

**POWER PURCHASE AGREEMENT FOR
COMBINED HEAT AND POWER PROJECT
AT GENERAL MILLS, MURFREESBORO, TENNESSEE**

DRAFT ENVIRONMENTAL ASSESSMENT

TENNESSEE VALLEY AUTHORITY
Knoxville, Tennessee

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1.0 PURPOSE AND NEED OF PROJECT

1.1 PROJECT DESCRIPTION

General Mills Incorporated (GMI), one of the world's largest suppliers of snack foods, cereals, and dairy-based products has two adjacent manufacturing facilities (Pillsbury and Yoplait) located in Murfreesboro, Rutherford County, Tennessee, that operate on a 7-day, 24-hour basis. Wastewater from plant manufacturing and support operations is pretreated at the GMI facility prior to discharge to the City of Murfreesboro sanitary sewer for additional treatment. Recently, GMI completed construction of a new 6.5 million gallon (MG) anaerobic digester to pretreat all plant wastewaters, as well as the agricultural waste and yogurt whey, before the wastewater is sent to the existing treatment units for polishing and discharge to the sanitary sewer. The anaerobic digester produces biogas with a methane content of about 62 percent that is currently being flared.

The GMI site purchases power from the Murfreesboro Electric Cooperative which in turn purchases its power from the TVA; current electric demand is approximately 13.5 megawatts (MW). Natural gas is used on-site for process heating with a maximum daily consumption of approximately 600 MMBtu. GMI proposes to use the biogas that is produced by the anaerobic digester in a 1.6-MW internal combustion (IC) engine-generator configured for combined heat and power (CHP) production to reduce operating costs by producing electricity for grid sale and by utilizing heat for process needs. Direct firing of the biogas in an internal combustion engine that produces both heat and power (combined heat and power or CHP) would have positive economic and environmental benefits. The proposed project will be located entirely on GMI property (Figure 1).

This project will require that GMI establish a grid connection to TVA through an interconnect to the distribution system owned and operated by Murfreesboro Electric Cooperative. In order to sell power to TVA, GMI will need to negotiate and execute a power purchase agreement (PPA) with TVA. TVA's power purchase would be through its Renewable Standard Offer (RSO) program, which provides for TVA's purchase of qualifying renewable energy electricity at pre-set rates and terms for a 20-year period. GMI is currently in discussions with TVA to establish the parameters for this agreement.



Figure 1. General Mills site with proposed CHP facility and associated infrastructure.

TVA's proposed action is to enter into the PPA with GMI, which would result in the construction and operation of the CHP facility and associated infrastructure. This environmental assessment (EA) has been prepared in accordance with the National Environmental Policy Act (NEPA) and TVA's procedures for implementing NEPA in order to assess the potential impacts of TVA entering into the PPA and the associated impacts of the construction and operation of the CHP and associated infrastructure.

1.2 PURPOSE AND NEED OF PROJECT

TVA produces or obtains electricity from a diverse portfolio of energy sources such as nuclear, fossil, hydro, solar, wind, and biomass. In order to help fulfill the objectives of its 2011 Integrated Resource Plan, TVA has undertaken efforts to expand the contribution of renewable and low greenhouse gas-emitting sources in its generation portfolio. The RSO program is one of the mechanisms used by TVA to increase its use of renewable energy, including energy generated by facilities such as the proposed GMI CHP facility. The proposed CHP facility would beneficially use digester gas that would otherwise be flared for production of heat and power and thereby decrease the GMI facility's use of natural gas, decrease its emissions, and reduce GMI's carbon footprint.

This project has long-term positive energy conservation impacts both for the facility and the environment. The facility will benefit financially by reducing operating costs through the production of electricity for sale to TVA and by utilizing heat for process needs.

2.0 ALTERNATIVES

TVA is considering two alternatives: the No Action Alternative and Action Alternative, under which TVA would enter into the PPA with GMI and GMI would construct and operate the proposed CHP facility. These are described below. The proposed CHP facility is section presents a summary of the alternatives considered.

2.1 NO ACTION ALTERNATIVE

Under the No Action Alternative, TVA would not enter into a PPA with GMI and GMI would continue to flare the biogas, which has a significant fuel value, produced by its recently completed anaerobic digester. In addition, GMI would continue to purchase and consume natural gas for all facility heating and manufacturing processes with no reduction in the associated emissions to the atmosphere.

2.2 ACTION ALTERNATIVE (COMBINED HEAT AND POWER OPTION)

Under the Action Alternative, TVA would entire into a 20-year PPA with GMI under the RSO program to purchase the electric power generated from the proposed CHP facility. GMI would construct and operate the CHP facility.

CHA Consulting, Inc. prepared a *Preliminary Engineering Design and Economic Analysis* report in July 2014 which considered potential uses of the biogas produced by the anaerobic treatment of wastewaters generated by current production operations and currently burned in a flare. This analysis was based on projected capital and operating and maintenance costs estimates. The report determined the best process and equipment needed to utilize the biogas would be to construct and operate a CHP facility. CHP is more efficient than separate generation of heat and electricity since CHP reduces a facility's air emissions and overall carbon footprint. The major components of the proposed CHP facility include the following:

1. A gas cleanup and compression facility to prepare the gas for use in the CHP facility;
2. Approximately 3,240 feet of a gas transmission pipeline to convey the biogas from the anaerobic digester to the gas cleanup and compression facility and from there to the point of use; and
3. The CHP facility that will generate 1.6 MW of electricity as well as 5.4 MBTU/hr of heat for use in the facility manufacturing processes. The main component would be a Caterpillar internal-combustion engine-generator set.

4. A connecting power line to a Murfreesboro Electric Department distribution line at a point adjacent to the proposed CHP facility.

The gas cleanup and compression facility preliminary design is for an approximate 40' by 40' structure that is single-story and located adjacent to and directly north of the new digester (Figure 1). The underground gas transmission pipeline between the gas cleanup and compression facility and the CHP facility is anticipated to be 10-inches in diameter and installed by trenching. The CHP facility is also approximately 40' by 40' and located immediately adjacent to a warehouse on the southeastern side of the facility; this structure would be much lower in height than the warehouse.

2.3 PREFERRED ALTERNATIVE

TVA's preferred alternative is the Action Alternative (Combined Heat and Power Option). Under this alternative, TVA would enter into the PPA with GMI who would then construct and operate the proposed CHP facility and associated infrastructure.

3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

Once it was determined that the GMI facility should utilize the biogas produced by the anaerobic digester to produce heat and power, the potential impacts of the project on the environment were identified and evaluated; where appropriate, the specific steps that would be taken to mitigate any adverse effects were also addressed. Determining the degree of environmental impact caused by this project included use of information from the preliminary project plans along with research of online databases and correspondence with State and Federal agencies to ensure that the project was examined from multiple angles. Once the potential environmental impacts of the project were assessed, any appropriate mitigation to decrease these potential impacts was determined. Any such mitigation will be implemented during the construction and/or operation phases of the project. The sections below summarize these potential environmental impacts and the need for mitigation.

Under the No Action Alternative, GMI would continue to operate the anaerobic digester and flare the methane it produces. GMI would also continue to use natural gas for plant heating and manufacturing processes, foregoing the increased efficiency and reduced emissions that would result from the Action Alternative. The site disturbance, construction and operational noise, and visual impacts of the proposed facilities would not occur.

3.1 LAND USE

3.1.1 General Land Use

3.1.1.1 Affected Environment

The portion of the GMI facility where the proposed project would be located is a previously graded, grassed area adjacent to the recently replaced (2013-2014) City of Murfreesboro sewer interceptor pipeline. According to the land cover classification performed as a part of the National Land Cover Dataset, the land use within the project area for all construction activities and nearby the construction area is entirely classified as Urban/Built-up. According to the City's Zoning Map, the project area is classified as Heavy Industrial (H-I) (City of Murfreesboro 2014). A copy of the land use map is included in Appendix A.

