Appendix F

Franklin County Requirements Revised August 2013 Revised November 2013

Documents Included:

Applicable Portion of Franklin County Ordinance Dated October 25, 2011 Added November 2013

> Zoning Verification Letter Dated August 21, 2012

Preliminary Design Review Letter Dated January 7, 2013

Labadie Bottom Road Relocation Letter Dated July 24, 2013

> County Planning Director Letter Dated September 18, 2013 Added November 2013

> County Planning Director Letter Dated October 10, 2013 Added November 2013

> > Andrews Engineering Letter Dated December 4, 2013 Added November 2013

County Planning Director Letter Dated December 10, 2013 Added November 2013



Commission Order No. 2011-307 Fourth Quarter Term 2011

COMMISSION ORDER

STATE OF MISSOURI County of Franklin - ss.

Tuesday,October,25,2011 Regulation Amendment

IN THE MATTER OF ADOPTING CERTAIN AMENDMENTS TO THE FRANKLIN COUNTY UNIFIED LAND USE REGULATIONS PERTAINING TO LANDFILL DESIGN, CONSTRUCTION AND OPERATION AND ESTABLISHING THE EFFECTIVE DATE THEREOF

PREAMBLE

The governing bodies of legal entities of all types are frequently presented with issues which impact the health, safety and welfare of its constituents. Less frequently governing bodies are presented with issues which have the capacity to affect future generations of constituents regardless of what decision is made. This is the type of paradox which the regulations to control the design, construction and operation of landfills, especially utility waste landfills, presents to the County Commission of Franklin County, Missouri. It is without question that the citizens of Franklin County need and deserve both cost efficient electrical power as well as a safe and clean environment, both now and in the future. It is, therefore, incumbent upon the members of this Commission to employ the wisdom and common sense which they have been given to find and adopt the best solution possible to address the potentially conflicting goals and to merge them into a solution which is in the best interest of all of the citizens of Franklin County, Missouri. It is, therefore, found and determined by the County Commission of Franklin County as follows:

WHEREAS, the County Commission prior hereto determined that the regulation within Franklin County of all types of landfills should be reviewed and amended, if appropriate; and

WHEREAS, in response to such direction the Franklin County Planning and Zoning Department prepared certain draft amendments to the Franklin County Unified Land Use Regulations to address the various types of Landfills possible and presented such proposed regulations to the public for the purpose of obtaining public comment thereon; and

WHEREAS, after said public hearing and with the goal of expanding and clarifying such regulations in order to protect and advance the health, safety and welfare of the citizens of Franklin County and to promote the goals and objectives of the Franklin County Master Plan, the Franklin County Planning and Zoning Department submitted recommendations to the Franklin County Commission; and

WHEREAS, after receipt of the proposed regulations and in the manner provided and required by law after due notice, the Franklin County Commission conducted a public hearing on the proposed regulations; and

WHEREAS, because there was such public interest in the subject it was necessary to continue the public hearing to later dates in order to give everyone a chance to be heard; and

WHEREAS, after the conclusion of the public hearing the County Commission was presented with hundreds of pages of testimony and evidence to review and consider; and Updated: 10/21/2011 3:47 PM by Doris Meyer 2011-307 Page 1 SCHEDULE CJG-ST1 WHEREAS, after the Commissioners completed their individual reviews a working session was held as an open, public meeting wherein the ideas and findings of each Commissioners were discussed and upon completion of which instruction and guidance was given by the Commission to the County Counselor to prepare regulations consistent with the guidance and instructions provided by the Commission to be returned to the Commission at a public work session for final review; and

WHEREAS, after hours of public hearings, hundreds of pages of testimony, hours upon hours of review and analysis the County Commission has been presented with the final draft of amendments to the Unified Land Use Regulations pertaining to landfills with said draft being marked Exhibit "A", attached hereto and incorporated by reference herein.

IT IS THEREFORE ORDERED by the County Commission of Franklin County that the proposed amendments to the Unified Land Use Regulations as set forth on Exhibit "A" be and are hereby approved and adopted,

IT IS FURTHER ORDERED that a copy of such regulations and this Order be provided to Scottie Eagan, Senior Planner, with the direction that the regulations be inserted in and made part of the Land Use Regulations.

Presiding Commissioner

District

Commissioner of 2nd District

Exhibit "A"

Proposed Amendments to the Land Use Regulations

I. Article 2, "Basic Definitions and Interpretations", Section 15, is amended by adding the following definitions thereto:

Non-Utility Waste Landfill. A parcel of land, or structure specifically designed and built as a landfill, used for the disposal of waste materials. A non-utility waste landfill can be built into or on top of the ground provided that waste materials are isolated from the surrounding environment (groundwater, air, surface water). This isolation is accomplished through the use of a composite bottom liner and a daily covering of clean soil. The operators of all non-utility waste landfills are strongly encouraged to provide set aside areas for plastic, glass, metal, cardboard and paper recycling facilities.

Utility Waste Landfill. Any parcel of land on which are situated any improvements constructed or used for disposal, management, reclamation or recycling of fly ash waste, bottom ash waste, slag waste, flue gas emission control waste or other solid wastes generated primarily in connection with the combustion of coal or other fossil fuels, or uses in support thereof or accessory thereto, including, without limitation, water retention and management areas.

II. The following Section 238 is added to Article 10, "Supplementary Use Regulations":

Section 238: Landfill Uses

- A. <u>Definitions</u>
 - 1. *Bottom Ash.* The agglomerated, angular ash particles, formed in pulverized coal furnaces that are too large to be carried in the flue gases and collect on the furnace walls or fall through open grates to an ash hopper at the bottom of the furnace.
 - 2. *Coal Combustion Products (CCPs).* Fly ash, bottom ash, broiler slag, or flue gas desulfurization materials, that are beneficially used.
 - 3. *CCR (Coal Combustion Residuals) Landfill:* See Utility Waste Landfill.
 - 4. *Coal Combustion Residuals (CCRs).* Fly ash, bottom ash, broiler slag, and flue gas desulfurization materials destined for disposal. CCRs are also known as coal combustion wastes (CCWs)

and fossil fuel combustion (FFC) wastes, when destined for disposal.

