



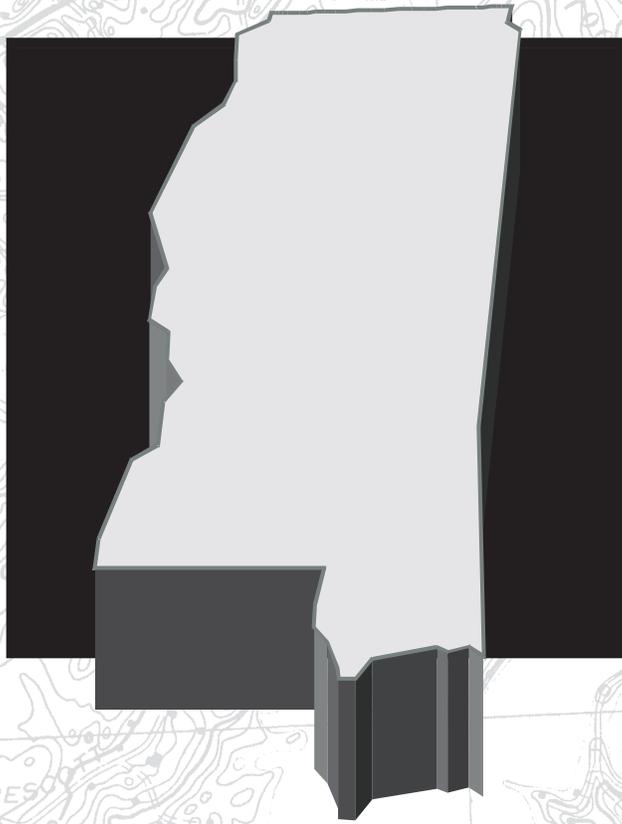
United States
Environmental Protection
Agency

EPA-430-R-02-011



LANDFILL METHANE
OUTREACH PROGRAM

Mississippi State Primer



**A Primer for
Developing Landfill
Gas Energy Projects
in the State of
Mississippi**



MISSISSIPPI DEPARTMENT OF
ENVIRONMENTAL QUALITY

- Originally Developed on April 18, 2002
- Modified on March 30, 2007

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Foreword

In an attempt to become more energy independent and environmentally friendly, the state of Mississippi is promoting the use of energy from alternate sources. When thinking of alternate energy sources, generally solar, wind, or water sources come to mind. However, a source of renewable energy that often gets overlooked is the local landfill. A landfill generates methane 24 hours a day, 7 days a week from the solid waste disposed within it, which often makes the landfill a more reliable renewable energy source as compared to other alternate energy sources. Businesses and communities in Mississippi can now explore potential opportunities for using this renewable and reliable energy source through the state's Landfill Methane Outreach Program.

Since joining the U.S. Environmental Protection Agency's Landfill Methane Outreach Program (LMOP) in 2001, the Mississippi Department of Environmental Quality (MDEQ) has worked in partnership with EPA and the state's LMOP task force in the development of landfill gas (LFG) energy projects in the state. MDEQ has provided assistance to landfill owners, project developers, and potential end users to encourage the development of LFG energy (LFGE) projects. Through LMOP, MDEQ and EPA have identified several landfills throughout the state with the potential to support an economically viable LFGE project.

Development of LFGE projects provides a win-win opportunity for the landfill owners/operators, the developers, the industries and other potential end users, the surrounding community, the local government, and all other parties involved. These projects generate jobs for communities even before they produce profits from the sale or use of LFG. Project development involves engineers, construction firms, equipment vendors, and utilities or end-users of the power produced. Much of a project's capital cost is spent locally for drilling, piping, construction, and operational personnel, providing additional economic benefits to the community through increased employment and local sales. Once the LFG collection system is in place, the captured gas can be sold for use as heat or fuel or can be converted and sold on the market as renewable energy. Thus, the community can turn a landfill into an asset.

Landfill gas is now used in many facets of industrial applications. Numerous high profile manufacturers are using LFG to meet their energy needs. Considering the current high price of energy, more and more industries are exploring the possibility of using LFG. Landfill gas can be piped directly to a nearby facility for use as either a boiler or industrial process fuel. Direct use of LFG is reliable and requires minimal processing and minor modifications of the existing combustion equipment. Another option is to generate electricity from the recovered LFG for utilities and power providers to purchase. Any entity that has a need for a direct and constant power supply is a good candidate for LFG use.

Because of its efforts to promote LFGE in Mississippi, MDEQ was honored by EPA as the LMOP State Partner of the Year for 2004. The state's LMOP task force plans to build on Mississippi's current program activities to ensure the development of new LFGE projects in the state and to increase LFGE awareness.

1. The Goals of the Primer

Throughout the country, the number of LFGE projects is growing. Recovering methane gas at solid waste landfills provides significant environmental and economic benefits by eliminating methane emissions while capturing the energy value of the gas. The methane captured from landfills can be transformed into a cost-effective fuel source for generating electricity and heat, firing boilers, or even powering vehicles.

Permits, incentive programs, and policies for LFGE project development vary greatly from state to state. To guide LFGE project developers through the state permitting process and to help them to take advantage of state incentive programs, the U.S. EPA Landfill Methane Outreach Program (LMOP) has worked with state agencies to develop individual primers for states participating in the State Partner Program. By presenting in this primer the latest information on federal and state regulations and incentives affecting LFGE projects, Mississippi hopes to facilitate the development of LFGE projects at many of the candidate landfills listed in Table A on page viii.

To develop this primer, the state of Mississippi identified the permit and funding programs that could apply to the development of LFGE projects in Mississippi. It should be noted, however, that the regulations, agencies, and policies described may be subject to change. Changes are likely to occur whenever a state legislature meets or when the federal government imposes new directions on state and local governments. LFGE project developers should verify and continuously monitor the status of laws and rules that might affect their plans or the operation of their projects.

1.1 Users of the Primer

The primer is designed to help facilitate LFGE recovery in the state of Mississippi. It provides information for LFGE project developers, as well as all other participants such as:

- Landfill owners/operators
- Utility companies
- Independent power producers
- Community officials
- State regulators
- Engineers
- Equipment vendors

1.2 Information Contained in the Primer

If you are interested in taking advantage of the economic and environmental opportunities of LFGE recovery in Mississippi, you will need to know the regulatory requirements that apply. You will also need to know what economic incentives are available to help make these projects more economically viable.

To address these needs, this primer covers the following topics:

- *Federal Regulations and Permits.* This section provides information on federal regulations that may pertain to LFGE projects, including solid waste, air quality, and water quality regulations.

- *State Regulations and Permits.* This section provides information on state permits that apply to LFGE recovery projects in Mississippi.
- *Local Regulations and Permits.* Local permit approval will often be needed for LFGE projects.
- *Federal Incentive Programs.* This section presents information on federal incentives that may apply to LFGE projects.
- *State Incentive Programs.* This section presents information about environmental infrastructure financing opportunities in the state of Mississippi
- *Electricity Restructuring.* This section discusses how renewable energy provisions in state electricity restructuring regulations might apply to LFGE projects.
- *Voluntary Reporting of Greenhouse Gases.* This section discusses a program allowing organizations to gain recognition for environmental achievements related to greenhouse gas emissions.

2. The Landfill Methane Outreach Program

In order to promote the use of LFG as a renewable energy source, EPA established the Landfill Methane Outreach Program (LMOP) in 1994. The goals of LMOP are to reduce methane emissions from landfills by:

- Encouraging environmentally and economically beneficial LFGE development
- Removing barriers to developing LFGE projects

To achieve these goals, EPA establishes partnerships with four key constituencies:

- State environmental and energy agencies
- Energy users/providers (including investor-owned, municipal, and other public power utilities; cooperatives; direct end users; and power marketers)
- Industry (including developers, engineers, and equipment vendors)
- Communities (municipalities, cities, counties, and other local governments and community groups)

EPA establishes these partnerships through a Memorandum of Understanding (MOU). By signing the MOU, each Partner acknowledges a shared commitment to promoting LFGE recovery at solid waste landfills, recognizes that the widespread use of LFG as an energy resource will reduce methane and other air emissions, and commits to certain activities that enhance the development of this resource. To learn more about becoming an LMOP Partner or to fill out an MOU, please visit LMOP's Join the Program page at <http://www.epa.gov/lmop/join.htm>.

As of November 2006, there were more than 400 operational LFGE projects in the United States. Approximately 100 additional LFGE projects are either currently under construction or already planned. EPA estimates that 575 more landfills across the United States present great potential for development of economically viable LFGE projects.

3. Benefits of Landfill Gas Use

The use of LFG as an energy resource provides the following environmental and economic benefits:

- Reduces emissions of landfill methane which is a potent greenhouse gas
- Reduces the use of fossil fuels including coal and natural gas
- Reduces local air pollution
- Creates jobs, revenues, and increased cost savings
- Reduces environmental compliance costs
- Other indirect benefits

Despite its many benefits, LFG generated from decomposing garbage represents a reliable and renewable fuel source that remains largely untapped at many landfills. Generating energy from LFG provides the following benefits:

Reduces Greenhouse Gas Emissions

Municipal solid waste (MSW) landfills are the largest man-made source of methane emissions in the United States, releasing an estimated 36 million metric tons of carbon equivalent (MMTCE) to the atmosphere in 2004 alone. Given that all landfills generate methane, it makes sense to use the gas for the beneficial purpose of energy generation rather than emitting it to the atmosphere. Methane is a very potent greenhouse gas (GHG) that is a key contributor to global climate change (over 21 times stronger than carbon dioxide (CO₂)). Methane also has a short (10-year) atmospheric life. Because methane is both potent and short-lived, reducing methane emissions from MSW landfills is one of the best ways to achieve a near-term beneficial impact in mitigating global climate change.

It is estimated that a LFGE project will capture about 60-90% of the methane emitted from the landfill, depending on system design and efficiency. The captured methane is destroyed (converted to water and the much less potent CO₂) when the gas is burned to produce electricity. The estimated annual greenhouse gas reduction benefits from a typical 4-megawatt (MW) LFGE project would be equivalent to planting over 47,000 acres of forest, removing the CO₂ emissions from over 33,000 vehicles, offsetting the use of over 800 railcars of coal, or preventing the use of more than 400,000 barrels of oil.

Reduces Use of Fossil Fuels

Producing energy from LFG helps prevent the use of non-renewable resources such as coal, oil, or natural gas to obtain the same amount of energy. It also provides an additional source of reliable and renewable energy.

Reduces Air Pollution

Using LFG can help the direct end user or power plant reduce emissions of CO₂ and pollutants such as sulfur dioxide (which is a major contributor to acid rain), particulate matter (a respiratory health concern), nitrogen oxides (NOx), and trace hazardous air pollutants. It should be noted that LFG electricity generation devices, like all combustion devices, generate some emissions of NOx, which can contribute to local ozone and smog formation. Depending on the fuels and technologies used by the power plant and the LFGE project, the NOx emission reductions from the power plant may not completely offset the NOx emit-

ted from the LFG electricity project. However, the overall environmental improvement from LFG electricity generation projects is significant because of the large methane reductions, hazardous air pollutant reductions, and avoidance of the use of limited non-renewable resources such as coal and oil that are more polluting than LFG.