The area for this project consists of the area immediately surrounding the approximately 3,240 feet of gas pipeline, the gas cleanup and compression facility and CHP facility site; the total area affected by the project would be approximately 2 acres.

3.1.1.2 Environmental Consequences

The proposed facilities would be located in an area currently zoned and utilized as Heavy Industrial. The construction and operation of the proposed facilities would not change this land use. While the project would result in several new facilities and a gas transmission pipeline, they would be located in previously disturbed areas of the GMI property. No mitigation is required.

3.1.2 Important Farmland, Prime Forest Land, and Prime Range Land

As described above, the area is classified as Urban/Built-up and Heavy Industrial and currently is comprised of grass-covered graded land and gravel access roads. No farmland, forest land, or range land would be lost as a result of this project. No mitigation is required.

3.1.3 Formally Classified Lands

3.1.3.1 Affected Environment

There are no state parks, national parks, national forests, state forests, or nature preserves in the project area. Stones River National Battlefield is located less than 10 miles north of the proposed project area. A municipal park, Barfield Crescent Park, is located 3 miles west of the proposed project location on the other side of the river. Other natural/recreation areas in the vicinity of the proposed project are Cedars of Lebanon State Park located ~20 miles north of the project area and Percy Priest Lake/Long Hunter State Park located ~25 miles north of the project area.

3.1.3.2 Environmental Consequences

No aspects of the project would affect any formally classified lands. No mitigation is required.

3.2 FLOODPLAINS

3.2.1 Affected Environment

The entire project area (including all construction activities) is adjacent to the Middle Fork

Stones River. According to the 2007 Rutherford County Flood Insurance Study (as shown on Flood Insurance Rate Map (FIRM) Community Panel Number 47149C0270H in Appendix B), the 100- and 500-year flood elevations at this location are 610.8 and 613.8 feet, respectively. A portion of the proposed sites for both the gas compressor and cleanup and the CHP facilities are located within the 100-year floodplain. Most of the gas pipeline would be located within the 100-year floodplain in an area where the 100-year flood elevation is 611–612 feet. The proposed site for the gas compressor and cleanup facility was selected because of the need to be adjacent to the digester facility to allow low-pressure conveyance of the digester gas to the cleanup and compression facility, from which it would be conveyed at higher pressure to the CHP facility. Other potential sites adjacent to the digester facility would have affected more of the floodplain or other facility operations. As such, the gas cleanup and compression facility was located in the limited available area adjacent to the digester and to the extent possible, out of the floodplain. GMI proposes to construct an elevated pad for the facility which would include about 600 cubic yards of fill in the floodplain. The gas line route was selected to incorporate areas outside of routine operations, traffic, and to minimize the impact on existing facilities and utilities.

A portion of the CHP facility would be also located within the 100-year floodplain. GMI states that the CHP needs to be close to the Yoplait plant in order to efficiently provide it with steam, and as close as possible to existing electric lines. There is an electric power line just south of the Yoplait plant; however, the Yoplait building is largely within the 100-year floodplain. Other potential locations onsite would also likely be in the floodplain, and farther from the electric power line. GMI proposes to add fill to the CHP facility site to the extent necessary to raise it above the floodplain elevation.

3.2.2 Environmental Consequences

As a federal agency, TVA is subject to the requirements of Executive Order (E.O.) 11988, Floodplain Management. The objective of E.O. 11988 is “...to avoid to the extent possible the long- and short term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative” (United States Water Resources Council 1978). The E.O. is not intended to prohibit floodplain development in all cases, but rather to create a consistent government policy against such development under most circumstances. The E.O. requires that agencies avoid the 100-year floodplain unless there is no practicable alternative.

Much of the underground pipeline would be located within the 100-year floodplain of Middle

Fork Stones River. Consistent with E.O. 11988, an underground pipeline is considered to be a repetitive action in the floodplain that should have no adverse floodplain impacts.

The gas cleanup and compression facility would be located within the 100-year floodplain of Middle Fork Stones River. It would not be considered a repetitive action in the 100-year floodplain. TVA Flood Risk staff has reviewed information provided by GMI and CHA and has determined that there is no practicable alternative to locating the gas cleanup and compression facility within the 100-year floodplain due to siting constraints (see Section 3.2.1 for a description of these constraints). By implementing the mitigation measures presented below, the gas cleanup and compression facility would be consistent with E.O. 11988.

A portion of the CHP facility would be located within the 100-year floodplain. The CHP would not be a repetitive action in the 100-year floodplain. TVA Flood Risk staff has reviewed information provided by GMI and CHA and has determined that there is no practicable alternative to locating the CHP within the 100-year floodplain due to the siting constraints described above. By implementing the mitigation measures listed below, the CHP would be consistent with E.O. 11988.

With implementation of the mitigation measures, TVA has determined that the proposed PPA and the subsequent construction and operation of the gas cleanup and compression facility, the pipeline, and the CHP facility would have no significant impact on floodplains.

3.2.3 Mitigation

GMI submitted the project site plan and the erosion and sediment control plan to the City of Murfreesboro Planning Commission, which oversee the City's participation in the National Flood Insurance Program. These plans depict and address the construction within the 100-year floodplain described above. Upon approval by the commission, the City will provide authorization of the project plan by issuing a building permit. All plans and construction activities will comply with the City requirements pertaining to floodplain construction. GMI will also use Best Management Practices during construction activities to minimize adverse effects on the floodplain.

3.3 WETLANDS

3.3.1 Affected Environment

The facility is located east of the Middle Fork Stones River and there are no areas that are classified as wetlands within the project area, according to the United States Fish and Wildlife Service National Wetlands Inventory (NWI) wetlands map included in Appendix C. This determination has been confirmed by an on-site inspection.

3.3.2 Environmental Consequences

The project will not affect wetlands and is consistent with the requirements of E.O. 11990 – Protection of Wetlands.

3.3.3 Mitigation

No mitigation specific to wetlands is required.

3.4 CULTURAL RESOURCES

3.4.1 Historical Properties

3.4.1.1 Affected Environment

In accordance with Section 106 of the National Historic Preservation Act, a Phase I archaeological and historic architecture survey was conducted by Tennessee Valley Archaeological Research (TVAR) in September 2014. The Area of Potential Effect (APE) for the archaeological survey was defined as the area directly impacted by the construction of the proposed gas cleanup and compression facility, gas pipeline and CHP facility. The APE for the historic architecture survey was defined as the area within a 0.5-mile radius of the proposed facilities. No historic properties listed on the National Register of Historic Places (NRHP) occur within the APE. No archaeological resources were encountered during the survey (Manning and Weaver 2014) and TVAR recommended no additional subsurface investigations in connection with the proposed project. TVAR investigated twelve previously recorded architectural resources within the APE. All but one of these had been destroyed since initially being recorded and no new architectural resources were found. The extant, previously recorded architectural resource was determined to be outside the viewshed of the project area. TVAR recommended no additional investigation of aboveground resources in connection with the proposed project.

A copy of TVAR's report was submitted to TVA on September 30, 2014 and TVA agrees with the findings of that report. TVA provided the TVAR report to the Tennessee State Historic Preservation Office (SHPO) and federally-recognized Indian tribes in the course of consultation with those entities under Section 106 of the National Historic Preservation Act. On November 12, 2014, the SHPO concurred with TVA's determination that there are no archaeological resources eligible for inclusion in the National Register of Historic Places. A copy of this letter is included in Appendix D. No comments were provided by the Indian tribes.

3.4.1.2 Environmental Consequences

Based on the results of the cultural resources survey, TVA concluded that no historic properties listed on or eligible for listing on the NRHP occur within the APE and that the proposed action would not affect historic properties. The SHPO has concurred with this determination. As indicated in the Phase I Cultural Resources Survey, no mitigation is required.

3.4.2 Visual Aesthetics

3.4.2.1 Affected Environment

There are no visually sensitive areas within the immediate project area. The project is located east of the Middle Fork Stones River with a tree line between the river and the proposed project location. On the west side of the river there is a golf course and a residential neighborhood.