- 5. *Composite Liner System.* The requirement that any Utility Waste Landfill be constructed with a system which has an upper component and a lower component. The design and construction standards for both components are set forth in the provision pertaining to "Construction Standards".
- 6. *Construction Standards*. The technical requirements and methods by which Utility Waste Landfills must be constructed. Specific standards are as set forth in this Section 238. Such specific standards may be supplemented by EPA and/or MoDNR regulations. In the event of a conflict between the specific provisions contained in these regulations and any EPA or MoDNR regulations adopted by this reference, the more restrictive shall control.
- 7. *Environmental Resource Officer*. The employee of the Franklin County Commission who shall insure that the owner/operator of a Utility Waste Landfill is operating the Utility Waste Landfill in accordance with the requirements of this Section 238. The Environmental Resource Officer shall have the authority to enforce compliance with these regulations by levying penalties and/or by recommending to the license issuing authority that the license of the non-compliant entity be revoked.
- 8. *Fly ash.* The very fine globular particles of silica glass which is a product of burning finely ground coal in the broiler to produce electricity, and is removed from the plant exhaust gases by air emission control devices.
- 9. *Fugitive Dust Controls.* The controls established to minimize the impact of fugitive dust on the environment. In addition to the specific controls set forth in these regulations, the County hereby also adopts prospectively the provisions of any State Implementation Plan (SIP) which may hereafter be enacted and adopted by the Missouri Department of Natural Resources. In the event that a conflict were to arise between the provisions of these regulations and any SIP, the more restrictive shall control.
- 10. *Grandfathered*. A use which is in existence as of the date new regulations or amended regulations are adopted.
- 11. *Groundwater*. Water below the land surface in the zone of saturation.

- 12. *Groundwater Monitoring Systems*. The system by which samples of groundwater are collected from wells around the Utility Waste Landfill and are analyzed to determine whether or not the groundwater has been contaminated by leachate from the Utility Waste Landfill. All groundwater monitoring systems shall be designed and constructed in accordance with the provision in these regulations pertaining to "construction standards". Groundwater shall be monitored in accordance with "operation and maintenance standards" as set forth in these regulations.
- 13. *Independent Registered Professional Engineer*. The individual selected by the Franklin County Commission to:
 - a.) verify all designs of any type of landfill submitted for review in order to insure compliance with these regulations and regulations promulgated by MDNR,
 - b.) to insure that construction is in accordance with the plans as submitted,
 - c.) to test all required samples, and
 - d.) to assist the Environmental Resource Officer with insuring that all landfills are being operated and maintained in accordance with these regulations as well as to perform such other duties as set forth in these regulations. If necessary, the Independent Registered Professional Engineer is authorized to subcontract with a Registered Professional Geologist licensed in Missouri. The owner/operator shall pay all fees and expenses charged by the Independent Registered Professional Engineer, whether for direct or subcontracted services. The Independent Registered Professional Engineer shall be licensed by the State of Missouri and must be experienced in the areas of landfill engineering, groundwater system design and monitoring groundwater samples analysis. In selecting the Independent Registered Professional Engineer, the County Commission shall also give consideration to the Engineer's experience in landfill design and construction. The selection of the Independent Registered Engineer shall be in the sole and exclusive discretion of the Franklin County Commission.

- 14. *In Use.* For the purposes of these regulations a "cell" shall be in "use" if the design and construction plans for such cell have been approved by the Independent Professional Registered Engineer prior to the commencement of construction on any cell or any other component of the landfill and has had waste deposited therein at least ten (10) days prior to the effective date of any new regulation or amendment of the existing regulations. As set forth in the construction requirements, construction of a new "cell" shall not commence prior to the capacity level of all active cells being filled to the level of 70%, except as provided in Section C(7)(b) below.
- 15. *Leachate*. Liquid that has passed through or emerged from solid waste and contains soluble, suspended or miscible materials removed from such waste.
- 16. *Leachate Collection and Removal System*. Any combination of landfill base slopes, liners, permeable zones, pipes, sumps, pumps or retention structures that is designed, constructed and maintained to monitor leachate generation in a solid waste disposal area and collect and remove leachate as necessary to reduce leachate depth over a landfill base.
- 17. *License Fee.* The initial and annual fee set forth in Section C (4)(c) below, which must be paid by the owner/operator to obtain the initial license to construct and operate a Utility Waste Landfill or a Non-Utility Waste Landfill and the annual renewal required for such license.
- 18. *License to Operate*. Permission granted by the Franklin County Commission for an owner/operator to operate a Utility Waste Landfill in a given area. Licenses shall only be issued to owners/operators of facilities which are designed, constructed and operated in compliance with these regulations.
- 19. *Natural Water Table*. The level at which water stands in a fully saturated unconfined aquifer as measured by shallow piezometers or wells. The natural water table is under static hydrologic conditions and uninfluenced by groundwater pumping or other engineered activities.
- 20. *Non-Utility Waste Landfill.* A parcel of land, or structure specifically designed and built as a landfill, used for the disposal of waste materials. A non-utility waste landfill can be built into or on top of the ground provided that waste materials are isolated

from the surrounding environment (groundwater, air, surface water). This isolation is accomplished through the use of a composite bottom liner and a daily covering of clean soil. The operators of all non-utility waste landfills are strongly encouraged to provide set aside areas for plastic, glass, metal, cardboard and paper recycling facilities.