Benefits the Local Economy

Landfill gas energy projects generate revenue from the sale of the gas. Landfill gas use can also create jobs associated with the design, construction, and operation of energy recovery systems. Landfill gas energy projects involve engineers, construction firms, equipment vendors, and utilities or end-users of the power produced. Much of this cost is spent locally for drilling, piping, construction, and operational personnel, helping communities to realize economic benefits from increased employment and local sales. Businesses are also realizing the cost savings associated with using LFG as a replacement for more expensive fossil fuels, such as natural gas. Some companies will save millions of dollars over the life of their LFGE projects. Also, the development of a LFGE project helps communities enjoy increased environmental protection, better waste management, and responsible community planning.

Reduces Environmental Compliance Costs

Current EPA regulations under the Clean Air Act require many landfills to collect and combust LFG. There are several compliance options, including flaring the gas, or installing a LFG use system. Only the beneficial use of LFG offers communities and landfill owners the opportunity to reduce the costs associated with regulatory compliance by turning potential pollution into a valuable community resource.

Other Indirect Benefits

Collecting LFG for energy recovery mitigates potential nuisance conditions in the surrounding community by reducing landfill odors. Burning LFG also destroys most of the non-methane organic compounds that are present at low concentrations in uncontrolled LFG, thereby reducing possible health risks from these compounds. Gas collection can also improve safety by reducing explosion hazards from gas accumulation in structures on or near the landfill. Generating electricity from existing MSW landfills is also a relatively cost-effective way to provide new renewable energy generation capacity to supply community power needs.

4. Landfill Gas Energy Projects in Mississippi

Mississippi currently has one operational LFGE project that was developed at the Pecan Grove Landfill, which is owned and operated by Waste Management, Inc. near Pass Christian, Mississippi. The Pecan Grove LFGE project was Mississippi's first operational LFGE project developed under the state's outreach program. Through this project, gas from the Pecan Grove Landfill is captured and treated at the landfill property and then piped to a DuPont manufacturing facility located near DeLisle, Mississippi. This project involved constructing a pipeline of over 5 miles and was designed to process 3,200 standard cubic feet per minute (scfm) of LFG. DuPont currently uses 2,700 scfm of treated LFG to fire boilers at its DeLisle plant. A direct benefit from this project is the removal of a significant amount of methane, a GHG, from the environment. Based on EPA's LFGE benefits calculation tool, the estimated reduction of GHG from this project is equivalent to:

- removing emissions from 6,500 vehicles on the road for a year, or
- reducing oil consumption by 79,000 barrels per year, or

- reducing coal consumption by 160 railcars per year, or
- planting 9,000 acres of forest.

Also, the energy benefit from this project is the equivalent of heating 8,800 homes annually.

In addition to the environmental benefits, this LFGE project has helped the DuPont facility save more than \$1 million annually in energy costs. Photographs of the operational Pecan Grove LFGE project in Mississippi are shown in Figure 1 below.

Figure 1: Photos of the Pecan Grove LFGE Project

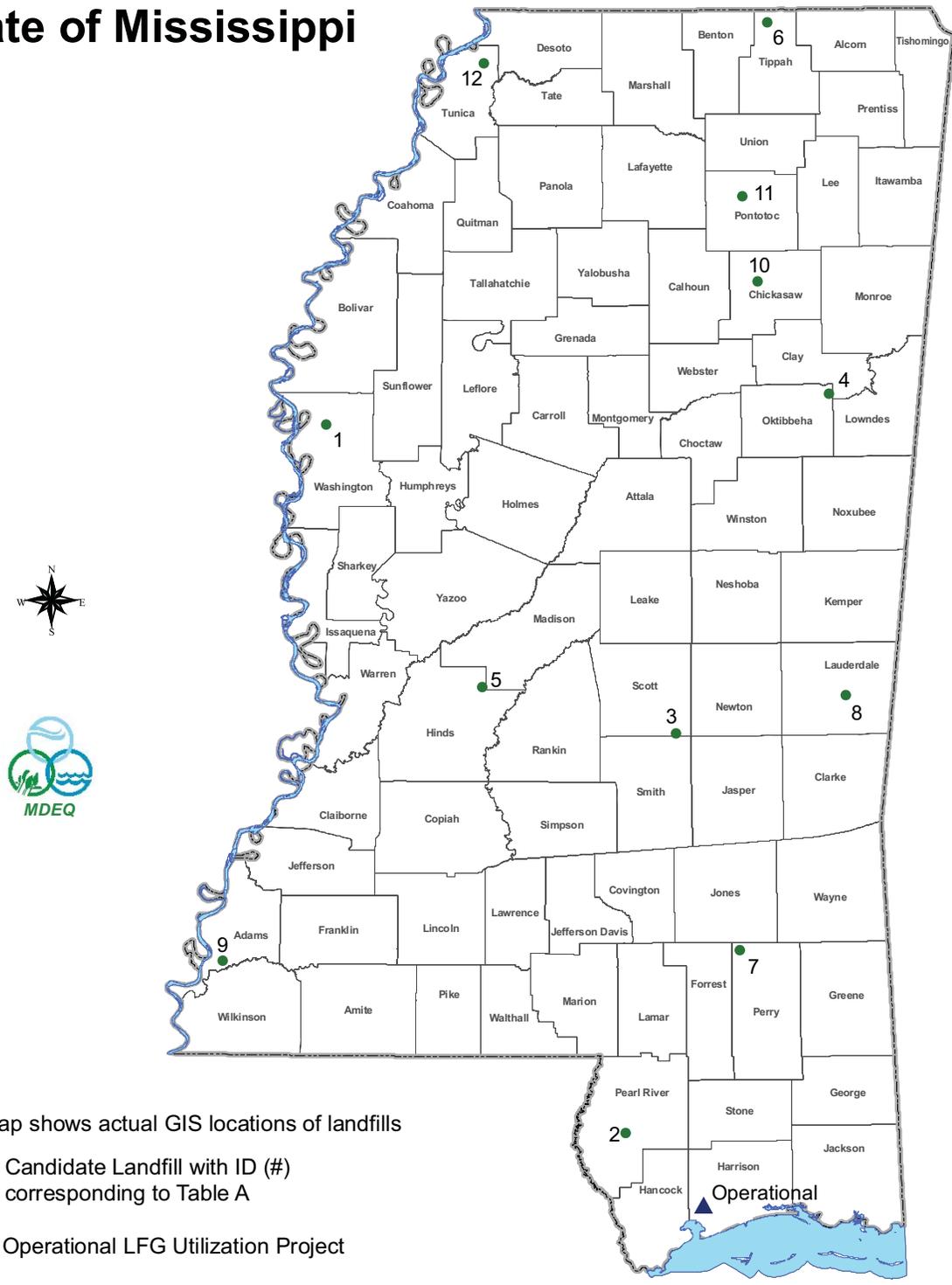


5. Candidate Landfills in Mississippi

Through LMOP, MDEQ and EPA have identified several landfills in the state that have potential to support an economically viable LFGE project. Table A identifies 12 of these candidate landfills. These landfills meet the minimum tonnage/volume threshold necessary to provide sufficient LFG, depending on the size and scope of the proposed project. The location of the operational LFGE project and the 12 candidate landfills is shown in Figure 2 on page vii. Additional information for these candidate landfills and other operational landfills that may present opportunities for future project development can be found on the MDEQ Web site at http://www.deq.state.ms.us/MDEQ.nsf/page/SW_Home?OpenDocument.

Figure 2: Candidate Landfills and Operational LFGE Projects

State of Mississippi



The map shows actual GIS locations of landfills

- Candidate Landfill with ID (#) corresponding to Table A
- ▲ Operational LFG Utilization Project

Table A**Candidate Landfills in Mississippi**

Landfill Name	Landfill Owner	City	County	Landfill Operational Status	Waste in Place (Tons)	Approximate MW Potential
1. Big River Landfill	Allied Waste Services	Leland	Washington	Open	3,811,100	3.0
2. Central Landfill	Trans American Waste Central Landfill, Inc.	McNeill	Pearl River	Open	3,836,700	3.0
3. Clearview Environmental Control	Chambers of Mississippi, Inc.	Lake	Scott	Open	7,104,500	5.7
4. Golden Triangle Landfill	Golden Triangle Regional Solid Waste Management Authority	Starkville	Clay	Open	1,166,300	1.0
5. Little Dixie Landfill	Check Virden	Ridgeland	Madison	Open	8,743,900	7.0
6. Northeast Mississippi Regional Landfill	Northeast Mississippi Regional Solid Waste Management Authority	Walnut	Tippah	Open	1,108,000	0.9
7. Pine Belt Landfill	Pine Belt Regional Solid Waste Management Authority	Ovett	Perry	Open	977,400	0.7
8. Pine Ridge Landfill	Waste Management of Mississippi, Inc.	Meridian	Lauderdale	Open	5,099,000	4.1
9. Plantation Oaks Landfill	Waste Management of Mississippi, Inc.	Sibley	Adams	Open	5,983,600	4.8
10. Prairie Bluff Landfill	Waste Management of Mississippi, Inc.	Houston	Chickasaw	Open	13,328,000	11.0
11. Three Rivers Regional Landfill	Three Rivers Regional Solid Waste Management Authority	Pontotoc	Pontotoc	Open	1,828,300	1.5
12. Tunica County New Landfill	Trash Hunters of Tunica, Inc.	Robinsonville	Tunica	Open	1,988,100	1.6

6. Mississippi State LMOP Task Force

The Mississippi state LMOP task force was formed to review state regulations and policies to explore opportunities for overcoming barriers to the development of LFGE projects. The overall purpose of the state task force is to encourage information sharing and increased coordination among interested parties on LFGE project development in Mississippi. The Mississippi state LMOP task force is comprised of the following members:

Table B Mississippi State LMOP Task Force Members

Name	Organization	Phone Number
Mr. Pradip Bhowal	Mississippi Department of Environmental Quality (MDEQ); State LMOP Coordinator	(601) 961-5082
Mr. Claiborne Barnwell	Mississippi Department of Transportation (MDOT)	(601) 359-7920
Mr. Jason Bridges	MDEQ - Environmental Compliance & Enforcement Division	(601) 961-5721
Mr. Kenneth Calvin	Mississippi Development Authority (MDA)	(601) 359-6600
Mr. Bryan Collins	MDEQ – Environmental Permits Division	(601) 961-5239
Mr. Christopher Garbacz	MPSC – Mississippi Public Utilities Staff	(601) 961-5413
Mr. B. J. Hailey	MDEQ - Air Division	(601) 961-5783
Mr. Trent Jones	MDEQ - Environmental Permits Division	(601) 961-5726
Mr. Patrick Sullivan	MDEQ, Liaison to Governor's Office	(601) 359-3150
Mr. Darell Neely	MDA, Liaison to Governor's Office	(601) 359-3150
Ms. Michelle Vinson	MDEQ - Environmental Permits Division	(601) 961-5040

7. Additional Information

For more information about the MS LMOP, contact:

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Part 1: Regulations and Permits

1.1 Overview of Federal Regulations and Permits

The following section discusses federal regulations that may pertain to LFGE projects. Landfill gas energy projects can be subject to solid waste, air quality, and water quality regulations. The federal regulations are presented in general terms because individual state/local governments generally develop their own regulations for carrying out the federal mandates. Specific requirements may therefore differ among states. Project developers will have to contact relevant federal agencies and in some cases, state agencies, for more detailed information and applications. The discussion of each key federal regulation/permit contains three components:

- Importance of the regulation/permit to LFGE project developers
- Applicability to LFGE projects
- Description of each regulation/permit

1.1.1 Clean Air Act

The Clean Air Act (CAA) regulates emissions of pollutants to protect the environment and public health. The CAA contains three provisions that may affect LFGE projects: (1) New Source Performance Standards (NSPS) and Emission Guidelines (EG), (2) National Emission Standards for Hazardous Air Pollutants (NESHAP), (3) New Source Review (NSR), and (4) Title V.