3.4.2.2 Environmental Consequences

During construction, the appearance of the construction site as viewed from the Middle Fork Stones River may be negatively affected although the treeline along the river banks may obscure much of the construction area. Although it may be possible for those using the river or those residents and golf course users on the west bank of the river to see some construction depending on the time of year and leaf cover during construction, any effects to the visual aesthetics should be temporary. Following the completion of construction the overall industrial appearance of the site would be similar to its current appearance and the gas cleanup and CHP facilities would not be readily visible from the golf course or adjacent residential area. Impacts of the proposed action on visual resources would be insignificant. No mitigation is necessary.

3.5 BIOLOGICAL RESOURCES

3.5.1 Affected Environment

The project area is an active industrial site; surface features include gravel roads and lots, sparsely vegetated areas following the recent construction of a pipeline, and regularly mowed lawn areas. No native plant communities are present and the on-site habitats are of little value to wildlife. The United States Fish and Wildlife Service (USFWS) was contacted requesting a project review. The agency responded via email on September 24, 2014 after reviewing the project for the potential impact to endangered or threatened (E/T) species. The response indicated that the agency has no records of E/T species in the Middle Fork of the Stones River. USFWS requested that the river be protected from sediment run-off during construction through the use of best management practices to protect E/T species that may be present but are absent from the agency's records. In light of historical and current site disturbance and site uses, there does not appear to be suitable habitat within the proposed project area for federally or state-listed E/T species.

In addition to contacting USFWS, a request for comments was made to multiple divisions of the Tennessee Department of Environment and Conservation (TDEC). Only TDEC's Division of Water Resources, responded to the request for comments. They did not address E/T species in the correspondence but recommended that appropriate erosion prevention and sediment control measures be installed and maintained throughout the duration of the project. Appendix E includes a summary of contacts with the TDEC and USFWS and copies of associated email correspondence.

3.5.2 Environmental Consequences

The proposed action would not adversely affect vegetation or wildlife. No endangered or threatened species or other species of conservation concern are known or likely to occur in the project area, and there would be no effects on such species.

3.5.3 Mitigation

No mitigation measures specific to biological resources are proposed.

3.6 WATER QUALITY

3.6.1 Affected Environment

Directly west of the project location is the Middle Fork Stones River. According to the EPA Watershed Assessment, Tracking & Environmental Results Waters (WATERS), the status of this section of the river (TN05130203021_1000) is ‘good’ with no impairments listed or Total Maximum Daily Loads (TMDLs) needed.

3.6.2 Environmental Consequences

A potential short-term adverse impact is increased surface runoff due to construction. The construction activities would include excavation which could result in sediment affecting the water quality of the Middle Fork Stones River. An Erosion and Sediment Control Plan will be prepared in accordance with the latest revision of the Tennessee Erosion and Sediment Control Handbook City of Murfreesboro Erosion Prevention and Sediment Control Plan Checklist. The plan will be submitted to the appropriate regulatory agencies for approval; once approved, it will be implemented. In addition, before construction, the contractor will obtain the required general construction storm water permit prior to construction; this will ensure that Best Management Practices are used to minimize the potential for storm water pollution from the construction activities. No other direct, indirect, or cumulative effects are expected from this project.

3.6.3 Mitigation

No additional mitigation specific to water quality is proposed.

3.7 SOCIOECONOMIC ISSUES/ENVIRONMENTAL JUSTICE

3.7.1 Socioeconomic Issues

3.7.1.1 Affected Environment

According to the 2010 Census, the population of Murfreesboro, TN was 109,046, and the median household income was \$49,450. Appendix F includes information from EPA’s EJView program regarding the surrounding and project areas in terms of poverty level, income, and minorities.

3.7.1.2 Environmental Consequences

In the short-term, construction may have a positive effect on the economy by providing construction employment opportunities and opportunities to purchase some of the construction materials and supplies from the local community. No mitigation is required.

3.7.2 Environmental Justice

The project is not expected to have any disproportionate impacts on minority or low-income populations. In regards to poverty level, the area adjacent to the proposed project location is only 0-10% impoverished residents which is the lowest poverty category based on the EJView scale. This is consistent with the per capita income that shows that the adjacent area has the highest per capita income in the local area falling in the \$41,000-\$72,000 range. The percent minorities in the adjacent area is in the 0-10% and 10-20% ranges. None of the criteria above indicate that the surrounding area has a disproportionately high low income or minority population. Nor would any such populations be disproportionately impacted by the proposed action.

3.8 MISCELLANEOUS ISSUES

3.8.1 Air Quality

3.8.1.1 Affected Environment

The project area, surrounding Rutherford County, and the regional Nashville area meet the applicable National Ambient Air Quality Standards and are not classified as non-attainment areas.

3.8.1.2 Environmental Consequences

3.8.1.2.1 Construction

Air emissions during the project include emissions from machinery (such as excavators, etc.) during construction. As with all construction projects, there may be an increase in dust and emissions due to construction equipment and activities. Any air quality effects are expected to be temporary, localized and restricted to those areas where construction is actively taking place.

3.8.1.2.2 Operations

As described previously, the facility currently purchases natural gas for process heating which results in facility emissions. The gas generated from the anaerobic digester is currently flared. The proposed CHP facility would produce 5.4 MBTU/hr of heat used for plant processes which is currently provided by the combustion of natural gas. Overall emissions from the GMI facility would consequently be reduced.

The projected emissions from the operation of the CHP facility are listed below.

Pollutant	Maximum Hourly Emissions (lbs/hr)
NO _x	4.92
CO	17.21
PM	0.69
SO ₂	2.02
VOC	4.92

These emissions from the CHP generator are expected to be nearly identical to those that currently occur as a result of the flaring operation in terms of both volume and constituents. The gas cleanup facility would remove moisture, siloxanes (carbon-silicon-oxygen compounds), and other particulates from the gas prior to its use in the generator; however the emissions would be very similar to the current flare system. Emissions of carbon dioxide (CO₂), a greenhouse gas, from the CHP facility would be very similar to those from the current flare system. Because the heat provided to by the CHP facility would reduce the combustion of natural gas to provide heat for plant processes, emissions of CO₂ and other air pollutants from the GMI facility would be reduced. TVA's purchase of the electricity generated by the CHP facility would result in a very small reduction in TVA's overall CO₂ emissions rate.

GMI has applied to the Tennessee Department of Environment and Conservation (TDEC) for the non-Title V air permit necessary to operate the CHP facility. As described in the permit application, the generator will be subject to Subpart JJJJ, Standards for Stationary Spark Ignition IC Engines and Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. The following table lists JJJJ emission standards on a grams per horsepower-hour rate (g/HP-hour) and the applicable standards for the proposed 2,233 HP engine and digester gas source fuel.

Pollutant	Standard (g/HP-hr)	Standard for GMI Engine (lbs/hr)
NO _x	2.0	9.84
CO	5.0	24.6
VOC	1.0	4.92

The emissions rates anticipated from the CHP facility are expected to be lower than the applicable standards. The facility will comply with all aspects of the TDEC-issued air permit regulating the proposed CHP facility. Overall impacts to air quality will be insignificant, and due to the reduction in emissions from the current combustion of natural gas for plant processes, the project will have a very small beneficial cumulative impact on air quality.

3.8.1.3 Mitigation

3.8.1.3.1 Construction

During construction activities, GMI will comply with odor control laws, dust control regulations, and other applicable air quality regulations to ensure that air quality is not adversely affected by those construction activities.

3.8.1.3.2 Operations

No mitigation beyond compliance with air permit conditions is proposed.

3.8.2 Transportation

3.8.2.1 Affected Environment

Roadway access to the GMI site is provided by four-lane and two-lane highways that connect to the nearby Interstate 24. These roadways are currently used by employees and trucks traveling to and from the GMI facility and other adjacent industrial facilities. A spur from and adjacent railroad also serves the GMI facility.