- 21. *Surface Water*. All water naturally open to atmosphere (rivers, lakes, reservoirs, ponds, streams, impoundments, seas, estuaries, etc.)
- 22. Utility Waste Landfill. Any parcel of land on which are situated any improvements constructed or used for management, reclamation or recycling of fly ash waste, bottom ash waste, slag waste, flue gas emission control waste or other wastes generated in connection with the combustion of coal and other fossil fuels, or uses in support thereof or accessory thereto, including, without limitation, water retention and management areas.
- 23. *Yard Waste*. Leaves, grass clippings, yard and garden vegetation. Yard waste shall not include stumps, roots or shrubs with intact root balls.
- 24. *Waste Materials*. The accumulation of non-hazardous materials including but not necessarily limited to:
 - a.) Animal, fruit and vegetable matter that attends the preparing, cooking, delivering in or storing of fruits, fowls or vegetables.
 - b.) Common household, commercial and industrial trash items such as but not limited to paper, cardboard, plastic, etc.
- B. <u>Regulations Concerning Non-Utility Waste Landfills.</u>
 - 1. <u>Conditional Use</u>: Non-Utility Waste Landfills shall be permitted only in Agricultural Non-Urban (ANU) zoning districts and Industrial Zoning districts and then only when a Conditional Use Permit (CUP) is obtained therefore. Any Conditional Use Permit pertaining to a Non-Utility Waste Landfill shall include the obligation to meet all design, construction, maintenance and licensing requirements set forth in these regulations as well as addition to any additional requirements mandated by the planning and zoning commission.

- 2. <u>Design and Construction Standards</u>: In addition to the specific requirements as hereinafter set forth, all Non-Utility Waste Landfills shall be designed and constructed in accordance with all applicable solid waste landfill regulations currently in effect or as may hereafter be adopted by the Missouri Department of Natural Resources. Specific design and construction requirements are:
 - Non-Utility Waste Landfills shall be no less than 1000 feet a.) from the nearest residential structure and no less than 300 feet from the property line of the nearest adjoining property. For the purposes of these regulations, all distances shall be determined by the plans for the landfill submitted to Franklin County in conjunction with the application for the Conditional Use Permit. Any landfill which expands closer to the nearest residential structure or property line than the requirements hereof shall result in the owner/operator being subject to the daily penalty as hereinafter set forth and/or revocation of the conditional use permit. Within the three hundred (300) foot setback area there shall be a buffer of natural vegetation of no less than twenty-five (25) feet. The composition and location of the buffer shall be contained in the initial design plans.
 - b.) All plans for Non-Utility Waste Landfills shall be reviewed by an Independent Registered Professional Engineer selected by the County to review and approve plans and monitor operations of the landfill. The owner/operator of the landfill shall be responsible for all costs and fees associated with the Independent Registered Professional Engineer. The fees and expenses charged by the Independent Registered Professional Engineer must be in line with the industry standards for Franklin County.
 - c.) No Conditional Use Permit application shall be considered by Franklin County unless the application is accompanied by an Environmental Impact Study prepared by a professional engineer with respect to the proposed site. The Environmental Impact Study must address, at a minimum, the following:

1.) The composition of the underlying soil and bedrock.

2.) The flow of surface water over the site.

3.) The impact of the proposed landfill on the local vegetation, wetlands and wildlife.

4.) The potential impact on historical and/or archeological conditions on the proposed site.

5.) Any necessary wetlands mitigation must be, if at all possible, performed on site.

6.) The height limitation to be placed upon the depository of accepted waste.

- d.) A complete "closure" plan must also be submitted at the time the application is filed. All closure plans shall be prepared in accordance with all applicable regulations of the Missouri Department of Natural Resources and shall be reviewed and approved by the Independent Registered Professional Engineer prior to any application being set for a hearing.
- e.) Prior to any Conditional Use Permit being considered at a public hearing the applicant shall pay for the completion of a traffic impact study. The study shall be performed by a Registered Professional Engineer selected by the County and shall be submitted as part of the record at the public hearing.
- 3. <u>Maintenance and Operation</u>: All Non-Utility Waste Landfills shall be maintained and operated in accordance with the following specific requirements as well as all applicable regulations as adopted by MoDNR and which are in effect as of the date the application is submitted. In the event of a conflict between the specific requirements hereof and MoDNR regulations, the more restrictive shall control. The specific requirements are:
 - a.) All waste shall be compacted to reduce the volume of waste contained in the Landfill. Compaction shall meet the specifics, if any, adopted by MoDNR.
 - b.) All waste shall be covered daily with appropriate amounts of clean soil.
- 4. <u>Licensing</u>: After an application for a Conditional Use Permit for a Non-Utility Waste Landfill is approved but prior to any construction starting the owner/operator shall apply for a permit to operate a landfill. In addition to the Conditional Use Permit

Approval, the permit application shall be accompanied by a copy of the operating policy of the landfill, a copy of all design and construction plans and a permit fee of \$25,000.00. The permit shall be subject to annual renewal. No permit shall be renewed if there is any existing violation and/or any unpaid penalty. The renewal application shall be accompanied by an annual renewal fee of \$10,000.00. All permit fees shall be used to support the Environmental Resource Officer and his or her office. No construction shall be commenced until the Independent Registered Professional Engineer has approved all design and construction plans.

- 5. <u>Severability and Savings Clause:</u> Any action by a court of competent jurisdiction which results in a finding that a portion, paragraph or section of these regulations is invalid and/or unenforceable shall not operate to void the entirety of the regulations. In the event of such action, these regulations shall be construed as if the provision found to be invalid or unenforceable never existed as a part of these regulations.
- Penalty: The County Environmental Resource Officer shall have 6. the authority to assess a daily penalty for the violation of these regulations. The County Environmental Resource Officer shall not assess any penalty without first notifying the owner/operator of the violation in writing and thereafter allowing suitable opportunity as determined by the County Environmental Resource Officer after consultation with representatives of the owner/operator and, if needed, the Independent Registered Professional Engineer retained for the project. If an agreement as to a reasonable "cure" period cannot be achieved then in such event the County Environmental Resource Officer shall establish the "cure" period. There shall be a fine of \$1,000.00 per day for each and every day an identified violation is not rectified. All penalties shall be paid into the General Fund of the County and shall be credited to a dedicated fund to be known as the "Environmental Mitigation Fund". Any penalty not paid within ninety (90) days after it is assessed shall result in the operating license for the landfill being revoked.

