data (except pH) for each downgradient well (where α^* is the site-wide false positive rate). Because low or high pH extremes can

potentially produce objectionable water quality, pH data are compared to both upper and lower prediction limits derived from pooled background data.

Statistical testing results for the June 16, 2015 compliance monitoring data are summarized in Tables 3 and 4. Results indicates well 94-43 had a UPL exceedance for TDS and well 97-44 had UPL exceedances for boron and chloride during this sampling event.

Groundwater Conditions

Figure 1 shows the shallow groundwater potentiometric surface at the residual landfill site on June 16, 2015, based on water level measurements made in facility monitoring wells prior to sampling. The potentiometric surface slopes southeastward across the landfill, generally following the overall topographic trend of the area. The estimated average hydraulic gradient across the site is approximately 0.026. Darcy groundwater flux through the mine spoil overburden is estimated to be approximately 2.8 feet/year based upon a median hydraulic conductivity of 0.96 feet/day ($3.4x10^{-4}$ cm/sec) for the overburden.

TABLE 2. Data Comparisons to Maximum Contaminant Levels

Constituent	Units	KDEP MCL	Well 94-41[1]		Well 94-42		Well 94-43		Well 97-44		Well 97-45	
			data	>MCL ?	data	>MCL ?	data	>MCL ?	data	>MCL ?	data	>MCL ?
Arsenic	mg/L	0.01	<102	no	<102	no	<102	no	<102	no	<102	no
Barium	mg/L	2	0.015	no	0.0105	no	0.0112	no	0.0122	no	0.014	no
Cadmium	mg/L	0.005	<0.001	no	<0.001	no	<0.001	no	<0.001	no	<0.001	no
Chromium	mg/L	0.1	<2	no	<2	no	<2	no	<2	no	<2	no
Lead	mg/L	0.05	<0.002	no	<0.002	no	<0.002	no	<0.002	no	<0.002	no
Mercury	mg/L	0.002	<0.2	no	<0.002	no	<0.002	no	<0.002	no	<0.002	no
Nitrate	mg/L	10	<0.1	no	<0.1	no	0.127	no	<0.1	no	<0.1	no
Selenium	mg/L	0.05	<0.002	no	<0.002	no	<0.002	no	<0.002	no	<0.002	no

[1]*Data values are averages of duplicate sample measurements.*

TABLE 3. Parametric Prediction Interval Test Results

Constituent	Units	UPL[1]	Well 94-41		Well 94-43		Well 97-44	
			Data	>UPL ?	Data	>UPL ?	Data	>UPL ?
Boron	mg/L	1.26	0.434	no	0.453	no	1.87	yes
Iron	mg/L	136	1.76	no	0.692	no	2.95	no
pH[2]	s.u.	6.02-7.03	6.2	no	6.3	no	6.3	no
Sodium	mg/L	625	239	no	546	no	402	no
Spec. conductance	µs/cm	5928	3867	no	5467	no	3632	no

[1]*UPLs updated using pooled upgradient well data through 6/16/2015.*
[2]*pH data compared to LPL and UPL.*

TABLE 4. Nonparametric Prediction Interval Test Results

Constituent	Units	UPL[1]	Well 94-41		Well 94-43		Well 97-44	
			Data	>UPL ?	Data	>UPL ?	Data	>UPL ?
Chloride	mg/L	41	4.15	no	16.1	no	56.6	yes
COD	mg/L	50	<10	no	<10	no	<10	no
TDS	mg/L	5100	3000	no	5210	yes	3260	no

[1]*UPLs updated using pooled upgradient well data through 12/10/2014.*

TABLE 5. Poisson Prediction Interval Test Results

Constituent	Units	UPL[4]	Well 94-41	Well 94-43	Well 97-44	Total # Detects	>UPL?
Asbestos	MF/L	1.16	<0.102	<0.102	<0.102	0	no

[3]*UPL units are detections per sampling event.*

TABLE 6. Boron Background Data Pool Results (Collected June 2012 to June 2015)