3.8.2.2 Environmental Consequences

Components of the CHP facility, the gas cleanup facility, and the pipeline would be delivered to the GMI site by truck, and construction employees would travel to the site by automobile. This

traffic would result in a small temporary increase in traffic on nearby roadways that would not adversely affect existing traffic patterns. The operation of the proposed facility would not result in any increase in traffic over current levels. Overall impacts on transportation would be insignificant and no mitigation is required.

3.8.3 Noise

3.8.3.1 Affected Environment

The GMI facility is in an industrial area where noise sources include various motors, blowers, and vehicles. It is adjacent to a railroad and Interstate 24 is located a short distance to the east. A residential area and golf course is located about 100 yards west of the site on the opposite side of the Middle Fork Stones River. Construction noise associated with the installation of the proposed line and equipment will occur in areas that are mainly industrial.

3.8.3.2 Environmental Consequences

The operation of construction equipment to excavate and install the pipeline and construct the gas cleanup and CHP facilities would produce noise. This would occur in an industrial area and is unlikely to noticeably exceed ambient noise levels. Use of blasting is not anticipated for installing the pipeline or other structures. However, if rock is encountered that cannot be handled via conventional excavation techniques or rock hammering, blasting may be used. GMI would comply with applicable local noise regulations. Noise produced by construction activities would only last a few weeks and would only occur during the day (i.e., not in the evening or at night). After the construction is complete, there may be an increase in the noise levels associated with the gas cleanup and compression facility and the CHP facility. The level of noise produced by these facilities would be consistent with routine facility manufacturing noise levels and would likely not be perceptible offsite. Overall noise impacts would be insignificant.

3.8.3.3 Mitigation

No additional mitigation specific to noise is proposed.

3.8.4 Solid and Hazardous Wastes

3.8.4.1 Affected Environment

During construction of the gas pipeline and CHP facility, a small amount of wastes may be generated.

3.8.4.2 Environmental Consequences

Small quantities of solid waste would be produced during construction. These wastes would be temporarily stored on-site in an appropriate manner and ultimately disposed of off-site in permitted facilities. No wastes are expected to be hazardous.

During the operation of the CHP facility, liquid wastes would be handled as part of the wastewater on-site pre-treatment process before being discharged from the site to the City of Murfreesboro wastewater treatment system. The siloxane removal process would produce solid waste captured by filters. Siloxanes are common industrial products present in landfills and do not require special handling. Measures will be taken to reduce the wastes at the source, reuse materials, and recycle materials. Waste generation will be minimized and any wastes generated will be properly handled, stored, and disposed. All material will be managed in accordance with applicable Federal, State, and Local environmental regulations. No adverse impacts, including cumulative impacts, are anticipated.

3.8.4.3 Mitigation

No additional mitigation specific to wastes is proposed.

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Amanda Marsh, Project Scientist

TVA

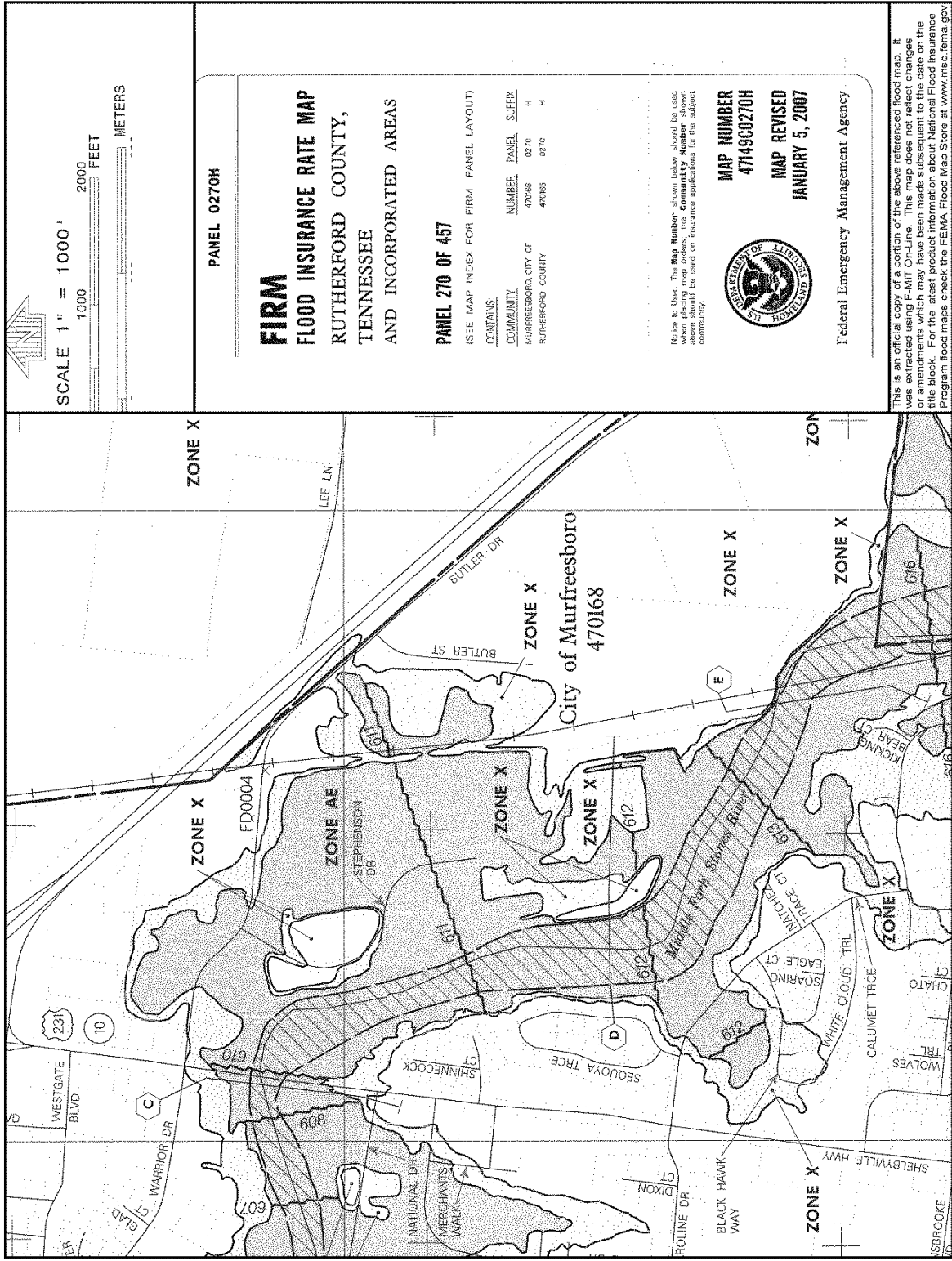
Charles P. Nicholson, NEPA Compliance and Document Preparation

APPENDIX A

LAND USE MAP

APPENDIX B

FEMA FLOOD INSURANCE RATE MAP



APPENDIX C

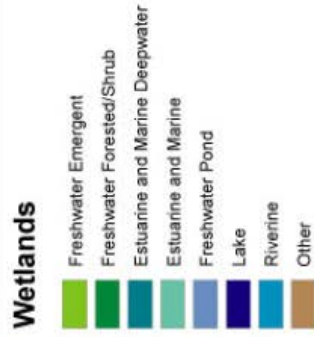
NATIONAL WETLANDS INVENTORY MAP



U.S. Fish and Wildlife Service National Wetlands Inventory

General Mills

Jul 23, 2014



This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetland related data should be used in accordance with the user metadata found on the National Wetlands Inventory.