C. Regulations Concerning Utility Waste Landfills

1. <u>Permitted Use:</u> Notwithstanding any other provision of the Franklin County Unified Land Use Regulations to the contrary, Utility Waste Landfills are a permitted use in every Zoning District of the County, excepting the "Suburban Development", "Residential Development" and "Residential Development 2" Zoning Districts provided that any such Utility Waste Landfill must comply with all the regulations in this Section 238, including, without limitation;

- a.) A portion of any Utility Waste Landfill must be contiguous to the boundary of the property upon which a public utility power generation plant is situated.
- b.) The land which is to be utilized as an Utility Waste Landfill site and the power generation plant site must at all times be under common ownership.
- c.) All Utility Waste Landfills shall be developed and constructed in sections referred to as "cells" as hereinafter set forth.
- d.) All Utility Waste Landfills shall be subject to the provisions hereinafter set forth regarding methods of construction, monitoring, inspections, licensing, operations and penalties.
- e.) Only "cells" which are already in use as of the date new regulations are adopted shall be considered to be "grandfathered" as such term is defined in these regulations. Franklin County reserves the right to amend these Regulations on an as needed basis from and after the effective date hereof with regard to the prospective requirements for design, construction and maintenance of all cells which are not "in use" as such term is defined within these Regulations as of the time the amendment is adopted.
- 2. Waste Accepted: Only wastes described in the definition of Utility Waste Landfill, above ("Utility Waste"), may be deposited in Utility Waste Landfill. All Utility Waste Landfills which are to be operated in Franklin County, Missouri shall accept no Utility Waste other than that which is generated by the plant situated in Franklin County which is located on property which is contiguous to the site on which the Utility Waste Landfill is to be situated as required in Section C(1)(a) above. In addition to the foregoing prohibition against depositing Utility Waste from any such non-contiguous facility, as required in Section C(1)(a) above ("Non-Contiguous Facility"), under no circumstances shall Utility Waste be brought onto the site from any Non-Contiguous Facility for any other purpose. It is the declared policy of Franklin County that the purpose in so restricting access to and use of any Utility Waste Landfill which is operated in Franklin County is to

minimize the intentional or unintended distribution of fly ash and other Coal Combustion Products on, across or over the public roadways of Franklin County as well as the property owned by the citizens and residents of Franklin County.

- 3. <u>Design and Construction</u>: All design and construction of Utility Wastes Landfills shall be in accordance with Missouri 10 CSR 80-11.010 et seq., (Missouri Utility Waste Landfill Regulations) as they are written as of the effective date hereof or as they may hereafter be amended, subject to the rules in "grandfathering" as set forth in these regulations. In the event of a conflict between these regulations and the regulations adopted by the Missouri Department of Natural Resources, the more restrictive shall control.
 - Plans, addendums, as-built drawings or other documents a.) which describe the design, construction, operation, or closure of a Utility Waste Landfill shall be prepared by a professional engineer which shall be stamped or sealed by such professional engineer and shall be submitted to the Independent Registered Professional Engineer selected by Franklin County for review and approval at the time that an application to operate a Utility Waste Landfill is submitted. Under no circumstances shall any construction of any component of a Utility Waste Landfill be commenced prior to the approval of all designs, plans, addendums, construction documents by the Independent Registered Professional Engineer. All fees and expenses associated with the review by the Independent Registered Professional Engineer shall be compatible with industry standards for the area and shall be paid for by the entity which has submitted the plans.
 - b.) All Utility Waste Landfills shall be built and constructed in "cells".
 - c.) Each Utility Waste Landfill cell shall have a composite liner consisting first of an outer layer of clay or compacted soil component at least two (2) feet in depth and which meets the hydraulic conductivity and other standards required by the applicable provisions of Missouri Department of Natural Resources regulations currently in existence or prospectively as they may hereafter be amended. The clay or composite soil component at the base of the Utility Waste Landfill shall be at least two (2) feet above the Natural Water Table in the site area. Each Utility Waste Landfill cell shall include a second (inner)

component which shall be constructed of a minimum 30mil flexible membrane liner (FML). The FML component shall be required to be installed in direct and uniform contact with the compacted soil component.

d.) All "cells" shall be designed and constructed so that they shall be protected by an exterior berm meeting the following criteria:

i.) The top of the berm at a minimum shall be equal to the five hundred (500) year flood level in the area of the proposed Utility Waste Landfill.

ii.) All designs of and materials proposed for use in construction of each berm shall be approved by the Independent Registered Professional Engineer retained for the project, for compliance with the requirements of this Section 238. All berms shall be constructed of concrete or cement-based material sufficiently thick for the purpose intended and approved by the Independent Registered Professional Engineer. Only fly ash produced at the contiguous power generating plant may be used in the manufacturing of concrete or other products to be used for the construction of any berm or cell. It is the expressed intent of these regulations that fly ash or other CCRs, whether encapsulated or not, produced at facilities other than the one which is contiguous to the Utility Waste Landfill, shall not be used in the construction of any berm, wall, cell, containment area or any other structure which is part of the Utility Waste Landfill as described above.

iii.) In-place waste material shall be compacted and stabilized so that such waste is able to counter-balance and mitigate the uplift pressures to withstand flood events.

- e.) All Utility Waste Landfills shall include a leachate collection system which shall be designed and constructed in the manner required by Missouri Department of Natural Resources (MDNR) and as approved by the Independent Registered Professional Engineer for compliance with the requirements of this Section 238.
- f.) All Utility Waste Landfills shall have a ground water monitoring system capable of monitoring the ground water quality around the entire perimeter of the proposed landfill. The Independent Registered Professional Engineer shall

determine how many up-gradient and down-gradient monitoring wells shall be required to comply with the requirements of this Section 238, but in no event shall the number be less than that which would be required by Missouri Department of Natural Resources regulations. The Independent Registered Professional Engineer shall subcontract this duty, if necessary, to a professional geologist registered in Missouri.