Location ID	Sample Date	Lab ID	Boron, total (mg/L)
PAF-94-42	06/26/2012	L582499-02	0.73
PAF-94-42	09/11/2012	L594653-01	0.69
PAF-94-42	03/26/2013	L627424-01	0.86
PAF-94-42	06/04/2013	L639260-03	0.75
PAF-94-42	09/10/2013	92171751001	0.752
PAF-94-42	09/10/2013	92171751002	0.748
PAF-94-42	03/18/2014	4093551002	0.638
PAF-94-42	03/18/2014	4093551003	0.628
PAF-94-42	06/17/2014	4098410003	0.794
PAF-97-45	06/26/2012	L582499-05	0.46
PAF-97-45	06/26/2012	L582499-06	0.45
PAF-97-45	09/11/2012	L594653-02	0.48
PAF-97-45	09/11/2012	L594653-03	0.48
PAF-97-45	03/26/2013	L627424-02	0.43
PAF-97-45	03/26/2013	L627424-03	0.41
PAF-97-45	06/04/2013	L639260-06	0.39
PAF-97-45	09/10/2013	92171751003	0.443
PAF-97-45	03/18/2014	4093551005	0.333
PAF-97-45	06/17/2014	4098410006	0.375
PAF-97-45	12/10/2014	L738354-04	0.57
PAF-97-45	12/10/2014	L738354-02	0.59
PAF-97-45	06/16/15	L771636	0.433

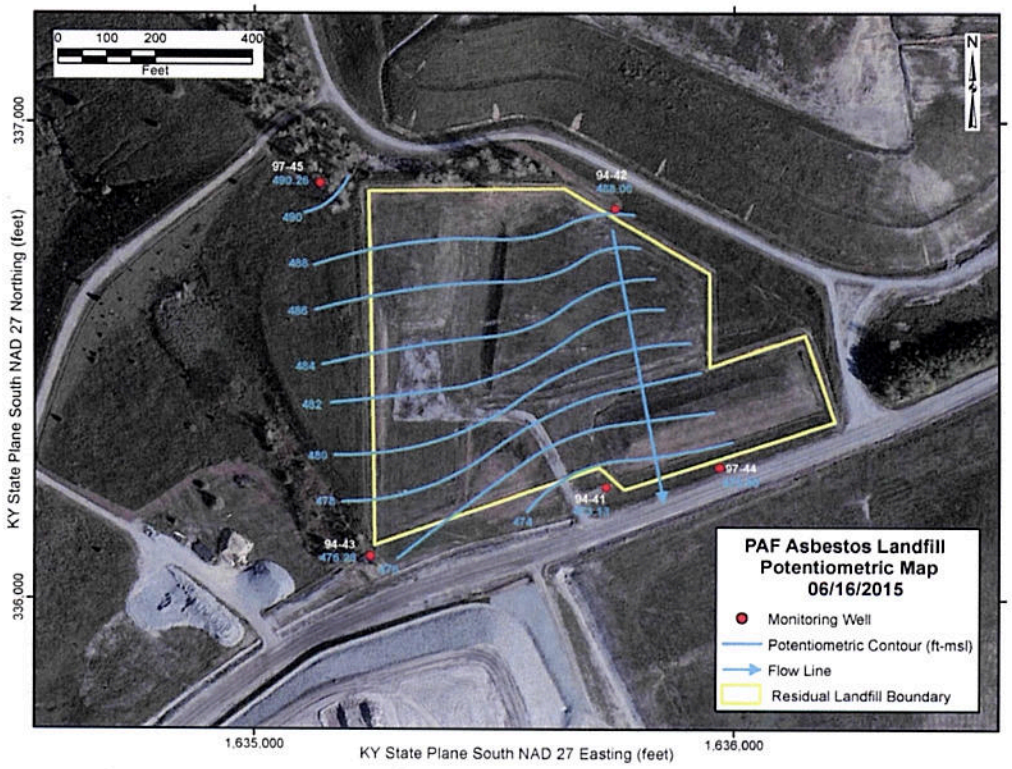

FIGURE 1. Shallow Groundwater Potentiometric Surface on June 16, 2015

ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WASTE MANAGEMENT
200 FAIR OAKS LANE, 2ND FLOOR
FRANKFORT, KY 40601
TELEPHONE NUMBER (502) 564-6716

Groundwater and Surface Water Monitoring Sample Data Reporting Form

This form is to be utilized by those sites required by regulation (Kentucky Waste Management Regulations - 401 KAR 48:300 and 45:160) or by statue (Kentucky Revised Statues Chapter 224) to conduct groundwater and surface water monitoring under the jurisdiction of the Division of Waste Management. **You must report any indication of contamination within forty-eight (48) hours of making the determination using statistical analyses, direct comparison, or other similar techniques. Submitting the lab report is NOT considered notification.** Instructions for completing the form are attached. Do not submit the instruction pages.