Facilities that are planning to construct a new LFGE system or to modify a landfill operation to incorporate a LFGE system must obtain a Permit to Construct (PTC) from the responsible regulatory agency if emissions from the project are expected to exceed the major facility emission thresholds. The PTC specifies the NSPS/EG, NSR, and NESHAP requirements that the project must meet. The facility must also obtain an operating permit or modify the existing operating permit as specified in “Mississippi Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants” APC-S-1, “Mississippi Permit Regulations for the Construction and/or Operation of Air Emissions Equipment” APC-S-2, and “Mississippi Air Emissions Operating Permit Regulations for the Purposes of Title V for the Federal Clean Air Act” APC-S-6. The general requirements of the NSPS/EG, NSR, NESHAP, and Title V for LFGE projects are discussed below.

New Source Performance Standards (NSPS) and Emission Guidelines (EG) for Municipal Solid Waste Landfills

- Importance** LFGE projects can be part of a compliance strategy to meet EPA’s emission standards for LFG.
- Applicability** Landfills meeting certain design capacity, age, and emissions criteria are required to collect LFG and to either flare it or use it for energy.
- Description** EPA final regulations under the CAA amendments require affected landfills to collect and control LFG. Specifically, landfills that are greater than or equal to 2.5 million megagrams (Mg) and 2.5 million cubic meters in design capacity and have estimated emissions of non-methane organic compounds (NMOC) of at least 50 Mg per year must reduce their

emissions of LFG. The regulations identify NMOC as a surrogate for LFG. Therefore, the emission reductions required in the rules are specified as reductions of NMOC. Landfills can use flares or energy recovery projects to meet the emission reduction requirements.

Landfill gas emissions were targeted in these rules because of the potential negative impact on human health and the environment from the volatile organic compounds contained in the gas. In addition, the contribution of LFG to local smog formation, local odors, and potential for explosions or landfill fires were included in the decision-making process.

For landfills that commenced construction, reconstruction, or modification on or after May 30, 1991 (“new landfills”) the New Source Performance Standards (40 CFR Part 60 Subpart WWW) apply. For older landfills that received waste after November 8, 1987 (“existing landfills”), the Emission Guidelines (40 CFR Part 60 Subpart Cc) apply. The collection and control requirements in each of these standards are the same; only the start of the compliance clock differs.

The final regulations for NSPS/EG can be found in the Federal Register, March 12, 1996, Vol. 61, No. 49, pages 9905-9944 and amendments/corrections can be found in the Federal Register, February 24, 1999, Vol. 64, No. 36, pages 9257-9262. Complete regulations including the amendments are contained in the Code of Federal Regulations (CFR) subparts previously listed. Additional clarifications and amendments have been proposed but are not yet final. See the Federal Register, September 8, 2006, Vol. 71, No. 174, pages 53271-53293 and Federal Register, May 23, 2002, Vol. 67, No. 100, pages 36475-36481.

The basic requirements are the same for both existing and new landfills. Landfills that meet both of the following criteria require collection and control of LFG under the regulations.

- Capacity—maximum design capacity greater than or equal to 2.5 million Mg (about 2.75 million tons) and 2.5 million cubic meters.
- Emissions—annual estimated uncontrolled NMOC emission rate is greater than 50 Mg (about 55 tons) per year. If annual uncontrolled NMOC emissions are less than 50 Mg for a facility with a design capacity greater than or equal to 2.5 million Mg and 2.5 million cubic meters, reporting is required. If the annual uncontrolled emissions are 50 Mg or more for these landfills, collection and control of LFG are required.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

Importance	LFGE projects can be part of a compliance strategy to meet EPA’s emission standards for LFG.
Applicability	Landfills meeting certain design capacity, age, and emissions criteria are required to collect LFG and to either flare it or use it for energy.
Description	The regulations for municipal solid waste (MSW) landfills under the NESHAP affect the same landfills and have the same control requirements as the NSPS/EG. Landfills with design capacities of at least 2.5 million Mg and 2.5 million cubic meters and that have estimated uncontrolled emissions of non-methane organic compounds (NMOC) of at least 50 Mg per year are required to collect and treat or control emissions of LFG. These control requirements are the same as the NSPS/EG with one exception - large landfills (i.e., those that exceed the 2.5 million Mg and 2.5 million cubic meters thresholds) that operate part or all of the landfill as a bioreactor must install collection and control systems for the bioreactor earlier than would be required by the NSPS, even if total estimated emissions do not yet exceed 50 Mg/year. The control systems may also be removed from bioreactors earlier.

Bioreactors generate LFG more quickly than conventional landfills, but also generate the gas for a shorter period of time.

The NESHAP also contains additional record keeping and reporting requirements as compared to the NSPS. Landfills that are required to collect and control LFG must develop a start-up, shutdown, and malfunction (SSM) plan and must report SSM events. The NESHAP also requires semi-annual compliance reporting, instead of the annual reporting required by the NSPS. The NESHAP defines types of deviations from the standards that must be reported in the semi-annual reports (for example, periods when monitored control device operating parameters are outside of specified ranges). The final regulations for NESHAP can be found in the Federal Register, January 16, 2003, Vol. 68, No. 11, pages 2227-2242.

Air Emissions: New Source Review (NSR) Permitting Process

- Importance** New LFGE projects may be required to obtain construction permits under New Source Review (NSR). Depending on the area in which the project is located, obtaining these permits may be the most critical aspect of project approval.
- Applicability** The combustion of LFG results in emissions of carbon monoxide (CO), oxides of nitrogen, and particulate matter (PM-10). Requirements vary for control of these emissions depending on local air quality. The relevant standards for a particular area will be discussed in Section 1.2, State Regulations and Permits. Applicability of these standards to LFGE projects will depend on the level of emissions resulting from the technology used in the project and the project's location (i.e., attainment or nonattainment area).
- Description** CAA regulations require new stationary sources and modifications to existing sources of certain air emissions to undergo NSR before they begin construction. The purpose of these regulations is to ensure that sources meet the applicable air quality standards for the area in which they are located. Because these regulations are complex, a landfill owner or operator may want to consult an attorney or expert familiar with NSR for more information about permit requirements.

The existing CAA regulations for attainment and maintenance of ambient air quality standards regulate six criteria pollutants: ozone, nitrogen dioxide (NO₂), CO, PM-10, sulfur dioxide (SO₂), and lead. The CAA authorizes EPA to set both health and public welfare-based national ambient air quality standards (NAAQS) for each criteria pollutant. Areas that meet the NAAQS for a particular air pollutant are classified as being in "attainment" for that pollutant and those that do not are in "nonattainment." Because each state is required to develop an air quality implementation plan (called a State Implementation Plan or SIP) to attain and maintain compliance with the NAAQS in each Air Quality Control Region within the state, specific permit requirements will vary by state. (See 40 CFR 51.160-51.166 for more information.)

The location and size of the LFGE project will dictate what kind of construction and operating permits are required. If the landfill is located in an area that is in attainment for a particular pollutant, the LFGE project may have to undergo Prevention of Significant Deterioration permitting. Nonattainment area permitting is required for those landfills that are located in areas that do not meet the NAAQS for a particular air pollutant. Furthermore, the estimated level of emissions from the project determines whether the project must undergo major NSR or minor NSR. The requirements of major NSR permitting are greater than those for minor NSR. The following provides more detail on new source permits:

Prevention of Significant Deterioration Permitting

Prevention of Significant Deterioration (PSD) review is used in attainment areas to determine whether a new or modified emissions source will cause significant deterioration of local air quality. MDEQ can assist LFGE project developers in determining whether a proposed project requires PSD approval. Applicants must determine PSD applicability for each individual pollutant.

For each pollutant for which the source is considered major, the PSD major NSR permitting process requires that the applicants determine the maximum degree of reduction achievable through the application of available control technologies. Specifically, major sources may have to undergo any or all of the following four PSD steps:

- Best Available Control Technology (BACT) analysis
- Monitoring of local air quality
- Source impact analysis/modeling
- Additional impact analysis/modeling (i.e., impact on vegetation, visibility, and Class I areas) (See 40 CFR Part 52.21 for more information on PSD.)

Minor sources and modifications are exempt from this process, but these sources must still obtain construction and operating air permits. (See Mississippi Air Regulations APC-S-1, APC-S-2, and APC-S-6 for more information.)

Nonattainment Air Permitting

A source located in an area that has been designated nonattainment for one or more of the six criteria pollutants may be subject to the nonattainment classification for such pollutants. Ozone is the most pervasive nonattainment pollutant and the one most likely to affect LFGE projects. A proposed new emissions source or modification of an existing source located in a nonattainment area must undergo nonattainment major NSR if the new source or the modification is classified as major (i.e., if the new or modified source exceeds specified emissions thresholds). To obtain a nonattainment NSR permit for criteria pollutants, a project must meet two requirements:

- Must use technology that achieves the Lowest Achievable Emissions Rate (LAER) for the nonattainment pollutant
- Must arrange for an emissions reduction at an existing combustion source that offsets the emissions from the new project at specific ratios

Potential Exemptions

EPA furnished a guidance document to state and regional permitting authorities which provides an exemption from major NSR permitting requirements for LFG recovery projects that qualify as “pollution control projects.” An existing landfill that plans to install a LFG recovery project may qualify as a pollution control project as long as it reduces non-methane organic compounds (NMOC) at the site. Under the guidance, the permitting authority may exempt the project from major NSR, provided it meets all other requirements under the CAA and the state, including minor source requirements. In nonattainment areas, offsets will still be required, but need not exceed a 1:1 ratio. States have discretion to exercise the increased flexibility allowed by the guidance on a case-by-case basis.

Title V Operating Permit

- Importance** Many LFGE projects must obtain operating permits that satisfy Title V of the 1990 CAA Amendments.
- Applicability** Any LFGE plant that is a major source, as defined by the Title V regulation (40 CFR Part 70), must obtain an operating permit.
- Description** Title V of the CAA requires that all major sources obtain new federally enforceable operating permits. Title V is modeled after a similar program established under the National Pollution Discharge Elimination System (NPDES). Each major source must submit an application for an operating permit that meets guidelines spelled out in individual state Title V programs. The operating permit describes the emission limits and operating conditions that a facility must satisfy and specifies the reporting requirements that a facility must meet to show compliance with the air pollution regulations. A Title V operating permit must be renewed every five years.

1.1.2 Resource Conservation and Recovery Act Subtitle D

- Importance** Before a LFGE project can be developed, all Resource Conservation and Recovery Act (RCRA) Subtitle D requirements (i.e., requirements for non-hazardous solid waste management) must be satisfied.
- Applicability** Methane is explosive in certain concentrations and poses a hazard if it migrates beyond the landfill facility boundary. Landfill gas collection systems must meet RCRA Subtitle D standards for gas control.
- Description** Since October 1979, federal regulations promulgated under Subtitle D of RCRA required controls on the migration of LFG. In 1991, EPA promulgated landfill design and performance standards. The newer standards apply to MSW landfills that were active on or after October 9, 1993. Specifically, the standards require monitoring of LFG and establish performance standards for combustible gas migration control. Monitoring requirements must be met at landfills not only during their operation, but also for a period of 30 years after closure.