- g.) The construction of the initial cell or cells and all subsequent cells shall be monitored by the Independent Registered Professional Engineer retained for the project. Such engineer shall have the authority to stop construction if it is believed that construction is not being performed in accordance with the plans approved under the Section 238.
- h.) The design of any Utility Waste Landfill shall include a 300 foot setback area from all property lines not under common ownership with the Landfill site. The setback area shall contain a buffer of natural vegetation not less than 25 feet wide. Any necessary wetlands mitigation must be, if at all possible, performed on site.
- 4. <u>Licensing of Utility Waste Landfill:</u> All Utility Waste Landfills shall be subject to the requirement to obtain an operating license prior to the commencement of operations and a license annually thereafter on the anniversary date the license was originally issued. With respect to the construction of a new Utility Waste Landfill. No construction of any component shall be commenced without the prior approval of the design and construction plans by the Independent Registered Professional Engineer. In order to obtain or renew a license the owner/operator must meet the following requirements:
 - a.) The original construction and all additions must have been approved by the Independent Registered Professional Engineer, or his or her successor, for compliance with the requirements of this Section 238.
 - b.) The owner/operator must have submitted to and have successfully passed all tests required by Franklin County and the Missouri Department of Natural Resources. Tests required by Franklin County shall be in addition to those required by MoDNR, provided that any additional test required by Franklin County must not be in conflict with any tests required by the Missouri Department of Natural Resources. The purpose of this requirement is to insure

that all tests results are submitted to and on record with Franklin County in a timely fashion.

- c.) The owner/operator must submit the annual fee of \$50,000.00 with the application and must have no fines or penalties unpaid. The annual fee of \$50,000.00 shall be used to fund in part, the position of the County Environmental Resource Officer, who shall, among other duties, assist the Independent Registered Professional Engineer retained for the project in the inspection and monitoring of the Utility Waste Landfill.
- 5. <u>Operations and Inspections:</u> All Utility Waste Landfills shall be operated in such a manner so as to minimize the impact of operations at all times on the citizens and inhabitants of Franklin County, Missouri which shall be demonstrated by explicit compliance with these regulations, generally accepted engineering standards and permitting requirements of the Missouri Department of Natural Resources. The Owner/Operator of the Utility Waste Landfill shall insure that at all times each of the following components are operating properly:
 - a.) Leachate Collection System;
 - b.) Ground Water Monitoring;
 - c.) Liner system; and
 - d.) All components of the berm system.

The County Environmental Resource Officer shall periodically inspect all components of the system for compliance with this Section 238 and shall immediately report any violations or deficiencies to the owner/operator with a notice directing that the deficiency must be corrected. After discussing such deficiency with the owner/operator and with the project Independent Registered Professional Engineer, a deadline for correcting the deficiency shall be established. In the event the deficiency is not corrected by such deadline or the extended deadline if granted by the Environmental Resource Officer, then the facility shall be subject to a penalty as hereinafter set forth.

6. <u>Monitoring and Annual Inspections:</u> The owner/operator shall be required to perform all monitoring as required by MoDNR and shall be subject to routine inspections as set forth in these regulations. Any deficiency discovered as a result of monitoring or inspecting which is not remedy as directed shall subject the owner/operator to daily penalties as hereinafter set forth.

- 7. <u>Operations:</u> All Utility Wastes Landfills shall be operated in accordance with these regulations and with all requirements of the regulations established by MoDNR, as they currently exist or as they be hereafter amended, subject to the provisions in this regulations on what is or is not "grandfathered". In the event of a conflict between these regulations and those promulgated by MoDNR, the more restrictive shall control.
 - a.) CCR Removal: If the owner/operator of an Utility Waste Landfill desires to remove fly ash or other CCR's from the landfill site the owner/operator shall be subject to the following requirements:

i.) All CCR's shall be removed in sealed, container trucks. Dump trucks or similar vehicles with only "tarp" coverings shall not be permitted. The owner/operator of any Utility Waste Landfill shall notify the Environmental Resource Officer of its intention to remove CCRs from the site and shall identify the vehicles which are intended to transport CCRs. Prior to loading CCRs onto any vehicle, the Environmental Resource Officer must inspect and approve each of the intended vehicles. There shall be a truck washing facility at or near the exit from the Utility Waste Landfill. All trucks filled with residue shall be washed prior to leaving the site.

ii). As part of the original plan, or any amendment thereto, the owner/operator shall identify the primary route and secondary route over which the vehicles shall travel. Prior to any CCR being transported the Independent Registered Professional Engineer retained by the County shall cause a traffic impact analysis to be performed at the expense of the landfill owner/operator. The Franklin County Commission shall direct which, if any, of the recommendations or findings of the impact study shall be implemented prior to permission being granted to transport CCR's away from the landfill site. All transport routes shall be selected with the goal of minimizing fugitive dust from affecting residential property and with minimizing the possibility of damage to roadways and other public infrastructure.

iii.) Under no circumstances shall CCR's or other residue from coal combustion from facilities other than the utility power generation plant as described in Section C(1)(a) above be deposited in an Utility Waste Landfill in Franklin County, Missouri. By applying for a license the owner/operator agrees to not deposit Utility Waste anywhere on the Utility Waste Landfill outside of the approved cells and associated berm, except during the construction period for materials permitted under Section C(3)(d)(ii) above.