User Remarks:

APPENDIX D

TENNESSEE STATE HISTORIC PRESERVATION OFFICE CORRESPONDENCE



Tennessee Valley Authority, 400 West Summit Hill Drive, Knoxville, TN 37902

October 29, 2014

Mr. E. Patrick McIntyre, Jr.
Executive Director
Tennessee Historical Commission
2941 Lebanon Road
Nashville, Tennessee 37243-0442

Dear Mr. McIntyre:

TENNESSEE VALLEY AUTHORITY (TVA), POWER PURCHASE AGREEMENT, GENERAL MILLS INCORPORATED COMBINED HEAT AND POWER FACILITY, MURFREESBORO, TENNESSEE (35° 47.88 N, 86° 23.62' W)

TVA proposes to enter into a Power Purchase Agreement (PPA) with General Mills Incorporated (GMI) for the purchase of power generated by GMI's proposed combined heat and power facility (CHP). GMI has two manufacturing facilities (Pillsbury and Yoplait) in Murfreesboro, Tennessee. Wastewater from plant operations is processed by aerobic biological treatment and by dissolved air flotation. Recently, GMI constructed a 6.5 million gallon digester to pretreat plant wastewaters and agricultural waste prior to sending it to the City of Murfreesboro Sewer Treatment Facility. GMI proposes to use the biogas that will be produced in the new digester to power a 1.6 megawatt (MW) internal combustion engine-generator configured for CHP production. Biogas from the digester would be processed in a gas cleanup and compression facility (GCC) before being transmitted to the CHP. GMI's proposed project would reduce the amount of power purchased from TVA for plant operations, produce electricity for grid sale, and produce heat for process needs. The project would include construction of the GCC, the CHP, and a gas transmission pipeline to carry the biogas approximately 3,240 ft. from the GCC to the CHP. The GCC would be installed on a 40 ft. by 20 ft. concrete pad, and the CHP would be installed on a 25 ft. by 20 ft. pad. Both structures will be approximately 12 ft. tall. The gas line would be installed below grade. TVA has determined that the proposed PPA is an undertaking (as defined at 36 CFR § 800.16(y)) that has the potential to cause effects on historic properties. We are initiating consultation under Section 106 of the National Historic Preservation Act for this undertaking.

TVA identified the area of potential effects (APE) for archaeological resources for the undertaking as the footprints of the GCC and CHP facilities and the 3,240-ft. gas line route. The APE for historic architectural properties consists of areas within a one-half mile radius of the proposed GCC and CHP facilities, as well as any areas where the undertaking would alter existing topography or vegetation in view of a historic resource.

GMI contracted with Tennessee Valley Archaeological Research (TVAR) to perform a phase I cultural resources survey of the APE. Enclosed are two copies of the draft report titled, *A Phase I Cultural Resources Survey of Proposed Improvements to the General Mills Food Production*

Mr. E. Patrick McIntyre, Jr.
Page Two
October 29, 2014

Facility in Murfreesboro, Rutherford County, Tennessee, along with two CDs containing digital copies of the report.

TVAR's background study, conducted prior to the field study, indicated that the APE is located within archaeological site 40RD179 (Camp Stanley). This site was originally recorded by Ben Nance and Fred Prouty in 1989, based on information gathered from amateur collectors. TVAR's archaeological field survey identified no archaeological resources, and the report authors recommend that the portion of the site within the APE has experienced a high degree of modern land disturbance and has been destroyed. TVAR's architectural survey identified no historic architectural resources within the APE. TVAR recommends that no additional cultural resources investigations are needed in association with the undertaking.

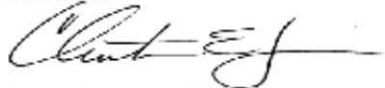
TVA has reviewed the enclosed draft report and agrees with the findings and recommendations of the authors. Based on the results of the investigation, TVA finds that the undertaking as currently proposed would not affect any resources listed or eligible for listing in the National Register of Historic Places.

Pursuant to 36 CFR Part 800.4(d)(1), we are seeking your concurrence with TVA's findings and determinations regarding historic properties in the APE of this undertaking.

Pursuant to 36 CFR Part 800.3(f)(2), TVA is consulting with federally recognized Indian tribes regarding historic properties within the proposed project's APE that may be of religious and cultural significance and are eligible for the NRHP.

Should you have any questions or comments, please contact Richard Yarnell in Knoxville at wryarnell@tva.gov or (865) 632-3463.

Sincerely,



Clinton E. Jones, Manager
Biological and Cultural Compliance
Environment
WT11B-K

Enclosures

cc (Enclosures):

Ms. Jennifer Barnett
Tennessee Division of Archaeology
1216 Foster Avenue, Cole Bldg. #3
Nashville, Tennessee 37210

Dudley, Cynthia S

From: Ezzell, Patricia Bernard
Sent: Thursday, October 30, 2014 4:56 PM
To: "joseph.blanchard@astribe.com" (joseph.blanchard@astribe.com); 'Richard-Allen@cherokee.org'; Tyler B. Howe (tylehowe@nc-chokeee.com); 'Miranda Panther (mirapant@nc-chokeee.com)'; 'Robin Dushane (RDushane@estoo.net)'; 'Dee Gardner (dgardner@estoo.net)'; 'kara.gann@kialegetribe.net'; 'Emman Spain (ESpain@mcn-nsn.gov)'; 'jjacobs@mcn-nsn.gov'; 'Kim Jumper (kim.jumper@shawnee-tribe.com)'; 'HPO@chickasaw.net'; 'Charles Coleman (chascoleman75@yahoo.com)'; 'ukbthpolarue@yahoo.com'
Cc: 'Russell Townsend (RussellT@nc-chokeee.com)'; 'odette_freeman@muscogeenation-nsn.gov'; 'jfife@muscogeenation-nsn.gov'; 'David Proctor (Davidp@mcn-nsn.gov)'; 'lwendt@mcn-nsn.gov'
Subject: TVA, POWER PURCHASE AGREEMENT, GENERAL MILLS INCORPORATED COMIBNED HEAT & POWER FACILITY, MURFREESBORO, RUTHERFORD COUNTY, TENNESSEE
Attachments: General Mills CHP Draft Rpt THPO ltr 20141030.pdf, CHA_General_Mills_FINAL_low_res.pdf

Good Afternoon,

I hope this email finds you well. By this email, I am transmitting the attached letter regarding TVA's proposal to enter into a Power Purchase Agreement (PPA) with General Mills Incorporated (GMI) for the purchase of power generated by GMI's proposed combined heat and power facility (CHP). The referenced report is also attached.

As always, please do not hesitate to contact me if you have any questions. Please respond by November 30, 2014, if you have comments on this proposed undertaking.

Thank you.

Sincerely,

Pat

Pat Bernard Ezzell
Senior Program Manager
Tribal Relations and Corporate History
Tennessee Valley Authority
400 W. Summit Hill Drive
460 WT 7D-K
Knoxville, Tennessee 37902
Office Phone: (865) 632-6461
Cell phone: 865-304-9251
E-mail: pbezzell@tva.gov



Tennessee Valley Authority, 400 West Summit Hill Drive, Knoxville, TN 37902

October 30, 2014

To Those Listed:

TENNESSEE VALLEY AUTHORITY (TVA), POWER PURCHASE AGREEMENT, GENERAL MILLS INCORPORATED COMBINED HEAT AND POWER FACILITY, MURFREESBORO, RUTHERFORD COUNTY, TENNESSEE (35° 47.88 N, 86° 23.62' W)

TVA proposes to enter into a Power Purchase Agreement (PPA) with General Mills Incorporated (GMI) for the purchase of power generated by GMI's proposed combined heat and power facility (CHP). GMI has two manufacturing facilities (Pillsbury and Yoplait) in Murfreesboro, Tennessee. Wastewater from plant operations is processed by aerobic biological treatment and by dissolved air flotation. Recently, GMI constructed a 6.5 million gallon digester to pretreat plant wastewaters and agricultural waste prior to sending it to the City of Murfreesboro Sewer Treatment Facility. GMI proposes to use the biogas that will be produced in the new digester to power a 1.6 megawatt (MW) internal combustion engine-generator configured for CHP production. Biogas from the digester would be processed in a gas cleanup and compression facility (GCC) before being transmitted to the CHP. GMI's proposed project would reduce the amount of power purchased from TVA for plant operations, produce electricity for grid sale, and produce heat for process needs. The project would include construction of the GCC, the CHP, and a gas transmission pipeline to carry the biogas approximately 3,240 ft. from the GCC to the CHP. The GCC would be installed on a 40 ft. by 20 ft. concrete pad, and the CHP would be installed on a 25 ft. by 20 ft. pad. Both structures will be approximately 12 ft. tall. The gas line would be installed below grade. TVA has determined that the proposed PPA is an undertaking (as defined at 36 CFR § 800.16(y)) that has the potential to cause effects on historic properties. We are initiating consultation under Section 106 of the National Historic Preservation Act for this undertaking.