Landfills affected by RCRA Subtitle D are required to control gas by establishing a program to periodically check for methane emissions and prevent offsite migration. Landfill owners and operators must ensure that the concentration of methane gas does not exceed:

- Twenty-five percent of the lower explosive limit for methane in facilities' structures
- The lower explosive limit for methane at the facility boundary

Permitted limits on methane levels reflect the fact that methane is explosive within the range of 5 to 15 percent concentration in air. If methane emissions exceed permitted limits, corrective action (i.e., installation of a LFG collection system) must be taken. Subtitle D may provide an impetus for some landfills to install energy recovery projects in cases where a gas collection system is required for compliance (see 40 CFR Part 258 for more information).

1.1.3 National Pollutant Discharge Elimination System (NPDES) Permit

Importance LFGE projects may need to obtain NPDES permits for discharging wastewater that is generated during the energy recovery process.

Applicability Landfill gas condensate forms when water and other vapors condense out of the gas stream due to temperature and pressure changes within the collection system. This wastewater must be removed from the collection system. In addition, LFGE projects may generate wastewater from system maintenance and cooling tower blow down.

Description NPDES permits regulate discharges of pollutants to surface waters. The authority to issue these permits is delegated to state governments by EPA. The permits, which typically last five years, limit the quantity and concentration of pollutants that may be discharged. To ensure compliance with the limits, permits require wastewater treatment or impose other operation conditions. The state water offices or EPA regional office can provide further information on these permits.

The permits are required for three categories of sources and can be issued as individual or general permits. A LFGE project would be included in the “wastewater discharges to surface water from industrial facilities” category and would require an individual permit. An individual permit application for wastewater discharges typically requires information on:

- Water supply volumes
- Water utilization
- Wastewater flow
- Characteristics and disposal methods
- Planned improvements
- Storm water treatment
- Plant operation
- Materials and chemicals used
- Production
- Other relevant information

1.1.4 Clean Water Act, Section 401

Importance LFGE projects may need Clean Water Act (CWA) Section 401 certification for constructing pipelines that cross streams or wetlands.

Applicability Landfill gas recovery collection pipes or distribution pipes from the landfill to a nearby gas user may cross streams or wetlands. When construction or operation of such pipes causes any discharge of dredge into streams or wetlands, the project may require Section 401 certification.

Description If the construction or operation of facilities results in any discharge into streams or wetlands, such construction is regulated under Section 401. This requirement may affect the construction of LFGE project facilities or pipelines to transport LFG.

The applicant must obtain a water quality certification from the state in which the discharge will originate. The certification should then be sent to the U.S. Army Corps of Engineers. The certification indicates that such discharge will comply with the applicable provisions of Sections 301, 302, 303, 306, and 307 of the CWA.

1.1.5 Other Federal Permit Programs and Regulatory Requirements

The following are brief descriptions of how other federal permits could apply to LFGE project development:

- RCRA Subtitle C could apply to a LFGE project if it produces hazardous waste. While some LFGE projects can return condensate to the landfill, many dispose of it through the public sewage system after some form of on-site treatment. In some cases, the condensate may contain high enough concentrations of heavy metals and organic chemicals for it to be classified as a hazardous waste, thus triggering federal Subtitle C regulation.
- The Historic Preservation Act of 1966 or the Endangered Species Act could apply if power lines or gas pipelines associated with a project infringe upon an historic site or an area that provides habitat for endangered species.
- Requirements of the Uniform Relocation Assistance and Real Property Acquisitions Act of 1970, as amended (Uniform Act) will apply to LFGE projects, if federal funds are used for any part of project design, right-of-way acquisition, or construction. The Federal Highway Administration is the lead agency for issues concerning the Uniform Act.

Any questions regarding these policies should be directed to Mr. Cecil Vick at the Mississippi Division Office. His phone number is (601) 965-4217.

1.2 Overview of State Regulations and Permits

This section provides information on permits required by the state of Mississippi for the development of a LFGE project. For an overview of required permits, contact information, and length of the review period, see Table 1.2.1. Tables 1.2.2 through 1.2.4 present more detailed information about the required permits. Information provided on each permit includes:

- How the permit is applicable to LFGE projects
- The appropriate agency contact
- A description of the permit
- The regulation
- Information required and suggestions for a successful application
- The application and review process
- The review/approval period
- Any fees required

1.2.1 Summary of Permits

The principal permits for LFGE projects in Mississippi are related to solid waste and air and water quality and are regulated by the Mississippi Department of Environmental Quality (MDEQ).

1.2.2 Permitting Assistance

The staff of the Environmental Permits Division (EPD) of MDEQ is available to provide assistance during the permitting process. The EPD Solid Waste and Mining Branch may be contacted by calling (601) 961-5171.

Table 1.2.1 Summary Table of State Regulations/Permits

Standard	Permit	Agency/Contact	Review Period
Air	Title V Operating Permit/Permit to Construct	MDEQ EPD Solid Waste & Mining Branch Michelle Vinson Phone: (601) 961-5040	— 30-60 days if it does not involve a public notice — 180 days if it involves a public notice
Landfills	Solid Waste Management Permit	MDEQ EPD Solid Waste & Mining Branch Michelle Vinson Phone: (601) 961-5040	240 days
Water	National Pollutant Discharge Elimination System (NPDES) Permit	MDEQ EPD Solid Waste & Mining Branch Michelle Vinson Phone: (601) 961-5040	180 days
	Pretreatment Discharge Permit	MDEQ EPD Solid Waste & Mining Branch Michelle Vinson Phone: (601) 961-5040	180 days

Table 1.2.2 Title V Operating Permits and Air Permits to Construct

Applicability to LFGE Projects	The construction of air control/emission equipment is subject to APC-S-2 and an Air Permit to Construct is required unless exempted by regulations. If the emissions generated on-site exceed the Title V regulatory threshold, a Title V Operating Permit may also be required.
Agency Contact	Michelle Vinson MDEQ EPD Solid Waste & Mining Branch P.O. Box 10385 Jackson, MS 39289-0385 Phone: (601) 961-5040 Fax: (601) 961-5703
Description	<p>The Air Permit to Construct requires all new, modified, reconstructed, replaced, or relocated stationary air pollution sources to have an air pollution control construction permit from the MDEQ unless the source is exempt. This construction permit must be obtained by the facility prior to beginning construction, modification, reconstruction, replacement, or relocation of the source.</p> <p>The Title V Permit requires all applicable facilities to comply with NSPS standards, MACT standards regarding facility operation, control device design and operation, and emission control, and all other applicable limits/standards.</p>
Regulation	Mississippi Commission on Environmental Quality “Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants” APC-S-1; Mississippi Commission on Environmental Quality “Permit Regulations for the Construction and/or Operation of Air Emissions Equipment” APC-S-2; and Mississippi Commission on Environmental Quality “Air Emissions Operating Permit Regulations for the Purposes of Title V for the Federal Clean Air Act” APC-S-6; and any and all future modifications, revisions, or additions to the referenced regulations.
Information Required/Suggestions	Applicants must supply all information outlined within the appropriate permit applications including, but not limited to, a description of emission controls, description of the project, all significant and insignificant existing or proposed air pollution units, description of operations, and activities at the facility.
Application Process	Submit application to the MDEQ at the previously provided address. A pre-application meeting may be held with the MDEQ staff prior to submittal of a permit application.
Review Process	The MDEQ has 45 days to determine the completeness of the submitted application. After determining the completeness, the MDEQ has 180 days to complete the application review and prepare draft permits for public notice. At this time, all permit applications associated with the operation of a landfill require a public notice and a public hearing prior to consideration for permit issuance by the Mississippi Environmental Quality Permit Board.
Review/Approval Period	180 days after completeness determination, 30 days for public notice/public hearing. Additional time may be required for the review of public comments received during the public notice period and/or public hearing.
Fees	At this time, there are no application fees for this permit. However, there are fees for the actual emissions from the permitted facility as required and allowed by law, if the facility is subject to Title V Regulations.

Table 1.2.3 Solid Waste Management Permit

Applicability to LFGE Projects	The Mississippi Nonhazardous Solid Waste Management Regulations require a Solid Waste Management Permit to operate a municipal solid waste landfill. Monitoring of LFG is required during the life of the facility as well as during a 30-year post-closure care period. The design, construction, and operational aspects of a gas collection and control system (GCCS) are regulated under the state Air Emissions Regulations. However, these aspects of a GCCS may need to be addressed within the Solid Waste Management Permit for the facility. Therefore, a modification of an existing solid waste management permit may become necessary for facilities without GCCS.
Agency Contact	Michelle Vinson MDEQ EPD Solid Waste & Mining Branch P.O. Box 10385 Jackson, MS 39289-0385 Phone: (601) 961-5040 Fax: (601) 961-5703
Description	The Solid Waste Management Permit includes all construction, operating, and monitoring requirements necessary for a municipal solid waste landfill. Devices installed for the control of LFG and methane would fall under the solid waste permit as they relate to cell design, operation, and closure and post-closure care. Modification of the permit to add or change the approved operation and design requires the review of the EPD Solid Waste & Mining Branch and the approval of the Mississippi Environmental Quality Permit Board.
Regulation	Mississippi Nonhazardous Solid Waste Management Regulations.
Information Required/Suggestions	Any landfill that is constructing a gas collection system must submit all information, including the design drawings and other details of the LFG control and collection system, to the EPD Solid Waste & Mining Branch for the necessary review and approval.
Application Process	Application forms can be obtained by contacting the EPD Solid Waste & Mining Branch. A pre-application meeting may be held with the MDEQ staff prior to submittal of an application.
Review Process	After determining the completeness of the submitted permit application, the MDEQ would prepare draft permits for public notice. All permit applications associated with the operation of a landfill require a public notice and a public hearing prior to consideration for permit issuance by the Mississippi Environmental Quality Permit Board.
Review/Approval Period	Varies as there is no statutory review period for solid waste management permits in Mississippi.
Fees	At this time, there are no application fees for this permit.