- b.) Cell usage: No new cell shall be constructed prior to the filling of all active cells with waste material to 70% of each such active cells total capacity. In the event generally accepted Utility Waste Landfill engineering standards require the commencement of construction of a new cell prior to the capacity level of active cells reaching 70% the owner/operator of the landfill shall submit to Franklin County Commission a request to proceed with the construction of new cells. The request shall include an analysis in support of such request prepared by a registered professional engineer with experience in landfill engineering. The County Commission shall either approve the request or shall submit the request to the Independent Registered Professional Engineer retained for the project for his or her recommendation. Under no circumstances shall the construction of a new cell be commenced without prior notification to the County Environmental Resource Officer. The notification from the owner/operator shall be submitted by a registered professional engineer on behalf of the owner/operator and shall contain an affidavit signed by the registered professional engineer to the effect that the new cell or cells shall be constructed in accordance with all applicable requirements as they exist on the date of the notification.
- c.) CCP Usage: All owners/operators of Utility Waste Landfills are encouraged to maximize beneficial usage of CCPs. The beneficial usage should focus on "on site" usage of the CCPs produced at the contiguous generating plant in order to further minimize the transportation of Coal Combustion Products.
- 8. <u>Severability and Savings Clause:</u> Any action by a court of competent jurisdiction which results in a finding that a portion, paragraph or section of these regulations is invalid and/or unenforceable shall not operate to void the entirety of the regulations. In the event of such action, these regulations shall be construed as if the provision found to be invalid or unenforceable never existed as a part of these regulations.
- 9. <u>Penalty:</u> The County Environmental Resource Officer shall have the authority to assess a daily penalty for the violation of these regulations. The County Environmental Resource Officer shall not assess any penalty without first notifying the owner/operator of the violation in writing and thereafter allowing suitable opportunity as determined by the County Environmental Resource Officer after consultation with representatives of the owner/operator and, if needed, the Independent Registered

Professional Engineer retained for the project. If an agreement as to a reasonable "cure" period cannot be achieved then in such event the County Environmental Resource Officer shall establish the "cure" period. There shall be a fine of \$1,000.00 per day for each and every day an identified violation is not rectified. All penalties shall be paid into the General Fund of the County and shall be credited to a dedicated fund to be known as the "Environmental Mitigation Fund". Any penalty not paid within ninety (90) days after it is assessed shall result in the operating license for the landfill being revoked.



PLANNING & ZONING DEPARTMENT PUBLIC WORKS DIVISION



409 EAST LOCUST STREET ROOM 003B UNION, MO 63084 MAIN LINE (636) 583-6369 FAX (636) 583-7911 www.franklinmo.org

August 21, 2012

Union Electric Co. d/b/a Ameren Missouri 1901 Chouteau St. Louis, MO 63103

Re: Zoning Verification - Ameren Labadie Plant

To Whom It May Concern:

Mr. Tim Tryniecki of Armstrong Teasdale has requested that this office provide you with zoning information for the property located along the Labadie Bottom Road in Labadie, MO. This property is further identified by parcel numbers 08-4-17.0-0-002-004.000, 08-4-17.0-0-000-003.000, 08-4-17.0-0-000-002.000, and 08-4-17.0-0-001-001.000. The zoning description for the property is Agricultural Non-Urban (ANU). By virtue of the use currently made of the property and Franklin County Zoning Regulations, constructing and operating a utility waste landfill on the subject property is a permitted use subject to compliance with all County. State and Federal regulations regarding utility waste landfills and all other applicable regulations.

You have indicated that Ameren would like to establish a utility waste landfill on the subject property. As state above, such use is permitted subject to compliance with all applicable laws and regulations. In accordance with the County regulations regarding utility waste landfills, all plans must be pre-approved by the Independent Registered Professional Engineer selected by the County for such purpose. For the purpose of this stage of the project. Andrews Engineering will serve in such capacity. Please insure that you coordinate all activity with this firm.

If you have any questions regarding this letter, please contact the Planning and Zoning office at 636-583-6369.

Sincerely,

Acotta C. Eayen

Mrs. Scottie C. Eagan Planning Director

Cc: Kenneth Liss - Andrews Engineering Joe Feldman

Planning & Zoning Commission Office of Zoning Enforcement Floodplain Administration and Map Repository Board of Zoning Adjustment

SCHEDULE CJG-ST1



January 7, 2013

Craig J. Giesmann, P.E., P.M.P. Managing Supervisor, Hydro Engineering Ameren Missouri 3700 S. Lindbergh Boulevard, MC F-604 St. Louis, Missouri 63127

Re: Preliminary Design Review

Dear Mr. Giesmann:

Andrews Engineering, Inc. (Andrews Engineering) acting as Franklin County's Independent Registered Professional Engineer, has met with Ameren Missouri and its consultants to discuss the preliminary design for fulfillment of the requirements listed in Franklin County's Article 10 "Supplementary Use Regulations", Section 238 – "Landfill Uses".

Andrews Engineering agrees with your conceptual designs that were discussed in meetings held between Ameren Missouri and its consultants, along with Andrews Engineering acting as Franklin County's Independent Registered Professional Engineer. No formal approvals may be granted until a formal submittal has been provided for review and approval.

If you have any further questions concerning this preliminary design review, please contact me at (636) 456-6387.

Sincerely,

Karl Finke, P.E., R.G. Branch Office Director

131 West Booneslick Road, Warrenton, Missouri 63383 • 636.456.6387 fax 636.456.6389 www.andrews-eng.com

FRANKLIN COUNTY

Franklin County Highway Department Eva Gadcke, Highway Administrator



400 EAST LOCUST STREET ROOM 003A UNION, MO 63084 MAIN LINE (636) 583-6361 FAX (636)584-0902 www.franklinmo.org

July 24, 2013

Craig Giesmann, PE, PMP Managing Supervisor Ameren – Power Operations Service 3700 S. Lindbergh Blvd., MC F-604 St. Louis, MO 63127

RE: Labadie Bottom Road Relocation

Dear Mr. Giesmann,

As part of the proposed landfill plans Labadie Bottom Road, a county road, will need to be relocated and an overpass from the plant to the landfill will need to be installed. I have been in contact with your engineer, Reitz & Jens, to review the county design requirements for these improvements. The traffic on this county road is mainly Ameren employees on the asphalted west end, and agricultural traffic on the graveled east end. We have not worked through final details of the roadway design or determined the extent of hard surfacing and gravel roadway. Our intent is to work with Reitz & Jens to come up with final plans for the roadway and submit them to the County Commission for approval.

