

**Ameren Missouri Labadie Energy Center
Proposed Utility Waste Landfill
Franklin County, Missouri**

**Table 1c
Revisions to Prior CPA Application
November 2013**

Main Report, Tables, Figures, Appendices and Plan Sheets		Revised	Not Revised	Explanation of Change
Report Covers		X		Added Revision date (November 2013)
MDNR Construction Permit Application Form		X		New Signature and Date
Construction Permit Application Report Title Page		X		Added Revision date (November 2013) and Engr Seals/Signatures/Date
Table of Contents		X		Identified all Sections, Tables, Figures, Appendices and Plan Sheets that were revised; Updated page numbers
Construction Permit Application Text				See Revised Sections Below
Section 1.0	INTRODUCTION		X	No Change
Section 2.0	SITE SELECTION			See Revised Sections Below
	Section 2.3 Site Access	X		Minor wording change; date of letter added
	Section 2.4 Zoning and Land Use	X		Added listing of Appendix F, Franklin County correspondence
	Section 2.8.6 Unstable Areas	X		Wording changes; min. FS changed; Added text to reflect Table E-2 revisions; other references to Revised Appendix J
Section 3.0 LANDFILL DESIGN				See Revised Sections Below
	Section 3.1 Description of Landfill Design	X		Expanded final cover description
	Section 3.1.3 Environmental Protection	X		Minor wording change; reference to anticipated future regulatory revisions
	Section 3.3.2 UWL Disposal Area Construction Sequence	X		Corrected 'flexible concrete mat' to 'fabric-formed concrete mat' (FCM)
	Section 3.3.2.1 Phase Construction Sequence	X		Corrected 'flexible concrete mat' to 'fabric-formed concrete mat' (FCM)
	Section 3.7.1 Stormwater Runoff Controls	X		Minor wording changes; leachate references
	Section 3.7.2 Water Quality Permits	X		Minor wording revision to last sentence
	Section 3.8.2.1 Soil Component	X		Expanded the discussion of soil stockpile testing
	Section 3.9.1 Leachate Generation Rate	X		Added Table O-1 description on leachate generation
	Section 3.9.2 Water Storage and Disposal	X		Revised to expand leachate management discussion
	Section 3.10.2 Groundwater Monitoring System	X		Revised for the addition of 7 wells
Section 4.0 LANDFILL OPERATION				See Revised Sections Below
	Section 4.1.2 Sequence of Phase Construction	X		Added construct sequence items for ponds and perimeter ditch, and vegetation maintenance
	Section 4.5 Water Quality	X		Added references to Sections 3.7 and 3.9 (which were revised); Corrected reference to Section 10
	Section 4.5.2 Leachate Management in the UWL	X		Added references to Section 3.9.2 (which was revised) and Appendix O
List of Tables				
Table 1a	Applicable Regulatory References by Table of Contents	X		Added Table 1c
Table 1b	Applicable Regulatory References by Regulatory Citation		X	
Table 1c	Table of Revisions to Prior CPA Application	X		New document developed to identify revisions since August 2013
List of Figures				
Figure 1	Site Location Map		X	
Figure 2	Sequence of Cell Construction		X	
Figure 3	Entrance Sign Detail		X	
List of Appendices				
Appendix A	Property Deeds		X	
Appendix B	Articles of Organization		X	
Appendix C	Good Standing Certificate	X		Updated with current Good Standing Certificate
Appendix D	Violation History Disclosure Form		X	
Appendix E	Request for Recommendation from East Central Solid Waste Management District, Region I		X	
Appendix F	Franklin County Requirements	X		Updated with additional County correspondence since August 2013
Appendix G	Adjacent Landowners or Landowners within 1000 feet	X		Table 1 - ownership verified (no changes) and corrected name misspellings; Figure 1 printed in color for clarity
Appendix H	Floodplain Documentation		X	
Appendix I	Wetland Assessment		X	
Appendix J	Report Titled "Geotechnical Engineering Report for Construction Permit Application" by Reitz & Jens, dated 11/30/12			See Revised Sections Below
	Cover page and appendices title page	X		Revised to show November 2013 revision date
	Table of Contents, Pages TC-a through TC-iii	X		Revised page numbers in text
	Section 1.3	X		Added last paragraph to clarify use of PHGA from USGS maps
	Section 3.1	X		Added last sentence to clarify use of measured physical properties of soils
	Section 3.2.2	X		First line of second paragraph, spelling correction; added last sentence to clarify use of measured physical properties of ponded CCP
	Section 4.1	X		Added last paragraph to clarify use of measured physical properties of natural soils
	Section 5.1.1	X		Added last paragraph to clarify use of PHGA from USGS maps and magnitude (Mw)
	Section 5.1.2	X		Added last paragraph to clarify use of PHGA and derived times histories
	Section 5.3	X		Added last paragraph as conclusion of analyses of probably horizontal deformations
	Section 6.1.1	X		Added last paragraph as conclusion of static slope stability analyses
	Section 6.1.2	X		Added last paragraph as conclusion of slope stability analyses for seismic loads
	Section 6.4	X		Modified last 2 sentences of first paragraph to clarify bearing capacity analysis of unconsolidated natural soils; and added new second paragraph to clarify bearing capacity analysis of consolidated natural soils
	Section 6.5	X		Added last paragraph as conclusion of stability analyses with range of CCP unit weights
	Section 9.0	X		First line of paragraph changed "permanent" to "all" because FCM to be used for the exterior slopes of all perimeter berms
	Appendix C - Results of Seismic Analyses	X		Added computer runs for deformation analysis for Time History #2 and Ky=0.13g