Table 1.2.4 NPDES Permit/Mississippi State Operating Permit

Applicability to LFGE Projects	<p>All landfills are required to obtain an Individual Stormwater Permit (NPDES) for the discharge of non-contaminated stormwater to surface waters of the state of Mississippi. As a part of the application process, the facilities must prepare and provide the MDEQ with a Stormwater Pollution Prevention Plan (SWPPP) that outlines the methods and procedures to limit the amount of stormwater that contacts waste at the facility. All stormwater that contacts waste must be treated as leachate and can not be discharged to surface waters of the state of Mississippi. While this specific permit does not directly apply to LFGE projects, it is required for the operation of a solid waste management facility and all operations associated with an LFGE project must be addressed within the SWPPP.</p> <p>Landfill gas condensate and other associated wastewaters may be collected with landfill leachate and disposed of at a permitted Privately Owned Treatment Works (POTW). If the receiving POTW is out-of-state, no permit for discharge is required. If the receiving POTW is within the state of Mississippi, a State Operating Pretreatment permit is required in addition to acceptance by the proposed POTW. These wastewaters can not be directly discharged to surface waters of the state.</p>
Agency Contact	<p>Michelle Vinson MDEQ EPD Solid Waste & Mining Branch P.O. Box 10385 Jackson, MS 39289-0385 Phone: (601) 961-5040 Fax: (601) 961-5703</p>
Description	<p>NPDES Individual Stormwater Permits allow for the discharge of non-contaminated stormwater to the surface waters of the state.</p> <p>A State Operating Pre-Treatment Permit allows the discharge of leachate, LFG condensate, and other wastewaters to a permitted POTW.</p>
Regulation	<p>Wastewater Regulations for National Pollutant Discharge Elimination System (NPDES) Permits, Underground Injection Control (UIC) Permits, State Permits, Water Quality Based Effluent Limitations, and Water Quality Certification.</p>
Information Required/ Suggestions	<p>Applicants must supply all information outlined within the appropriate permit applications, including a description of operations and activities at the facility.</p>
Application Process	<p>Application forms can be obtained by contacting the MDEQ. Permit applications must be filed at least 180 days prior to the expected date of discharge.</p>
Review Process	<p>The EPD Solid Waste & Mining Branch reviews the applications for an NPDES permit for a solid waste management facility. End users' and/or other facilities' applications will be reviewed by the appropriate sector branch of EPD.</p>
Review/Approval Period	<p>Varies as there is no statutory review period for water permits in Mississippi.</p>
Fees	<p>None at this time.</p>

1.2.3 Mississippi Public Service Commission (MPSC) Jurisdiction

The Mississippi Public Service Commission is vested by state law to regulate public utilities. These regulatory powers include water, sewer, electric, natural gas, and communication utilities. However, not all utilities are considered to be public as defined by state law (MS Code 77-3-3 d). Additionally, there are some special requirements and situations as described below.

In the case of electric generation, the State law requires that no person may construct an electric generating plant or an electric transmission line without first obtaining a Certificate of Public Convenience and Necessity from the Public Service Commission. In the case of an independent power producer (IPP), the authority of the Public Service Commission is limited to the granting of a facility's certificate. The Federal Energy Regulatory Commission (FERC) has jurisdiction over the wholesale market in which IPPs operate. The certification requirements do not apply to co-generators and small standby facilities where the electric output will be consumed on-site and/or sold to the public utility at avoided cost. The Public Service Commission is informed about any transactions involving utilities under its jurisdiction.

Landfill gas is currently not regulated by the Public Service Commission because there has never been an application to use LFG by a public utility in Mississippi. Under certain circumstances, LFG may be regulated in the future. However, any pipeline delivering such gas is under the jurisdiction of the Public Service Commission safety standards.

Electric energy produced from LFG currently must be sold in the wholesale market or sold to the local electric utility at avoided cost unless the producer is a certificated electric utility in the state of Mississippi. The ultimate retailer could designate such LFGE as renewable energy, or "green energy." The development of green marketing programs offers promising mechanisms to encourage utilities and other energy marketers to participate in LFGE projects. Green marketing programs are designed to enable energy marketers to position renewable energy products (including LFGE projects) as premium products, and therefore, to collect a premium price from their customers. However, the general public is less familiar with LFGE than other sources of renewable energy; support from LMOP can help ensure the success of early LFGE green marketing efforts.

1.2.4 Mississippi Department of Transportation (MDOT)

If LFGE projects are to impinge upon a state of Mississippi right-of-way, a permit from the Mississippi Department of Transportation (MDOT) must be obtained. There are some restrictions as to where utilities can be located. In order to obtain a permit for locating utilities within the right-of-way, you should contact the MDOT District Office that coincides with the proposed project/utility location. The District Office will coordinate the permit application with the appropriate parties within the MDOT. Contact the District Utility Coordinator and/or District Permit Officer for specific permitting requirements. The following list provides contacts within MDOT District Offices who can help with the permitting process.

District 1

1909 N. Gloster Street
Tupelo, MS 38803
Phone: (662) 842-1122
Fax: (662) 844-5731
Contacts: Fred Gaines, District Utility Representative
Wendell Dixon, Permit Officer

District 2

150 Highway 51 N
Batesville, MS 38606
Phone: (662) 563-4541
Fax: (662) 563-0138
Contacts: Kelly Standard, District Utilities Coordinator
Robert L. Tamboli, Permit Officer
William T. Wilson, Permit Officer

District 3

1240 Highway 49 West
 Yazoo City, MS 39194
 Phone: (662) 746-2513
 Fax: (662) 746-9344
 Contacts: Sidney Hollowell, District Utilities Coordinator
 John R. McDonald, Permit Officer

District 6

6356 Highway 49N
 Hattiesburg, MS 39401
 Phone: (601) 544-9321
 Fax: (601) 544-0227
 Contacts: Gordon Bass, District Utilities Coordinator
 Monnie McCraney, Permit Officer

District 5

7759 Highway 80W
 Newton, MS 39345
 Phone: (601) 683-3341
 Fax: (601) 683-7030
 Contacts: Hanna J. Watson, District Utility Coordinator
 Samuel G. Everett, Permit Officer

District 7

Mail code 27-01
 P.O. Box 627
 McComb, MS 39648
 Phone: (601) 684-2111
 Fax: (601) 684-7358
 Contact: Alice Barnes, District Utilities Coordinator

1.3 Overview of Local Regulations and Permits

Within the framework of federal and state regulations, local governments may have some jurisdiction over LFGE development in certain cases. Typically, local permits address issues that affect the surrounding community. These permits generally fall under the categories of construction, environment and health, land use, and water quality/use. It should be noted, however, that some local standards and regulations are stricter than state or federal regulations.

Steps to Successful Approval of Local Permits

The following six steps will assist LFGE project developers in achieving successful local permits approval:

- Step 1.** Determine which local authorities have jurisdiction over the project on the project site(s).
- Step 2.** Contact the local, city, and/or county planning and public works departments to obtain information about applicable permits and to discuss your plans. Meeting with agency staff to discuss the LFGE project and required permits often helps to expedite the permitting process.
- Step 3.** Obtain essential information regarding each permit, including:
 - What information is required
 - The permitting process that should be followed
 - Time frames (including submittal, hearing, and decision dates)
- Step 4.** Obtain copies of the regulations to compare and verify what is required in the permit applications. If they differ, contact the appropriate permitting agency.
- Step 5.** Submit a complete application. Incomplete applications typically result in processing delays.
- Step 6.** Attend meetings or hearing(s) where the application will be discussed to respond to any questions that are raised. Failure to do so could result in delays.

Typical Local Permits

Table 1.3.1 on the next page lists typical local permits and approvals that may be required for LFGE projects.

Table 1.3.1 Local Regulations and Permits

Permit	Description
Building Permit	Many county/local governments require building permits for construction, which entail compliance with several types of building codes, such as plumbing and electrical. A typical building permit application may require detailed final plans for structures, including electrical and plumbing plans, floor layout, sewage facilities, storm water drainage plan, size and shape of lot and buildings, setback of buildings from property lines and drain field, access, size and shape of foundation walls, air vents, window access, and heating or cooling plants (if included in the design).
Zoning/Land Use	Some communities have a zoning and land use plan that identifies where different types of development are allowed (i.e., residential, commercial, and industrial). The local zoning board determines whether a particular project meets local land use criteria and can grant variances if conditions warrant. A LFGE project may require an industrial zoning classification.
Storm Water	Some local public works departments require a permit for discharges during construction and operation of a LFGE project. Good facility design that maintains the pre-development runoff characteristics of the site will typically enable the project to meet permitting requirements easily.
Solid Waste Disposal	A LFGE project may generate solid wastes, such as packaging material, cleaning solvents, and equipment fluids. These solid wastes may need to be disposed of at an appropriate authorized disposal facility.
Wastewater	The primary types of wastewater likely to be generated by a LFGE project include maintenance wastewater and cooling tower blow down. The local public works department may need to be contacted to provide information about available wastewater handling capacity and any unique condensate treatment requirements or permits for landfills.
Fire Hazards and Precautions	The mix of gases in LFG has a moderate to high explosion potential. Methane is explosive in concentrations of 5 to 15 percent in air. Because methane has the potential to migrate from the landfill to on-site or off-site structures, it poses a significant public safety hazard. EPA requires that methane concentrations be less than 5 percent at a landfill property line and less than 25 percent of the lower explosive limit (LEL) in a facility's structures. County or city fire codes may call for even stricter standards to be observed at the landfill.
Noise	Most local zoning ordinances stipulate the maximum allowable decibel levels from noise sources. These levels vary depending on the location of the site. For example, LFG recovery projects located near residential areas will likely have to comply with stricter noise level standards than projects located in non-populated areas.

Part 2: Incentive Programs

2.1 Overview of Federal Incentive Programs

There are several federal incentive programs that have traditionally applied to LFGE projects: the Section 29 Tax Credit, the Renewable Energy Production Incentive (REPI), and the Qualifying Facilities (QF) Certification. In October 2004, the U.S. Congress extended and amended the Section 45 Production Tax Credit to include LFGE projects for generating electricity. Projects that have already qualified for Section 29 tax credits are eligible to receive the Section 29 tax credit through December 31, 2007. Information about the QF Certification, Section 29, and Section 45 credits is provided below.

Listed below are some federal resources for funding LFGE projects:

- Incentives Through the Energy Policy Act of 2005
 - Renewable Electricity Production Credit
 - Revision: Credit for Producing Fuel from a Nonconventional Source
 - Renewable Energy Production Incentive
 - Federal Purchase Requirement
 - Rural and Remote Communities Electrification Grants
 - Loan Guarantees
- U.S. Department of Agriculture Renewable Energy Loan Program
- U.S. Department of Agriculture Rural Business Opportunity Grants
- U.S. Department of Commerce Economic Development Administration Public Works Program
- U.S. Department of Energy Office of Energy Efficiency and Renewable Energy Regional Biomass Energy Program
- U.S. Environmental Protection Agency Office of Pollution Prevention and Toxics Pollution Prevention (P2) Grants Program

For the latest updates on federal and state incentives, please refer to the following sources:

- LMOP Federal Funding Resources - <http://www.epa.gov/lmop/res/guide/federal.htm>
- LMOP State Funding Resources - http://www.epa.gov/lmop/res/guide/state_resources.htm

2.1.1 Renewable Energy Production Incentive (REPI)

The Renewable Energy Production Incentive (REPI), mandated under the Energy Policy Act of 2005, includes the use of electricity production. The Act extends the eligibility period to October 1, 2016, which means that a facility generating electricity from LFG:

- Must be operational by October 1, 2016
- Can receive payments for the first 10 years of operation, until 2026, if federal funds are available

Appropriations are extended for fiscal year 2006 through 2026, although no annual amount is set forth in the Act. If appropriated funds are insufficient to make full payments, 60 percent of funds will be assigned to facilities that use solar, wind, ocean, geothermal, or closed-loop biomass technologies, and the remaining 40 percent will be assigned to other projects, including those that use LFG. REPI payments are subject to adjustment because they are appropriated by Congress each year.

2.1.2 Qualifying Facilities Certification

Landfill gas energy projects that generate electricity will benefit from the Qualifying Facilities (QF) certification, which is granted through the Federal Energy Regulatory Commission (FERC). The following information describes the benefits of QF status and the steps for applying for such status.