Conceptually, the proposed relocation and overpass is accepted. The county reserves the right to approve the final plan details before construction can begin. Please let me know if you need additional information on this subject.

Sincerely, Adresan

Joe Feldmann Franklin County Highway Dept. County Engineer

CC: Mark Vincent Paul Reitz, Reitz & Jens

FRANKLIN COUNTY

PLANNING & ZONING DEPARTMENT PUBLIC WORKS DIVISION



400 EAST LOCUST STREET ROOM 003B UNION, MO 63084 MAIN LINE (636) 583-6369 FAX (636) 583-7911 www.franklinmo.org

September 18, 2013

Missouri Department of Natural Resources ATTN: Charlene S. Fitch, P.E. P.O. Box 176 Jefferson City, MO 65102

Re: Ameren Missouri Construction Permit Application to the Missouri Department of Natural Resources ("MDNR") originally deemed complete on February 7, 2013, and amended by letter dated August 7, 2013 and enclosures therewith (as amended at any time, the "Application") for a Proposed Utility Waste Landfill ("Proposed UWL")

Dear Ms. Fitch:

This letter is written pursuant to the provisions of Section 260.003 of the Revised Statutes of Missouri and 10 CSR 80-2.020 of the Missouri Code of State Regulations. The undersigned is the Planning Director for Franklin County, Missouri (the "County") and is authorized to issue this certification on behalf of the County.

The County has reviewed plans submitted by Ameren Missouri to MDNR pursuant to the Application, under your Solid Waste Management Program ("SWMP"). This review has included the submittal package provided to MDNR by Ameren Missouri's letter dated August 7, 2013.

Specifically, we have reviewed such plans and the Application under the County's Unified Land Use Regulations governing zoning, subdivision and related land use matters (as amended at any time, the "Land Use Regulations"). The Land Use Regulations include a new Section 238, which was adopted by the County by County Commission Order 2011-307, dated October 25, 2011. Section 238 pertains to landfills, including Utility Waste Landfills (Section 238 is hereinafter called the "Landfill Ordinance").

Our review has been conducted in accordance with the Land Use Regulations and Landfill Ordinance and specifically, a review has been completed by the County Engineer and by the Independent Registered Professional Engineer ("IRPE"), as defined therein.

We hereby certify as follows:

1. Under the Land Use Regulations, the real property which is the subject of the Application (the "Property") is located within the "Agricultural Non-Urban (ANU)" zoning district. The use of the Property for the Proposed UWL is a permitted use, provided that the Proposed UWL complies with the Landfill Ordinance. No Conditional Use Permit is required for such use.

Planning & Zoning Commission Office of Zoning Enforcement Floodplain Administration and Map Repository Board of Zoning Adjustment SCHEDULE CJG-ST1

- 2. Ameren Missouri and the activity which is subject of the Application is in compliance with all applicable local zoning, building and health codes, ordinances and orders with regard to Ameren Missouri and such activity is regulated pursuant to Chapter 260 of the Revised Statutes of Missouri.
- 3. Ameren Missouri has applied to the County for all permits required under the Landfill Ordinance and the other Land Use Regulations. Ameren Missouri, by letter of July 8, 2013, informed us of proposed revisions to its plans for the Propose UWL, in response to comments by the County and the IRPE under the Landfill Ordinance. As noted above, by letter of August 7, 2013. Ameren Missouri submitted a formal revision to the Application, with revised plans and other documents. We certify that the Application is now sufficient for the County to issue a construction permit under the County's Land Use Regulations (including, for emphasis, the Landfill Ordinance).
- 4. The Proposed UWL must also comply with the provisions of the County's floodplain ordinance included within the Land Use Regulations, applicable to development in the floodway and floodplain. Ameren Missouri applied for and was issued this permit on March 19, 2013. A copy is attached. This permit is still valid and in force.
- 5. Except as noted above, there are no other County certificates, licenses, permits or other approval required in order to engage in the Proposed UWL use.

If you have any questions regarding this letter, please contact the Planning and Zoning office at 636-583-6369.

Sincerely,

Scotto C. Eayan

Mrs. Scottie C. Eagan Planning Director

Cc: Kenneth Liss - Andrews Engineering Joe Feldman Craig Ceismann – Ameren Missouri

FRANKLIN COUNTY

PLANNING & ZONING DEPARTMENT PUBLIC WORKS DIVISION



400 EAST LOCUST STREET ROOM 003B UNION, MO 63084 MAIN LINE (636) 583-6369 FAX (636) 583-7911 www.franklinmo.org

October 10, 2013

Missouri Department of Natural Resources ATTN: Charlene S. Fitch, P.E. P.O. Box 176 Jefferson City, MO 65102

Re: Ameren Missouri Construction Permit Application to the Missouri Department of Natural Resources ("MDNR") originally deemed complete on February 7, 2013, and amended by letter dated August 7, 2013 and enclosures therewith (as amended at any time, the "Application") for a Proposed Utility Waste Landfill ("Proposed UWL")

Dear Ms. Fitch:

Thank you for your letter of October 2, 2013, asking for clarification of our letter of September 18, 2013. We off the following clarifications to your numbered questions:

- We believe you have received directly from the County's Independent Registered Professional Engineer ("IRPE"), by e-mail of September 27, 2013, a copy of a clarification letter from the IRPE to the County. Since that date we have held several discussions with the IRPE and received written revisions to its original comments. The IRPE has now completed its review of the Ameren Application (to MDNR). The IRPE comments (including the points in its September 27, 2013 letter) have been addressed by the Applicant to the satisfaction of the County, and we can certify that review and comment by the IRPE is complete in accordance with the Landfill Ordinance. Specifically, by letter dated October 9, 2013, the Applicant has committed to install two additional groundwater monitoring wells, one of 80-100 feet in depth.
- 2. Contrary to any implication in our September 18, 2013 letter, notably paragraphs 3 and 5 thereof, the County does not issue a construction permit under its Landfill Ordinance. We apologize for any confusion. The Landfill Ordinance does require an operating license after completion of construction, but this requirement only applies prior to commencement of operations. There are no outstanding or required County permit applications for the Proposed UWL.

