



**State of Tennessee**  
**DEPARTMENT OF ENVIRONMENT AND CONSERVATION**  
**KNOXVILLE ENVIRONMENTAL FIELD OFFICE**  
**3711 MIDDLEBROOK PIKE**

**KNOXVILLE, TENNESSEE 37921-6538**

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August 24, 2015

Mr. Sam W. Hixson  
Tennessee Valley Authority  
1101 Market Street, BR4a  
Chattanooga, Tennessee 37402

RE: IDL 01 103 0220 TVA Bull Run Fossil Plant (BRF), Anderson County  
Part II Permit Application  
Hydrogeologic Site Investigation, CCP Proposed Landfill

Dear Mr. Hixson:

The Division of Solid Waste Management (Division) has received the subject report and conducted its initial completeness review. The Division finds the investigation and report to be complete in accordance with Rule 0400-11-01-.04 (7). The Division's Hydrogeological Report Completeness Checklist is attached.

Any questions or comments can be directed to Patrick Mulligan of the Knoxville Environmental Field Office at 865.594.5582.

Regards,

A handwritten signature in black ink, reading "Patrick Mulligan", is written over the typed name.

Patrick Mulligan, P.G.  
Environmental Scientist  
Division of Solid Waste Management

A handwritten signature in blue ink, reading "R. Awasthi", is written over the typed name.

Revendra Awasthi  
Field Office Manager  
Division of Solid Waste Management

c. KEFO File  
NCO File

Enc.

**PART II APPLICATION**  
**HYDROGEOLOGICAL REPORT COMPLETENESS CHECK LIST**

**Proposed Site and LF Class:** TVA Bull Run Fossil Plant CCR IDL 01 103 0220

**Submitted by:** TVA - AECOM

**Original submittal on:** 08—07-2015

**Revisions submitted on:** \_\_\_\_\_

Item	Yes	No	Comments
Certified by a qualified registered geologist or qualified engineer	X		Report Certification. Page 2. Margaret G. Gilliland, P.G.
Descriptions and/or locations of soil sampling and procedures used	X		Section 3.3 Drilling, Page 7. Section 3.5 Geotechnical Sampling and Lab Analysis – 200 foot grid
Soil classifications (USCS)	X		Section 3.5 Geotechnical Sampling and Lab Analysis. Soil and rock characterized using USCS and ASTM. Appendix D - Geotechnical Site Evaluation Report
Saturated hydraulic conductivity of undisturbed soils to be buffer ASTM D-1587 & D-5084	X		6.9x10 <sup>-9</sup> to 1.1x10 <sup>-6</sup> range Table 4.1 Appendix D – Geotechnical Site Evaluation Report
Saturated hydraulic conductivity of remolded soil to be liner & cover ASTM D-698 or D-1557 & D-5084	X		1.2x10 <sup>-8</sup> to 5.1x10 <sup>-7</sup> Standard Proctor 1.6x10 <sup>-7</sup> to 4.1x10 <sup>-6</sup> Modified Proctor Table 4.1 Appendix D – Geotechnical Site Evaluation Report
Description of sampling and analytical procedures used	X		Section 3.3 Drilling, Page 7. Section 3.5 Geotechnical Sampling and Lab Analysis
Water table elevations at time of drilling	X		Moisture content of soils reported on boring logs. Groundwater elevations reported on boring logs where encountered. Appendix C and D.

Reviewed by:

*Patrick McElroy*

Signature:

*[Signature]*

Date:

8-24-15

**PART II APPLICATION**  
**HYDROGEOLOGICAL REPORT COMPLETENESS CHECK LIST**

Water table elevations at least twice more	X	Potentiometric surface presented for four monitoring events. Continuous monitoring otherwise with pressure transducers.  Figures 4.5A – 4.5C
Map with surveyed soil borings and boundary of proposed fill area	X	Figure 3.1  Appendix D – Geotechnical Site Evaluation Report
Groundwater flow map	X	Potentiometric maps provided for all four monitoring events.  Figures 4.5A – 4.5C
Groundwater recharge and discharge features	X	Recharge by surface infiltration and localized surface water features. Seeps and ponds noted with minor influence to uppermost water table. Sections 4.3.1 – Groundwater Occurrence and Section 5.1 – Conceptual Site Model
Springs, wells within 1 mile radius	X	Appendix A – Public and Private Water Supply Source Survey
Public water supply within 2 mile radius	X	Appendix A – Public and Private Water Supply Source Survey
Summary of geological and hydrological evaluations	X	Conceptual site model complete and details. Monitoring system proposed.  Conceptual design and site geotechnical considerations in Appendix D.

Reviewed by: Patrick E. Mully Signature: PM Date: 8-24-15

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