The Public Utility Regulatory Policies Act (PURPA)—one of five parts of the National Energy Act of 1978—was designed to promote conservation of energy and energy security by removing barriers to the development of cogeneration facilities and facilities that employ waste or renewable fuels. Such facilities are called Qualifying Facilities or QFs. Under PURPA, utilities are required to purchase electricity from QFs at each utility's avoided cost of generating power. PURPA provides that a small power production facility, such as a LFGE project that meets FERC standards, can become a QF.

In order to apply for QF status, applicants must prepare either (1) a Notice of Self-Certification, which asserts compliance with FERC's technical and ownership criteria, or (2) an Application for Commission Certification of Qualifying Status, which requires a draft Federal Register notice and which provides actual FERC approval of QF status. In either case, the applicant must also file Form 565, which is a list of questions about the project, and must pay any filing fees associated with certifications, exemptions, and other activities. FERC will provide the QF "Info Packet" that describes the necessary steps, requirements, and background information. After submittal of the initial application, further justifications and submittal of information may be required.

For the QF information and application packet, contact:

Federal Energy Regulatory Commission
Qualifying Facilities Division
825 North Capitol Street, N.E.
Washington, DC 20426
Phone: (202) 208-0577
<http://www.ferc.fed.us>

2.1.3 Section 29 Tax Credit

Developers of LFGE projects who sell LFG to an unrelated third party may qualify for a tax credit under Section 29 of the Internal Revenue Service (IRS) tax code. In order to take advantage of the credits, project developers may bring in an outside party when developing power projects. The Section 29 tax credit was established in 1979 to encourage development of unconventional gas resources, such as LFG. Section 29 tax credits are available through December 31, 2007 to LFGE projects that had a gas sales agreement in place by December 31, 1996 and were placed in service by June 30, 1998. The credit has been extended several times by the U.S. Congress. The credit is worth \$3.00 per barrel of oil-equivalent (on a MMBtu basis) and is adjusted annually for inflation. Currently it is worth \$0.979 per MMBtu, which is approximately 1.2 cents/kilowatt-hour (kWh) for a typical LFG electricity project. This credit applies to existing projects only.

2.1.4 Section 45 Tax Credit

The Section 45 Renewable Electricity Production Credit (REPC), commonly referred to as the Production Tax Credit, is a federal tax credit for projects generating electricity from qualified energy resources. The current list of resources includes LFG, wind, solar energy, geothermal energy, biomass, poultry waste, small irrigation power, MSW combustion, refined coal, certain hydropower facilities, and Indian coal.

The REPC provides a tax credit of 1.5 cents/kWh, adjusted annually for inflation, for wind, solar, closed-loop biomass, and geothermal resources. Electricity from open-loop biomass, LFG, small irrigation hydroelectric, MSW resources, and hydropower receive half that rate, which the IRS June 19, 2006 Bulletin reported as 1.0 cents/kWh for 2006.

Facilities producing electricity from LFG had to be placed in service by the end of 2005 to qualify for the tax credit. The new law extends the placed-in-service window through December 31, 2008. The credit period was also extended to 10 years for facilities placed in service after August 8, 2005. The length of time the credit can be claimed depends on when the facility is placed in service. For LFG facilities placed into service:

- After October 22, 2004 and before August 8, 2005, the credit period is 5 years.
- After August 8, 2005 and before January 1, 2009, the credit period is 10 years.

The Section 45 credit is eliminated if the facility produces electricity from LFG and has already received a credit under Section 29 for the taxable year or for any prior taxable year.

2.2 State Incentive Programs

The state of Mississippi does not currently provide any tax incentives for LFGE projects. However, as State Partners in the EPA Landfill Methane Outreach Program, the Mississippi Department of Environmental Quality (MDEQ) and the Mississippi Development Authority (MDA) will continue to evaluate the creation of further incentives within Mississippi for this purpose. Other financial incentives that are currently available in Mississippi include:

2.2.1 Capital Improvements Revolving Loan Program (CAP)

The Mississippi Development Authority (MDA) Capital Improvements Revolving Loan Program (CAP) is designed for making loans to counties or municipalities (Applicant) to finance capital improvements in Mississippi. Counties and municipalities are encouraged to use these loans in connection with state and federal programs. Funding for loans to applicants is derived from issuance of state bonds. Eligible projects include:

- Construction or repair of water and sewer facilities
- Construction or repair of drainage systems for industrial development
- Improvements in fire protection
- Construction of new buildings for economic development purposes
- Renovation or repair of existing buildings for economic development purposes
- Construction or repair of access roads for industrial development

Loan Terms

The cumulative maximum loan amount for any eligible local unit of government during a calendar year is \$1 million. The term of any loan shall not exceed 20 years. The loan amount will be limited by the applicant's ability to repay the loan within acceptable terms. The rate of interest on loans which qualify for tax exempt status shall be at three percent per annum, calculated according to the actuarial method at the time of loan approval. Taxable CAP loans shall be at the true interest cost on the most recent issue of 20-year state general obligation bonds occurring prior to the date such loan is made.

2.2.2 Energy Investment Program

Through the Energy Investment Program, the Mississippi Development Authority (MDA) provides financial assistance to individuals, partnerships or corporations making energy conserving capital improvements or designing and developing energy conservation processes. This program offers low interest loans of up to \$300,000, with maximum terms of seven years. Each loan may be secured by a lien on the measures installed, other business assets, personal guarantees of the owners or officers, performance bonds, or a combination of these.

The Energy Investment Program offers loans at a rate of three percent below the Prime Interest rate prevailing at the time of closing, in amounts up to \$300,000, which can be amortized over a period of time not to exceed seven years. Loans are secured by a lien or liens on either the measures installed and/or other unencumbered business assets, personal guarantees by the firm's or organization's owner or officers, surety bonds, or a combination of these.

Eligibility

Applicants may be sole proprietors, partnerships, corporations, or non-profit organizations. Loan proceeds may only be utilized by facilities located in the state of Mississippi.

A technical analysis must be performed on each project. This analysis must be conducted by a licensed architect or engineer chosen by the applicant. The technical analysis evaluates the ability of the business to conserve energy or improve the efficiency of an industrial process through the installation of energy saving measures or the use of an alternate energy source. The analysis must clearly explain the measures to be undertaken and detail the energy savings and other revenue benefits attributable to the project. Only these projects recommended by the technical analysis will be considered for funding.

Use of Proceeds

Two categories of energy efficiency projects may be eligible for funding as defined below:

Retrofit Projects: Improvements made to a building or modifications to equipment not used in a manufacturing process that will reduce utility costs or allow for the use of an alternative energy source.

Examples of such projects include:

- Heating and cooling systems
- Lighting fixtures
- Insulation
- Cogeneration systems
- Furnaces, burners, boilers, waste recovery systems, ignition systems
- Automatic energy management control systems

Energy Efficient Process: Includes the implementation of equipment that enhances the efficiency of any industrial process by reducing energy consumption or allowing for the use of alternative energy sources.

Examples of such projects include:

- Kilns
- Boilers: natural gas or wood
- Billet ovens
- Optimizing saws
- Refrigeration systems
- Variable steam and hydraulic equipment

Loan Amounts and Terms

- Interest Rate: three percent below prime
- Minimum Loan: \$15,000
- Maximum Loan: \$300,000
- Loan Term: Up to seven years
- Fully collateralized
- Personal guarantees of all principals owning 20 percent or more of the business

Application Process

Applications are available from the Energy Division of the Mississippi Development Authority (MDA) and will be provided to businesses upon request.

Associated Costs

- One percent origination fee
- Filing fees

2.2.3 Economic Development—Public Improvements

Purpose

The purpose of the Mississippi Development Authority (MDA) Community Development Block Grant (CDBG) Economic Development Public Improvements category is to assist units of local government to fund eligible infrastructure improvements in the support of manufacturing, retail, commercial, industrial, and other business endeavors. The use of these funds is directly associated with the creation or retention of jobs of which at least 51 percent must be low- and moderate-income. Each project will be reviewed for eligibility on a case-by-case basis.

Available Funds

The state will set aside \$18.5 million to provide funding for eligible CDBG economic development activities.

Grant Size

A maximum grant size of \$650,000 and a minimum of \$100,000 will apply to all applicants. There will be no increase of grant size for involvement by joint applicants.

2.2.4 Public Facilities—Regular and Small Government

Purpose

To assist communities which demonstrate a need for assistance in support of eligible CDBG activities (e.g., water, wastewater, flood improvements, certain public buildings, etc.).

Available Funds

Approximately \$9.6 million is set aside for Regular competition and \$7.5 million for the Small Government competition. Small Governments are those with a population of 3,500 or less.

Grant Size

Minimum grant size is \$100,000. Maximum grant size is \$450,000 for Regular competition and \$300,000 for Small Government competition.

Threshold Requirements

In order to apply, applicants must have no open Public Facilities, Urgent Needs/Emergencies, or CDBG Housing grant unless the project area is in an Empowerment Zone or Enterprise community, in which case, an application may be submitted with one open grant in Public Facilities, if that one open grant is at least 50 percent expended.

Proposed activities must benefit a minimum of 51 percent of persons of low- and moderate-income.

Submission Dates

Submission dates for the 2002 program have passed.

Documented Need for the Project

The state will review each applicant's explanation as to the need for the project and shall measure the impact of the program on the identifiable needs in relation to the amount of funds requested.

Consideration will be given to:

- Extent and seriousness of the identifiable needs
- Impact of the proposed activities on the environment
- Local efforts taken to resolve the problem

- Results to be achieved by the project
- Number of persons to benefit, given the type of project

2.2.5 Advantage Mississippi Initiative

Advantage Mississippi brings together in a unified manner a powerful set of tools, the vision, and the drive for Mississippi to become a major competitor in economic development. The comprehensive package includes significant tax credit incentives giving Mississippi a competitive edge.

The Initiative places a priority on access to technology, the support of community and rural development, and programs for existing business and industry. The program capitalizes on Mississippi's leading edge university-based research in polymer science, engineering, acoustics, and other areas to assist related business development.

The following programs are funded under the Initiative:

- Small Municipalities and Limited Population Counties Grant Program
- Growth and Prosperity Program (GAP)
- Mississippi Advantage Jobs Incentive Program
- Mississippi Regional Alliance Development Program
- Mississippi ACE Fund

2.2.5.1 Small Municipalities and Limited Population Counties Grant Program

The Mississippi Small Municipalities and Limited Population Counties Grant Program, administered by the Mississippi Development Authority (MDA), is designed for making grants to small municipalities and limited population counties or natural gas districts (Local Sponsors) to finance projects to promote economic growth in the state of Mississippi. Funding for grants to Local Sponsors is derived from appropriations or funds otherwise made available by the State Legislature.

Eligibility

Local Sponsors (Applicant)

Small municipalities or a limited population county must submit an application to the MDA. An eligible municipality and county are defined as follows:

Small Municipality—a municipality with a population of 10,000 or less, according to the most recent federal decennial census, at the time the application is submitted by the municipality.

Limited Population County—a county with a population of 30,000 or less, according to the most recent federal decennial census, at the time the application is submitted by the county.

Natural Gas Districts—districts created by law and meeting the same requirements as small municipalities.