1. Facility Name: Tennesee Valley Authority Paradise Fossil Plant

2. Activity: Residual Landfill

3. Agency Interest #:

4. Permit #: SW08900012

5. Finds/Unit No: KY1-640-013-156/1

6. Quarter & Year: 1st Half 2015

7. Check **one** of the following:

☐ Characterization ☐ Quarterly ☒ Semi-Annual ☐ Annual ☐ Assessment

8. Check applicable submittal: ☐ Groundwater ☒ Surface Water

FACILITY INFORMATION

9. Facility Name: Tennesessee Vally Authority Paradise Fossil Plant

10. Facility Address: 13246 Route 176, Suite 10, Drakesboro, KY 42337

11. County: Muhlenburg **12.** Latitude: N37° 15' 04" **13.** Longitude: W87° 00' 08"

14. Sampling date: 04/15/15

OWNER INFORMATION

15. Facility owner: Tennessee Valley Authority **16.** Phone number: (270) 476 - 3300

17. Contact person: Emma M. Taul **18.** Phone number: (270) 476 - 4366

19. Contact person title: Environmental Scientist

20. Mailing address: 13246 State Route 176, Suite 10, Drakesboro, KY 42337

SAMPLING PERSONNEL

(IF OTHER THAN LANDFILL OR LABORATORY)

21. Company: Tennessee Valley Autority

22. Contact person: Amos L. Smith **23.** Phone number: (423) 751 - 7636

24. TVA BR 4A-C, Mailing address: 1101 Market Street, Chattanooga, TN 37402-2801

LABORATORY RECORD

25. Laboratory: SMR Laboratories, Inc. **26.** Lab ID No.: TN100456

27. Contact person: Lisa Duvall **28.** Phone number: (270)754-9928

29. Mailing address: 200 N. First St,, Central City, KY 42330

RESIDUAL LANDFILL - QUARTERLY MONITORING RESULTS - 1st Half 2015

Division of Waste Management
Solid Waste Branch
14 Reilly Road
Frankfort, KY 40601 (502) 564-6716

Permit Number: 089-00012

Facility: TVA - PARADISE FOSSIL PLANT

SURFACE WATER SAMPLE ANALYSES

Monitoring Sample Location					MONITORING SAMPLE POINT		UPGRADIENT MONITORING POINT	
Sample Sequence # (For Official Use Only)								
Sample Date and Time (Month/Day/Year hour:minutes)					04/15/2015 13:00:00 PM		NA	
Duplicate (Y" or "N") [2]					N		NA	
Split ("Y" or "N") [3]					N		NA	
Facility Sample ID Number (if applicable)					MSP 1, MSP 2, MSP 3, MSP 4		UMSP 1, UMSP 2, UMSP 3, UMSP 4	
Laboratory Sample ID Number (if applicable)					PAF-RL-SWR		NA	
Date of Analysis (Month/Day/Year)					4/20/2015		NA	
Climatic conditions (Cloudy,etc) and Temperature					Cloudy 59 degree F		NA	
	SYSTEMATIC PARAMETER NAME	TD[5]	UNITS OF MEAS.	METHOD	DETECTED VALUE OR MQL	FLAG	DETECTED VALUE OR MQL	FLAG
	BOD (5 DAY)	T	mg/L	SM-5210B-BOD	<3		NA	
	CHLORIDE	T	mg/L	EPA-300.0	0.594		NA	
	CONDUCTIVITY	T	µmhos/cm	2510B	689		NA	
	COD (CHEMICAL OXYGEN DEMAND)	T	mg/L	SM-5220D	38		NA	
	TOTAL DISSOLVED SOLIDS	T	mg/L	SM-2540C	529		NA	
	TOTAL BORON	T	mg/L	EPA-200.7	0.203		NA	
	TOTAL CALCIUM	T	mg/L	EPA-200.7	115		NA	
	HARDNESS as CaCO3(SM-2340B)	T	mg/L	EPA-200.7	366		NA	
	TOTAL IRON	T	mg/L	EPA-200.7	0.403		NA	
	TOTAL MAGNESIUM	T	mg/L	EPA-200.7	19.2		NA	
	TOTAL SODIUM	T	mg/L	EPA-200.7	2.76		NA	
	TOTAL SULFATE	T	mg/L	EPA-300.0	236		NA	
	pH	T	s.u.	FIELD METER	7.75		NA	

[1] AKGWA # is 0000-0000 for any type of blank.
[2] Respond 'Y' if the sample was a duplicate of another sample in this report.
[3] Respond 'Y' if the sample was split and analyzed by separate laboratories.
[4] Chemical Abstracts Service Registry Number or unique identifier number assigned by agency.
[5] "T" = Total; "D" = Dissolved
[6] "<" indicates a non-detect; do not use 'ND' or 'BDL'.