Planning & Zoning Commission Office of Zoning Enforcement Floodplain Administration and Map Repository Board of Zoning Adjustment

SCHEDULE CJG-ST1

Except as clarified hereby, we confirm our September 18, 2013 letter.

If you have any questions regarding this letter, please contact the Planning and Zoning office at 636-583-6369.

Sincerely,

cotto C. Earjan

Mrs. Scottie C. Eagan Planning Director

Cc: Kenneth Liss - Andrews Engineering Joe Feldman, P.E., Franklin County Engineer Craig Ceismann – Ameren Missouri Mark Vincent, Franklin County Counselor



DEC 08 2013

December 4, 2013

Joe Feldmann P.E., L.S. Franklin County Highway Department 400 East Locust Room 003A Union, MO 63084

Re: Proposed Coal Ash Waste Landfill Ameren – Labadie Power Plant Franklin County, Missouri

Dear Mr. Feldmann:

Andrews Engineering, Inc. (Andrews Engineering) has reviewed the Ameren Missouri Construction Permit Application prepared for the proposed Utility Waste Landfill at the Ameren Missouri Labadie Energy Center.

Documents reviewed:

- Ameren Missouri Labadie Energy Center, Construction Permit Application and accompanying set of Permit Drawings for a Proposed Utility Waste Landfill, Franklin County, Missouri, submitted January 29, 2013
- Ameren Missouri Labadie Energy Center, Construction Permit Application, Response to Comment Letter Dated May 7, 2013, submitted August 7, 2013
- Ameren Missouri Labadie Energy Center, Response to IRPE Comments, submitted July 8, 2013 and revised July 11, 2013
- Ameren Missouri Labadie Energy Center, Response to Andrews Engineering's Comments Re: Labadie Landfill, submitted November 18, 2013
- Ameren Missouri Labadie Energy Center, Construction Permit Application, Revisions to Prior CPA Application, submitted November 25, 2013

Our final review was limited to portions of the revised CPA Application (submitted to Andrews Engineering on November 25, 2013). As indicated by Mr. Craig Giesmann, Ameren UE, only documents requiring revisions were re-submitted for review. Based on our review of the subject documents, the Construction Permit Application and amendments, the application meets the requirements of County Ordinance 2011-307 (the "landfill Ordinance").

If you have any questions or concerns, please do not hesitate to contact me.

Very truly yours. Douglas X . Mauntel, P.E.

Andrews Engineering, Inc.

DWM:dwm:sjb

cc: Kenneth Liss, L.P.G., Vice President of Operations – Andrews Engineering, Inc. Karl Finke, P.E. – Andrews Engineering, Inc. Craig Giesmann, P.E. – Ameren Missouri

J-2012/2012-106 (Franklin County)\DCC/2013\Ameren Missoun Labadie Energy Center - Construction Permit Application (CPA) final rev.docx

Applications 3300 Ginger Creek Drive, Springfield, Illinois 62711 + 217.787.2334 fax 217.787.9495 www.andrews-eng.com SCHEDULE CJG-ST1



PLANNING & ZONING DEPARTMENT PUBLIC WORKS DIVISION



400 EAST LOCUST STREET ROOM 003B UNION, MO 63084 MAIN LINE (636) 583-6369 FAX (636) 583-7911 www.franklinmo.org

December 10, 2013

Missouri Department of Natural Resources ATTN: Charlene S. Fitch, P.E. P.O. Box 176 Jefferson City, MO 65102

Re: Ameren Missouri ("Applicant") Construction Permit Application to the Missouri Department of Natural Resources ("MDNR"), originally deemed complete on February 7, 2013, and amended by letter dated August 7, 2013 and enclosures therewith (as amended at any time to date, the "Application") for a Proposed Utility Waste Landfill ("Proposed UWL")

Dear Ms. Fitch:

This letter supplements our letters to you of September 18, 2013 and October 10, 2013. As you have expressed an interest in being apprised of the status of the review of the Application by the County's Independent Registered Professional Engineer ("IRPE"), we are providing the following report.

In our letter of October 10, 2013, we advised you that by letter dated October 9, 2013, the Applicant had committed to install two additional groundwater monitoring wells. Since that time, the Applicant has submitted updated plans for location of additional wells, together with detailed responses to the October 8, 2013 comments of the IRPE.

The Applicant and the IRPE met at County offices on November 12, 2013, and since that time on a number of occasions discussed the IRPE's comments and the Applicant's responses thereto. The IRPE has also reviewed the Applicant's proposed amendments to the Application, which amendments we understand are to be filed with your office shortly.

We are happy to report that all of the IRPE's comments have been fully addressed by the Applicant, and both the Applicant and the IRPE (and the County) are in agreement with the resolution of those comments provide in the memorandum attached hereto.

We are enclosing the original IRPE's letter dated December 4, 2013, confirming the foregoing.

Except as clarified hereby, we confirm and restate our September 18, 2013 and October 10, 2013 letters.

If you have any questions regarding this letter, please contact the Planning and Zoning office at 636-583-6369.

Sincerely,

Franklin County Missouri

By: Acottu C Mrs. Stottie C. Eagan C. Eayan

Planning Director

Cc: Kenneth Liss – Andrews Engineering
Joe Feldmann, P.E., Franklin County Environmental Resource Officer
Craig Geismann – Ameren Missouri
Mark Vincent, Franklin County Counselor