Eligible Projects

Eligible projects financed with Mississippi Small Municipalities and Limited Population Counties Grant Program funds must be publicly owned. Eligible projects include but are not limited to:

- Drainage systems
- Utilities such as water supply systems and gas supply systems
- Sewer systems (pipe treatment)
- Marine structures
- Transportation facilities directly affecting the site, including roads, bridges, rail lines, or pipelines
- Land purchases and improvements
- Airfields and Airports
- Equipment (no rolling stock)

Eligible projects shall serve an economic purpose or aid in the creation of jobs. Mississippi Small Municipalities and Limited Population Counties Grant Program funds may not be used for working capital.

Applications Requirements

Local Sponsor Application

The application that is submitted by a Local Sponsor must include:

- Purpose of the proposed grant including a list of eligible items and the cost of each.
- The estimated cost of the total project, a description of the Local Sponsor's investment in the project, and all public or private sources of funding that have been secured and that will be utilized exclusively for the project.
- Time schedule for implementation and completion of the project, evidencing an expeditious completion of the project.
- A statement that the specific improvements are necessary for economic development or job creation.
- Engineering documentation.
- Current employment levels at the project site and estimated increase, if any, as a result of financing the project.

Two copies of the application must be submitted to MDA. MDA will evaluate the application to determine if the project meets the program criteria.

Grants

General Grant Terms

The program intent is to stimulate growth and economic development in small communities in the state. Therefore, the amount of each grant will be based on population, ability of the community to participate in the project, and amount of funds available at the time of the application. Each application will be evaluated on its own merit to meet the intent of the program.

2.2.5.2 Growth and Prosperity Program

The Growth and Prosperity (GAP) Program, administered by the Mississippi Development Authority (MDA), is a program designed for designating certain counties as GAP counties and making incentives available to private companies that locate or expand in those economically challenged areas of the state. An updated map for GAP areas in Mississippi is shown in Figure 3 on page 24.

Eligibility

Eligible Counties and Other Eligible Entities

A county or entity must fall into one or more of the following categories to qualify under the GAP Program:

Counties

- Counties which have an annualized unemployment rate that is at least 200 percent of the state's unemployment rate as of December 31 of any year from 2000 through 2005, as determined by the Mississippi Employment Security Commission's (MESCC's) most recently published data, and/or;
- Counties that apply before December 31, 2002 are eligible if 30 percent or more of the population of the county is at or below the federal poverty level. Eligibility will be based on the official data compiled by the United States Census Bureau as of August 30, 2000.
- Counties that apply after December 31, 2002 are eligible if 30 percent or more of the population of the county is at or below the federal poverty level according to the most recent official data compiled by the United States Census Bureau.

Supervisors Districts (as they exist on January 1, 2001)

- Districts are eligible if 30 percent or more of the population is at or below the federal poverty level according to the official data compiled by the United States Census Bureau as of June 30, 2000, or the official 1990 census poverty rate data. The official 1990 census poverty rate data shall not be used to make determination after December 31, 2002.
- Must be contiguous to a county that has been certified a GAP county by MDA. To receive the incentive(s) offered by GAP, an approved business enterprise must be located within eight miles of the boundary of a certified GAP county.

Municipality

- Any municipality within a certified GAP county.

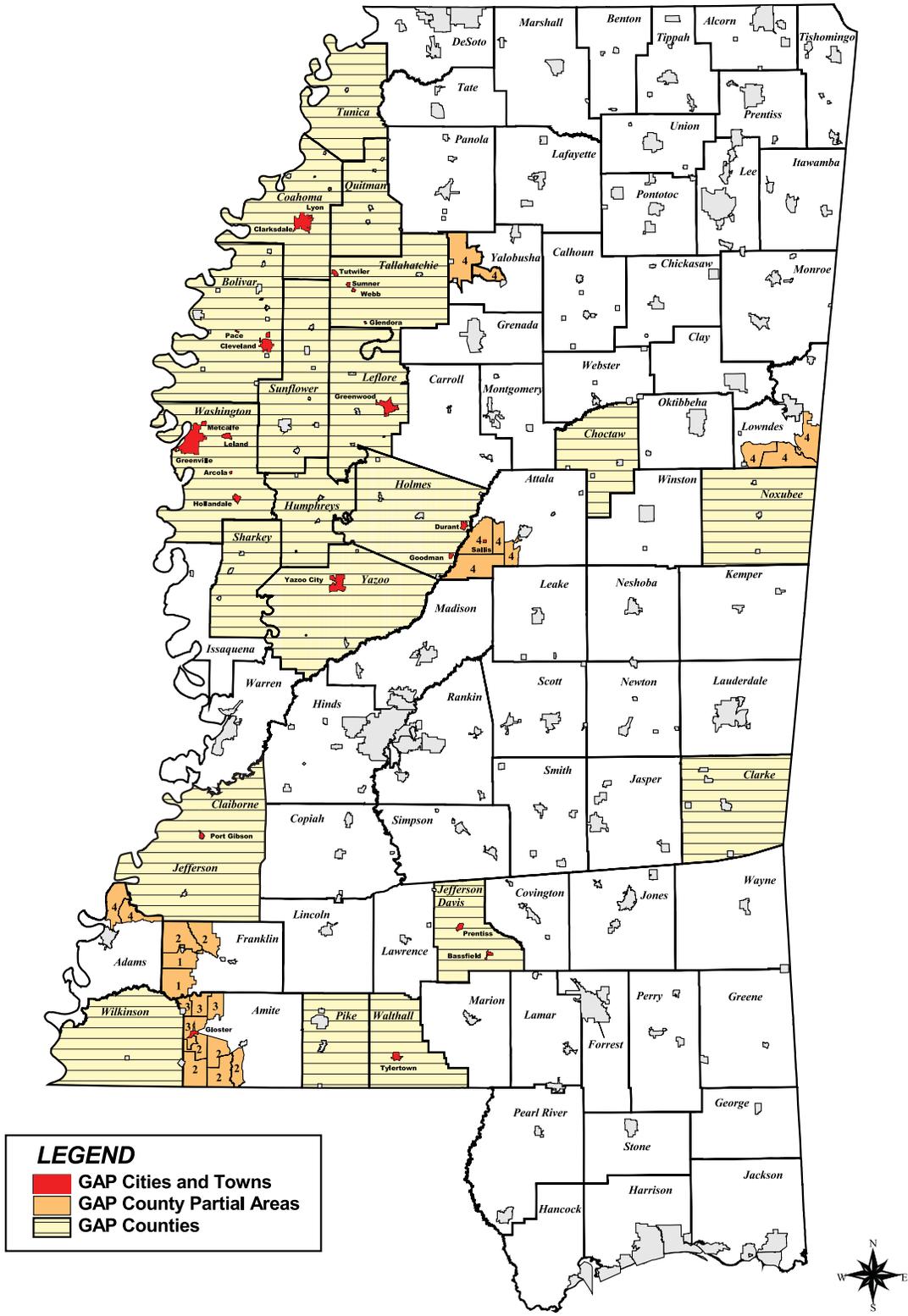
Eligible Business Enterprises

The following types of new or expanding businesses are eligible to participate under the GAP Program:

- Manufacturing, processing, assembling, storing, warehousing, servicing, distributing, or selling of any products or goods, including products of agriculture.
- Enterprises for research and development, including, but not limited to, scientific laboratories.
- Other businesses or industries that will further the public purposes of the GAP Act as determined on a case-by-case basis by MDA, and that create a minimum of 10 jobs.

Retail or gaming businesses or electrical generation facilities are not considered eligible business enterprises.

Figure 3: Illustration showing Growth and Prosperity (GAP) Program Areas in Mississippi



Application Requirements

Government Entity Application Information

There is no separate application form.

Two copies of the application information must be submitted to MDA. MDA will evaluate this information to determine if the government entity meets the program criteria. The application presented by a county or other entity must include:

- A statement indicating which criteria the county is using to be deemed qualified.
- A supervisor's district must use the poverty level criteria and should include a map showing the GAP county with which they are associated and the basis for the districts' eligibility.
- A certified copy of an order or resolution of the Board of Supervisors consenting to the designation of the county or a supervisor's district as a GAP entity. The order or resolution should also contain language that the Board of Supervisors understands, that once designated a GAP county, any and all MDA approved business enterprise will receive up to a 10-year ad valorem tax exemption. Such exemption does not include the school tax or taxes imposed to pay the cost of providing fire and police protection.

Any municipality within a certified GAP county must apply to MDA to be certified as a GAP community. The municipality must be located in a certified GAP county and must provide a certified order or resolution containing the same information as required above for county Board of Supervisors. Counties or other entities have until December 31, 2005 to become eligible and submit applications.

2.2.5.3 Mississippi Advantage Jobs Incentive Program

The Mississippi Advantage Jobs Incentive Program (Advantage Jobs), administered by the Mississippi Development Authority (MDA) and the Mississippi State Tax Commission, is a program designed to provide incentives to qualified companies that promise significant development of the economy of the state of Mississippi through the creation of quality jobs. Companies that are eligible to receive this incentive must be directly related to job creation and must provide a direct benefit to the state.

Eligible Company

In order to receive benefits under the Advantage Jobs program a company must meet the following requirements at the time an application is submitted:

- It must be a corporation, limited liability company, partnership, sole proprietorship, business trust, or other legal entity authorized to do business in the state.
- It must provide an annual salary (excluding benefits which are not subject to income tax) to its employees of at least 125 percent of the most recent state average annual wage or the most recent average annual wage of the county in which the business is located, whichever is less.
- It must create and maintain a minimum of 10 full-time jobs if the company is locating in a county that has an average unemployment rate, over the previous 12 month period, which is 150 percent of the state unemployment rate or in a Tier Three County, as established under Mississippi Code Section 57-73-21. In other counties the business must create and maintain

a minimum of 25 full-time jobs. The job creation requirement must be met within 24 months of the issuance of an Advantage Jobs Application Certificate.

- Provide or plan to provide to any new employees a basic health benefit plan. Such plan must be in effect within 180 days of receiving any incentives.

Ineligible Company

The following types of companies are not eligible to apply for Advantage Jobs Benefits:

- **Gaming Industry**—any gaming company which is regulated and/or subject to regulation by the State Gaming Commission.
- **Retail and Service Industry**—A business or industry which buys a product and resells it without changing the form of the product is considered a retail or service businesses. These types of businesses are ineligible and include all professional service companies and financial institutions except for financial institutions relocating a regional or national headquarters into the state from outside the state.
- **Telecommunications Enterprises**—Companies organized to do business as commercial broadcast radio stations, television stations, or new organizations primarily serving in-state markets are not qualified to participate.

Advantage Jobs Incentive Payment

The amount of payment will be determined by the MDA but may not exceed the estimated net direct state benefit. For the purpose of this determination the following factors will be used:

- **New Direct Job**—full-time employment at a qualified company which employment did not exist in the state before the application is approved. These job figures will be verified by the Mississippi Employment Security Commission (MESOC).
- **Full-Time Job**—a job of at least 35 hours per week.
- **Estimated Direct State Benefit**—tax revenue projected by MDA to accrue to the state as a result of the qualified company.
- **Estimated Direct State Cost**—the cost projected by MDA to accrue to the state as a result of the qualified company.
- **Estimated Net Direct State Benefit**—the estimated direct state benefits less the estimated direct state costs.
- **Net Benefit Rate**—the estimated net direct state benefits computed as a percentage of gross payroll. The net benefit rate may be variable and shall not exceed four percent of the gross payroll. (Cannot exceed the estimated net direct state benefit.)
- **Gross Payroll**—wages for new direct jobs of the qualified company.
- **Average Wage**
 - For the application process, the gross wages paid to an employee.
 - For the determination of the benefit to be paid, the amount of wages which are subject to State Income Tax.