TVA identified the area of potential effects (APE) for archaeological resources for the undertaking as the footprints of the GCC and CHP facilities and the 3,240-ft. gas line route. The APE for historic architectural properties consists of areas within a one-half mile radius of the proposed GCC and CHP facilities, as well as any areas where the undertaking would alter existing topography or vegetation in view of a historic resource.

GMI contracted with Tennessee Valley Archaeological Research (TVAR) to perform a phase I cultural resources survey of the APE. Please find enclosed a copy of the draft report titled, *A Phase I Cultural Resources Survey of Proposed Improvements to the General Mills Food Production Facility in Murfreesboro, Rutherford County, Tennessee*.

TVAR's background study, conducted prior to the field study, indicated that the APE is located within archaeological site 40RD179 (Camp Stanley). This site was originally recorded by Ben Nance and Fred Prouty in 1989, based on information gathered from amateur collectors.

To Those Listed
Page Two
October 30, 2014

TVAR's archaeological field survey identified no archaeological resources, and the report authors recommend that the portion of the site within the APE has experienced a high degree of modern land disturbance and has been destroyed. TVAR's architectural survey identified no historic architectural resources within the APE. TVAR recommends that no additional cultural resources investigations are needed in association with the undertaking.

TVA has reviewed the enclosed draft report and agrees with the findings and recommendations of the authors. Based on the results of the investigation, TVA finds that the undertaking as currently proposed would not affect any resources listed or eligible for listing in the National Register of Historic Places.

Pursuant to 36 CFR Part 800.3(f)(2), TVA is consulting with the following federally recognized Indian tribes regarding historic properties within the proposed project's APE that may be of religious and cultural significance and are eligible for listing in the NRHP: Absentee Shawnee Tribe of Oklahoma, Cherokee Nation, Eastern Band of Cherokee Indians, Eastern Shawnee Tribe of Oklahoma, Kialegee Tribal Town, Muscogee (Creek) Nation of Oklahoma, Shawnee Tribe, The Chickasaw Nation, Thlopthlocco Tribal Town, and the United Keetoowah Band of Cherokee Indians in Oklahoma.

By this letter, TVA is providing notification of these findings and is seeking your comments regarding this undertaking and any properties that may be of religious and cultural significance and may be eligible for the NRHP pursuant to 36 CFR Part 800.2(c)(2)(i), 800.3(f)(2), and 800.4(a)(4)(b).

Please respond by November 30, 2014, if you have any comments on the proposed undertaking. If you have any questions, please contact me at (865) 632-6461 or by email at pbezzell@tva.gov.

Sincerely,



Patricia Bernard Ezzell
Senior Program Manager
Tribal Relations and Corporate History
Public Relations and Corporate Information
Communications

SCC:PBE:CSD
Enclosures

IDENTICAL LETTER MAILED TO THE FOLLOWING ON OCTOBER 30, 2014:

Dr. Richard Allen
Policy Analyst
Cherokee Nation
Post Office Box 948
Tahlequah, Oklahoma 74465

Mr. Joseph Blanchard
Tribal Historic Preservation Officer
Absentee Shawnee Tribe of Oklahoma
2025 S. Gordon Cooper
Shawnee, Oklahoma 74801

Mr. Ace Buckner
Cultural Resources Director
Kialegee Tribal Town
Post Office Box 332
Wetumka, Oklahoma 74883

cc: Ms. Kara Gann
Assistant Cultural Resources Director
Kialegee Tribal Town
Post Office Box 332
Wetumka, Oklahoma 74883

Mr. Charles Coleman
NAGPRA Representative
Thlopthlocco Tribal Town
Route 1, Box 190-A
Weleetka, Oklahoma 74880

Ms. Robin DuShane
Tribal Historic Preservation Officer
Eastern Shawnee Tribe of Oklahoma
127 West Oneida
Seneca, Missouri 64865

Ms. Dee Gardner
NAGPRA/Cell Tower Coordinator
Eastern Shawnee Tribe of Oklahoma
127 West Oneida
Seneca, Missouri 64865

Mr. Tyler Howe
Historic Preservation Specialist
Eastern Band of Cherokee Indians
Post Office Box 45
Cherokee, North Carolina 28719

cc: Mr. Russell Townsend
Tribal Historic Preservation Office
Eastern Band of Cherokee Indians
Post Office Box 455
Cherokee, North Carolina 28719

Ms. Miranda Panther
NAGPRA Coordinator
Eastern Band of Cherokee Indians
Post Office Box 455
Cherokee, North Carolina 28719

Ms. Johnnie Jacobs
Manager
Cultural Preservation Department
Muscogee (Creek) Nation
P.O. Box 580
Okmulgee, Oklahoma 74447

cc: Mr. Jeff Fife
Assistant to the Second Chief
Muscogee (Creek) Nation
P.O. Box 580
Okmulgee, Oklahoma 74447

Ms. Odette Freeman
Assistant Manager
Cultural Preservation Department
Muscogee (Creek) Nation
Post Office Box 580
Okmulgee, Oklahoma 74447

Mr. David Proctor
Cultural Advisor
Cultural Preservation Department
Muscogee (Creek) Nation
Post Office Box 580
Okmulgee, Oklahoma 74447

Ms. Kim Jumper
Tribal Historic Preservation Officer
Shawnee Tribe
Post Office Box 189
Miami, Oklahoma 74355

cc: Jodi Hayes
NAGPRA Representative
Shawnee Tribe
PO Box 189
Miami, OK 74355

Mrs. Lisa C. LaRue-Baker
Acting Tribal Historic Preservation Officer
United Keetoowah Band
of Cherokee Indians in Oklahoma
Post Office Box 746
Tahlequah, Oklahoma 74464

Mr. Kirk Perry
Administrator
Department of Homeland Affairs
The Chickasaw Nation
Post Office Box 1548
Ada, Oklahoma 72821-1548

cc: Ms. Virginia (Gingy) Nail
Assistant Tribal Historic Preservation Officer
Department of Homeland Affairs
The Chickasaw Nation
Post Office Box 1548
Ada, Oklahoma 72821-1548

Ms. Amber Jarrett
Preservation & Repatriation Manager
Division of Historic Preservation
Department of Culture & Humanities
The Chickasaw Nation
P.O. Box 1548
Ada, OK 74821-1548

Dr. Tim Baugh
Cultural Preservation Specialist
Historic Preservation Division
Department of Homeland Affairs
The Chickasaw Nation
P.O. Box 1548
Ada, OK 74821-1548

Mr. Emman Spain
Deputy Tribal Historic Preservation Officer
Cultural Preservation Department
Muscogee (Creek) Nation
Post Office Box 580
Okmulgee, Oklahoma 74447



TENNESSEE HISTORICAL COMMISSION
STATE HISTORIC PRESERVATION OFFICE
2841 LEBANON ROAD
NASHVILLE, TENNESSEE 37243-0442
OFFICE: (615) 632-1650
www.tnhistoricalcommission.org



November 12, 2014

Mr. Clinton Jones
Tennessee Valley Authority
400 West Summitt Hill Drive
Knoxville, Tennessee 37902

RE: TVA, ARCHAEOLOGICAL ASSESSMENT, GENERAL MILLS INC. POWER PURCHASE,
MURFREESBORO, RUTHERFORD COUNTY, TN

Dear Mr. Jones:

At your request, our office has reviewed the above-referenced archaeological survey report in accordance with regulations codified at 36 CFR 800 (Federal Register, December 12, 2000, 77698-77739). Based on the information provided, we concur that the project area contains no archaeological resources eligible for listing in the National Register of Historic Places.