**Ameren Missouri Labadie Energy Center
Proposed Utility Waste Landfill
Franklin County, Missouri**

**Table 1c
Revisions to Prior CPA Application
November 2013**

Main Report, Tables, Figures, Appendices and Plan Sheets		Revised	Not Revised	Explanation of Change
Appendix J (continued)	Appendix E - Results of Slope Stability Analyses	X		Revised Table E-1 to show residual shear strengths from alternate analysis of liquefied soils; Revised Table E-2, Summary of Stability Analyses to clarify recommended minimum factors of safety, added factors of safety with alternate analyses with liquefied soils, and added results of analyses with greater estimated unit weight of CCPs
	Appendix H - Appendix 2, Sub-Appendix D from DSI	X		New sub-appendix with copy of Appendix 2, Sub-Appendix D from DSI: Analysis of CPT Soundings and Comparison with Borings
Appendix K	Soil Material Volume and Balance Calculations		X	
Appendix L	Landfill Life Estimate		X	
Appendix M	Erosion Calculations		X	
Appendix N	Stormwater Calculations		X	
Appendix O	H.E.L.P. Model Results		X	
Appendix P	Construction Quality Assurance Plan	X		Revised for HDPE seam test procedures (Air Pressure) and other clarifications
Appendix Q	Groundwater Sampling and Analysis Plan	X		Revised for the addition of 7 wells
	Appendix Q List of Figures, Tables & Appendices			See Revised Sections Below
	Figure 1 - Site Location Map		X	
	Figure 2 - Monitoring Well Location Map	X		Revised for the addition of 7 wells
	Figure 3 - Typical Groundwater Monitoring Well Construction Detail	X		Revised for the addition of 7 wells
	Table 1 - Groundwater Monitoring Well Information Summary	X		Revised for the addition of 7 wells
	Table 2 - Groundwater Monitoring Schedule		X	
	Appendix 1 - Driller's Logs and Monitoring Well Construction Details		X	
	Appendix 2 - Missouri Solid Waste Management Rule - Constituents for Detection Monitoring (10 CSR 80-11.010, Appendix I)		X	
	Appendix 3 - Field Equipment Calibration Forms and Procedures		X	
	Appendix 4 - Sample Container and Preservation Guidelines and Groundwater Sampling Bottle Inventory Form		X	
	Appendix 5 - Monitoring Well Field Inspection Form		X	
	Appendix 6 - Field Sampling Log and Volume Tracking Log Forms		X	
	Appendix 7 - Example Chain-of-Custody Field Record Form		X	
	Appendix 8 - Decision Flow Charts		X	
Appendix R	Closure and Post-Closure Plan		X	
Appendix S	Utility Waste Landfill Emergency Contacts		X	
Appendix T	Recordkeeping and Reporting Forms		X	
Appendix U	Draft FAI		X	
Appendix V	Survey Plat		X	
Appendix W	Groundwater Hydraulic Data		X	
Appendix X	Documentation of Groundwater Monitoring System Design	X		Revised cover page to reflect X(a) and X(b)
Appendix X(a)	Documentation of Groundwater Monitoring System Design	X		Added new cover page to reflect renaming the existing documents to Appendix X(a)
Appendix X(b)	Documentation of Supplemental Groundwater Monitoring Well Design	X		Added new Appendix X(b)
Appendix Y	Miscellaneous Engineering Calculations	X		Revised cover page to reflect Y© revision
Appendix Y(a)	Leachate Pipe and Pump Calculations		X	
Appendix Y(b)	Estimated Maximum Settlements Leachate		X	
Appendix Y(c)	Water Management Calculations	X		Corrected leachate tank diameter from 12 ft to 8 ft
Appendix Y(d)	Flood Mitigation Calculations		X	
Appendix Z	Geosynthetics Design Calculations		X	
Appendix Z	Groundwater Demonstration		X	
List of Plan Sheets				
Sheet 1	Cover Sheet	X		Added Revision Date November 2013
Sheet 2	Existing Site Conditions		X	
Sheet 3	Project Overview	X		Revised for the addition of 7 wells
Sheet 4	Land Use and Zoning within 1/4 mile		X	
Sheet 5	Overall Bottom Grading Plan (Top of Liner)	X		Revised for the addition of 7 wells
Sheet 6	Cell 1 Grading Plan (Top of Liner)		X	
Sheet 7	Cell 2 Grading Plan (Top of Liner)		X	
Sheet 8	Cell 3 Grading Plan (Top of Liner)		X	
Sheet 9	Cell 4 Grading Plan (Top of Liner)		X	
Sheet 10	Overall Final Grading Plan	X		Revised for the addition of 7 wells
Sheet 11	Phase 1 Final Grading Plan		X	
Sheet 12	Phase 2 Final Grading Plan		X	
Sheet 13	Phase 3 Final Grading Plan		X	
Sheet 14	Phase 4 Final Grading Plan		X	
Sheet 15	Geomembrance and Cover Details		X	
Sheet 16	Stormwater Pond Storage and Transfer Details	X		Deleted Note to address MDNR comment
Sheet 17	Liner Details		X	
Sheet 18	Miscellaneous Details 1	X		Revised Detail 2/18 to adapt for deep monitoring wells
Sheet 19	Miscellaneous Details 2		X	
Sheet 20	Leachate Collection System Details		X	
Sheet 21	Stormwater Drainage Details		X	
Sheet 22	Cross Sections A-A' and B-B'		X	
Sheet 23	Cross Sections C-C' and D-D'		X	