- A substantial number of employees must receive wages above this wage rate to be established as the average wage rate.
- **Employee Increments**—for companies with over 200 employees, the project can be defined in 200 employee increments.
- **Lease Employee**—are eligible to be included in the average wage and number of jobs calculations. The lease company will have to provide all information on the wages actual paid to an employee. The information will be the company’s responsibility to obtain and provide in the application.

Acquisition of Facilities

In connection with the acquisition of assets or facilities existing within the state at or prior to the acquisition date, no benefit under the Advantage Jobs program will be available, except under the following circumstances:

1. A formal decision to close the existing facility by the seller must have been announced by means of a notice (WARN Notice) delivered in the manner prescribed in the Workers Adjustment and Relocation Act, 29 U.S.C. Section 2101 and following, or some other substantially similar formal, verifiable evidence must be available to confirm that a decision to close the existing facility has been made.
2. The purchaser must provide a letter to the MDA stating that without the benefits available under and pursuant to the Advantage Jobs program, the purchaser would be unwilling to purchase the facility or assets.
3. The equity owners of the seller may not have effective voting control, directly or indirectly, of the purchaser for a period of not less than 10 years, and under no circumstances may the equity owners of the seller during such period own more than 25 percent of the equity interest of the purchaser.

The Advantage Jobs benefits offered, if any: (a) shall be based on the facts and circumstance of each case; (b) shall be subject to review and approval by the Executive Director of MDA; and (c) shall be subject to any conditions imposed by the Executive Director in addition to or in lieu of the conditions stated above.

2.2.5.4 Mississippi Regional Alliance Development Program

The Mississippi Regional Alliance Development Program, administered by the Mississippi Development Authority (MDA), is a program designed to permit local government units of the state of Mississippi to make the most efficient use of their powers and resources. The Mississippi Regional Alliance Development Program promotes development of regional alliances between government units, including government units from another state. Mississippi Regional Alliance Development Program authorizes local government units to issue bonds for the purpose of sharing in the costs and the revenues connected with projects.

Local Government Units

Any county, municipality, town, or village in the state may participate in a regional economic development Alliance. An Alliance may be formed between local government units and Foreign Government Units.

Foreign Government Units consist of any county, parish, utility district, school district, community college, institution of higher learning, airport or port authority, or any political subdivision of another state.

Eligible Projects

Projects, which are eligible for assistance under the Mississippi Regional Alliance Development Program, include but are not limited to:

- Acquisition, construction, repair, renovation, demolition or removal of:
 - Buildings and site improvements (including fixtures)
 - Potable and nonpotable water supply systems
 - Sewage and water disposal systems
 - Drainage systems
 - Energy facilities (power generation and distribution)
 - Highways, streets, and other roadways
 - Utility distribution systems:
 - Water, electricity, natural gas, telephone, and other telecommunication facilities
 - Systems which are a part of the project and connecting to an existing utility system
 - Business, industrial, and technology parks (including land acquisition)
 - County purposes authorized by Sections 17-5-3 (waterworks and sewage systems for military camps) and Sections 19-9-1 (uniform system for issuance of bonds except for construction of school buildings)
 - Municipal purposes authorized by Section 17-5-3, 17-17-301 et seq. (regional solid waste authority), and 21-27-23 (municipal borrowing powers)
 - Refunding bonds as authorized by 21-27-1

Such projects do not have to be directly related to a business or industry locating or expanding in the state but must have a direct benefit to economic development.

Alliance

To form an Alliance, local government units must apply to the MDA for a certificate of public convenience and necessity (Alliance Certificate). The application for the Alliance Certificate may be obtained from MDA. The MDA will issue or refuse to issue an Alliance Certificate within six months of receipt. When an Alliance Certificate is issued it shall authorize the local government unit to create and operate an Alliance. The Certificate shall expire within 12 months unless the Alliance is created within that time.

In the Alliance Certificate, the MDA shall fix and determine:

- The extent and amount to which the local government units may issue bonds or make expenditures for such Alliance.
- The extent and amount that the revenues derived from the project shall be shared by the local government unit with other members of the Alliance.

- The extent and amount that the revenues derived from the project may be pledged to secure payment of the bonds issued to finance the project.
- The property that may be acquired and terms upon which such acquisition may occur.
- The expenditures that may be made.
- The buildings that will be constructed.
- The equipment that may be acquired.

An Alliance has identical powers and authority as the government units that are members of such Alliance. All laws in regard to purchasing, auditing, depositories, and expenditures that apply to the local government units will also apply to the Alliance.

Alliance Agreement

After receiving an Alliance Certificate, the local government units shall have the authority to enter into an agreement (Alliance Agreement). The Alliance Agreement must specify the duration of the agreement, its purposes, and a number of provisions relating to the organizations and staffing, as well as conditions for termination. Any government unit may sell, lease, grant, or otherwise supply goods and services to another government unit, which is a party to the Alliance Agreement. All agreements between or among members of an Alliance must be submitted to and approved by the Attorney General of the state before becoming effective.

2.2.5.5 Mississippi ACE Fund

The Mississippi ACE Fund, administered by the Mississippi Development Authority (MDA) is a program designed for making grants to Economic Development Entities (Local Sponsors) to assist in funding extraordinary economic development opportunities to promote economic growth in the state of Mississippi. Local Sponsors are encouraged to use these grants in connection with other state and federal programs. Funding for grants to Local Sponsors is derived from monies contributed to the ACE Fund by private and public sources.

Eligibility

Local Sponsors (Applicant)

Applications for assistance must be submitted by public or private nonprofit local economic development entities, including, but not limited to, chambers of commerce, local authorities, commissions, or other entities created by local and private legislation or districts created pursuant to Section 19-5-99.

Eligible Projects

Projects, which are eligible for assistance, must be related to the construction, renovation, or expansion of a new or expanded industry. Examples include construction of infrastructure, moving costs, and other transitional costs.

ACE funds may not be used for working capital nor to provide funds related to a gaming enterprise.

Eligible projects should benefit the following types of industries:

- Manufacturing and processing
- Large distribution facility
- Service support to agriculture, aquaculture, and mariculture
- Service support to manufacturing and processing
- Telecommunications and data processing
- Corporate headquarters and operations centers
- Research and development
- Tourism

Project Requirements

Extraordinary Economic Development Opportunity

To be eligible for grants through the ACE Fund, a business or industry project must be classified as an extraordinary economic development opportunity and demonstrate that the business or industry is at an economic disadvantage by locating or expanding in the designated location.

An extraordinary economic development opportunity is defined as follows:

	New jobs	or	Capital Investment
Tier three counties	50		\$1,000,000
Tier one and two counties	100		\$2,000,000

Economic disadvantage may be determined by locating in a tier three county, by proving that capital or operating expenses are increased by locating or expanding in a particular location, or by proving that shortages exist in necessary human and physical infrastructure at the location.

Matching Funds

A local public or private fund or in-kind match is strongly encouraged.

Applications Requirements

There is no separate application form. The application submitted by a Local Sponsor must include:

- The purpose of the proposed grant including a list of proposed expenditures and the cost of each.
- The estimated cost of the total project, a description of the Local Sponsor's investment in the project, and all public or private sources of funding.
- A statement of the number and types of jobs created.

- Evidence that economic disadvantage exists for the designated location.
- The time schedule for implementation and completion of the project.
- Evidence, if any, of local match.
- A statement of the efforts that have been made by the business or industry to secure other local, state, federal, or private funds for the project.
- Current employment levels at the project site and estimated increase, if any, as a result of financing the project.

Three copies of the application must be submitted to MDA. MDA will evaluate the application to determine if the project meets the program criteria.

2.3 Electricity Restructuring and Landfill Gas Energy

Electricity Restructuring

Electricity restructuring refers to the introduction of competition into both the wholesale and retail electricity markets. Historically, electric utilities operated as monopolies authorized by federal and state regulatory authorities as the sole provider of electric service to consumers within a specified service area. Under restructuring, utilities will lose these monopolies, enabling other energy providers to compete for their customers. With retail choice, independent power producers (IPP) are allowed to sell energy directly to retail customers utilizing both the transmission grid in the region and the distribution system of the local electric utility. The desired result is more energy options for consumers, lower energy prices, and greater use of renewable energy sources.

Efforts to restructure the electric utility industry began in 1978 with passage of the Public Utilities Regulatory Policies Act (PURPA), which required utilities to buy a portion of their power from unregulated power generators in an effort to encourage the development of smaller generating facilities, new technologies, and renewable energy sources. The National Energy Policy Act of 1992 (EPACT) expanded on PURPA, allowing more types of unregulated companies to generate and sell electricity, effectively creating a more competitive wholesale market for electric power.

Restructuring at the retail level has been a hot issue in many states since the passage of EPACT, which delegated states the authority to introduce competition among electric utilities within their borders. As of February 2003, 24 states and the District of Columbia have either enacted enabling legislation or issued a regulatory order to implement some form of retail access. Retail access in these jurisdictions is either currently available to all or some customers or will be available. Six states have either passed legislation or issued regulatory orders to delay implementing retail access. Twenty-six states, including Mississippi, have not enacted enabling legislation to restructure the electric power industry or implement retail access. After being first to enact retail choice, California has suspended direct retail access.

Current Status of Electricity Restructuring in Mississippi

The Mississippi Public Service Commission opened a generic docket, 96-UA-389, in August 1996 to consider electric restructuring. Hearings covering all the related issues were conducted beginning in 1997 and concluded in early 2000. By Order dated May 2, 2000, the Commission found that retail competition in the provision of electric generation service in Mississippi may not be in the public interest at that time. Currently, there are no plans to revisit this decision in the foreseeable future.

Latest Information on Electricity Restructuring

Electricity restructuring is not as hot an issue now as it once was and many Web sites have discontinued routine status updates. For the latest information on electricity restructuring in Mississippi, visit the U.S. Department of Energy Web site at http://www.eia.doe.gov/cneaf/electricity/page/fact_sheets/facts.html.

2.4 Voluntary Reporting of Greenhouse Gases Program

The Voluntary Reporting of Greenhouse Gases Program, created by Congress under Section 1605(b) of the Energy Policy Act of 1992, provides an opportunity for any company, organization, or individual to establish a public record of their greenhouse gas emissions, reductions, or sequestration achievements in a national database. The data submitted to the program are made publicly available via CD-ROM and the Internet. Those who report to 1605(b) can gain recognition for environmental stewardship, demonstrate support for voluntary approach towards achieving environmental policy goals, support information exchange, and inform the public debate about greenhouse gas emissions.

Additional information about the program, as well as reporting forms and technical assistance, are available through the Energy Information Administration's (EIA's) Communications Center (by calling 202-586-0688 or toll free at 800-803-5182, or via e-mail at infoghg@eia.doe.gov) and on the program's Web site at <http://www.eia.doe.gov/oiaf/1605/frntvrgg.html>.