If project plans are changed or archaeological remains are discovered during construction, please contact this office to determine what further action, if any, will be necessary to comply with Section 106 of the National Historic Preservation Act.

Your cooperation is appreciated.

Sincerely,

E. Patrick McIntyre, Jr.
Executive Director and
State Historic Preservation Officer

EPM/jmb

APPENDIX E

AGENCY CORRESPONDENCE

Long, Libby

From: Hoffman, Lawrence
Sent: Monday, September 29, 2014 11:30 AM
To: Marsh, Amanda
Subject: FW: Environmental Assessment for Combined heat and Power Project, General Mills Murfreesboro TN; CHA Project No. 28535

From: McDonald, Kenneth [mailto:kenneth_mcdonald@fws.gov]
Sent: Wednesday, September 24, 2014 11:05 AM
To: Hoffman, Lawrence
Subject: Environmental Assessment for Combined heat and Power Project, General Mills Murfreesboro TN; CHA Project No. 28535

Dear Mr. Hoffman

We've reviewed this project for any potential impacts to federally listed threatened or endangered species. We have no records of threatened or endangered species within the Middle Fork of the Stones River. However, we do recommend the strongest possible protection of the Middle Fork of the Stones River from sediment run-off during construction. We believe application of best management practices for the protection of water quality would be sufficiently protective of any listed threatened or endangered species which may be present but not reflected in our records.

Thank you for the opportunity to review this project. If you have additional questions or concerns feel free to contact me at any time.

Ken McDonald

--

Kenneth W. McDonald
Energy Biologist
U.S. Fish and Wildlife Service
446 Neal Street
Cookeville, TN 38501

Office: 931.525.4990
Fax: 931.528.7075

kenneth_mcdonald@fws.gov

Energy and persistence will conquer all things- Benjamin Franklin



ENVIRONMENTAL FIELD OFFICE
TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
711 R.S. Gass Blvd
Nashville, TENNESSEE 37243
(615) 687-7000 STATEWIDE 1-888-891-8332 FAX (615) 687-7078

September 23, 2014

Ms. Amanda Marsh
1901 Innovation Drive, Suite 2100
Blacksburg, VA 24060

Re: Public Records Request Combined Heat and Power Project
General Mills Murfreesboro, TN
CHA Project # 28535

Dear Ms. Marsh:

The Tennessee Public Records Act is found at Tennessee Code Annotated Section 10-7-503. Unlike the federal Freedom of Information Act, the Tennessee law does not require the state conduct a search for records. It is your responsibility to identify the records you are seeking. However, as a courtesy, a search of the files in the Environmental Field Office was conducted, and:

- () No records matching your descriptions were found at the Nashville Environmental Field Office.
- () A small number of records were found and they are enclosed with this letter.
- (X) Records were found and are available. You can setup an appointment by calling Lonna Justus with the division of Water Resources at 615-687- 7068 files.

Again, please understand that our courtesy search was based on your description of the records you are seeking, and it was limited to local files only. In many cases there may be additional records at other TDEC offices. You may want to more clearly describe the records that you are

seeking and/or contact our other offices. You can also find a great deal of information on our website at: www.tn.gov/environment.

All of our non-confidential records are open for inspection between the hours of 8:00 a.m. and 4:30 p.m. at our Nashville Central Office and each of our Field Offices. To assure prompt service and adequate time for file review, it is recommended appointments be made between the hours of 8:30 a.m. and 3:00 p.m. You may request copies of documents that you identify during your inspection. There may be a charge for copies and labor costs pursuant to Tennessee Rule 0400-01-01-.01.

It may be helpful to your search if you call the appropriate division in advance of coming to our offices so that the personnel familiar with the filing system are available to assist you. Attached is a contact list to assist you with your search.

Sincerely,

Sharon Escue

Sharon Escue
Administrative Services Assistant
Nashville Environmental Field Office
711 R. S. Gass Blvd.
Nashville, TN 37216
Office: 615-687-7000
Fax: 615-687-7072

**TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
CONTACT LIST**

DIVISION OF AIR POLLUTION CONTROL 615-532-0554
DIVISION OF ARCHEOLOGY 615-741-1588
DIVISION OF NATURAL AREAS 615-532-0431
DIVISION OF RADIOLOGICAL HEALTH 615-532-0364
DIVISION OF REMEDIATION 615-532-0900
DIVISION OF HAZARDOUS & SOLID WASTE MANAGEMENT 615-532-0780
DIVISION OF UNDERGROUND STORAGE TANKS 615-532-0945
DIVISION OF WATER RESOURCES
WATER SUPPLY 615-532-0191
GROUNDWATER PROTECTION 615-532-0761
WATER POLLUTION CONTROL 615-532-0625
MEMPHIS ENVIRONMENTAL FIELD OFFICE 901-371-3000
JACKSON ENVIRONMENTAL FIELD OFFICE 731-512-1300
COLUMBIA ENVIRONMENTAL FIELD OFFICE 931-840-4142
NASHVILLE ENVIRONMENTAL FIELD OFFICE 615-687-7000
COOKEVILLE ENVIRONMENTAL FIELD OFFICE 931-432-7605
CHATTANOOGA ENVIRONMENTAL FIELD OFFICE 423-634-5745
KNOXVILLE ENVIRONMENTAL FIELD OFFICE 865-594-5450
JOHNSON CITY ENVIRONMENTAL FIELD OFFICE 423-854-5404



STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF WATER RESOURCES
William R. Snodgrass - Tennessee Tower
312 Rosa L. Parks Avenue, 11th Floor
Nashville, Tennessee 37243-1102

October 20, 2014

R. Lawrence Hoffman
CHA
1901 Innovation Drive
Suite 2100
Blacksburg, Virginia 24060

re: General Mills Murfreesboro Combined Heat and Power Project

Dear Mr. Hoffman:

The Division has reviewed the information that was submitted through our Department's Environmental Policy Office the combined heat and power project for the General Mills facility in Murfreesboro, Tennessee. This project as proposed does not pose a significant impact on programs regulated by the Division of Water Resources.

It is unclear from the information submitted if the construction of the transmission main will disturb over one acre of land. If this is the case, a General National Pollutant Discharge Elimination System (NPDES) Permit for Discharges of Storm Water Associated with Construction Activities (CGP) would be required prior to construction. Owing to the close proximity to the Stones River, the Division would still encourage appropriate erosion prevention and sediment control measures are installed and maintained throughout the duration of the project even if a CGP permit is not required. The Department's website has further information regarding CGPs: www.tn.gov/environment/permits/conststm.shtml.

If you have any further questions, I will be glad to try to assist you. You may reach me at (615) 532-0170 or tom.moss@tn.gov.

Sincerely,

A handwritten signature in blue ink that reads "Thomas A. Moss".

Thomas A. Moss
Environmental Review Coordinator
Compliance and Enforcement Unit

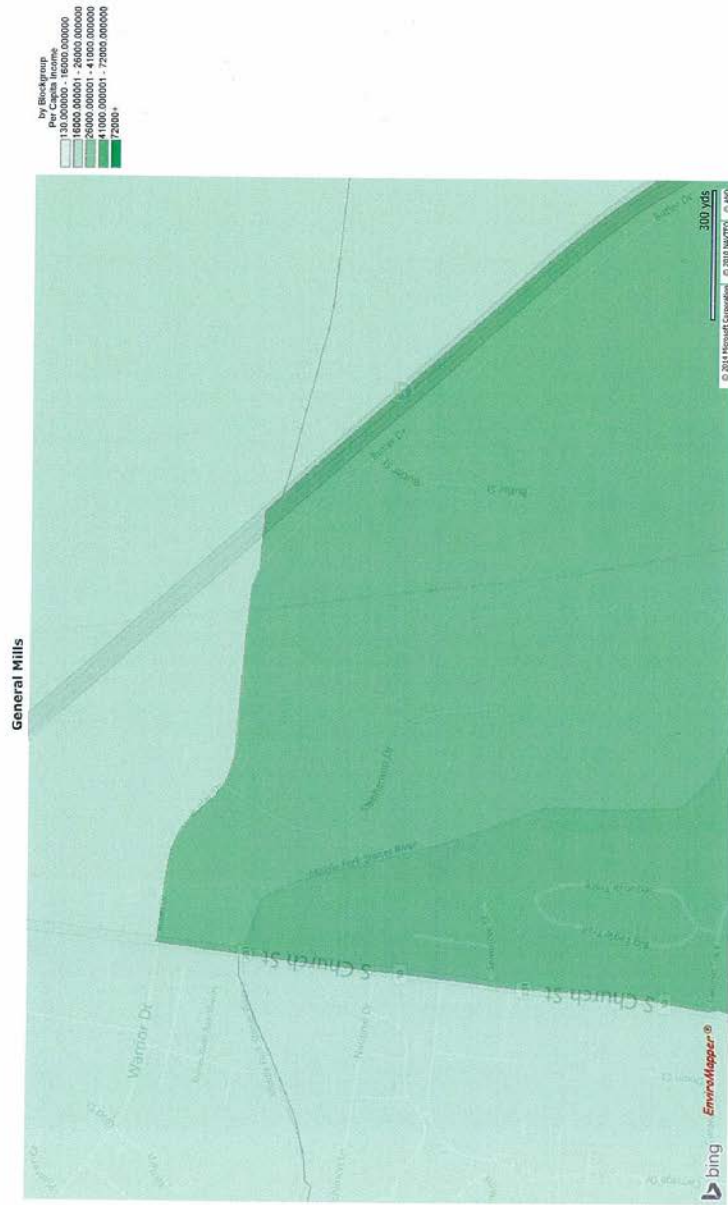
RECEIVED
OCT 23 2014
CHA Consulting, Inc.

APPENDIX F

CENSUS DEMOGRAPHIC PROFILE – EPA EJVIEW INFORMATION

EJView Print Map

Page 1 of 1

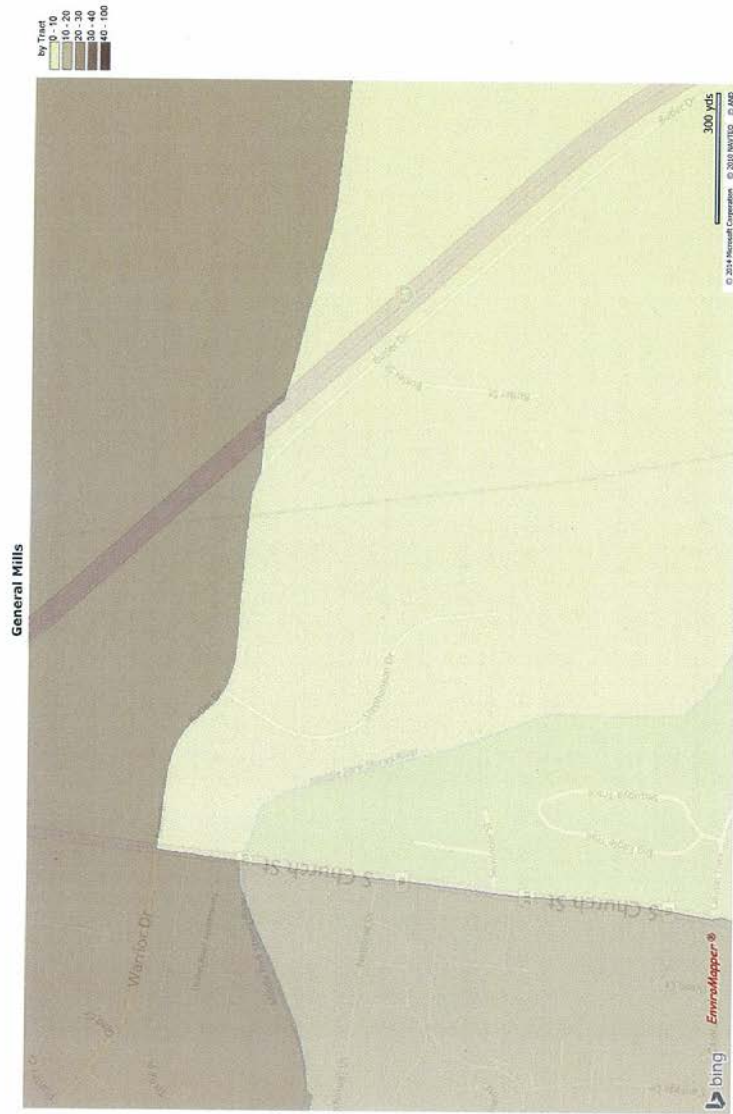


<http://epamap14.epa.gov/ejmap/printmap.html>

7/23/2014

EJView Print Map

Page 1 of 1

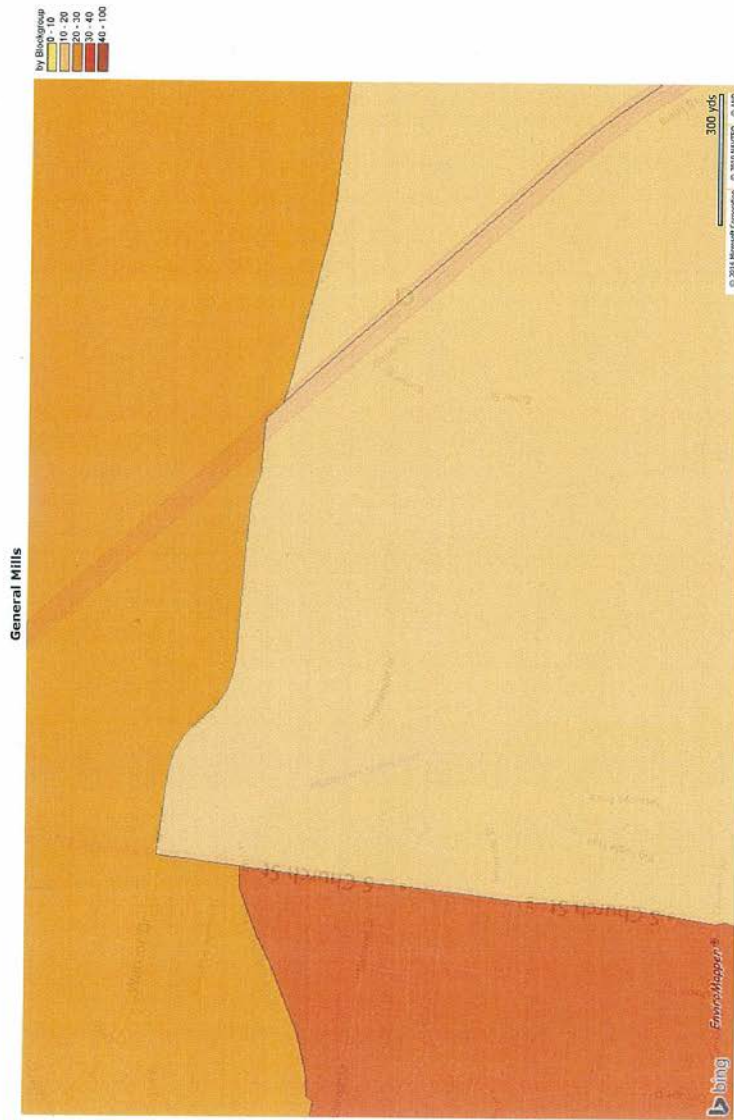


<http://epamap14.epa.gov/ejmap/printmap.html>

7/23/2014

EJView Print Map

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<http://epamap14.epa.gov/ejmap/printmap.html>

7/23/2014