

# Strategic Plan

(2012-2014 Version 1)

Department of Mines, Minerals and Energy (409)  
Agency Plan

## Mission Statement

It is the mission of the Department of Mines, Minerals and Energy (DMME) to enhance the development and conservation of energy and mineral resources in a safe and environmentally sound manner to support a more productive economy.

## Vision Statement

We envision DMME as a nationally recognized energy, geology, and mineral extraction customer service agency that showcases worker and public safety and environmental protection. Further, we see ourselves as a model agency known for the leadership of our people -- one that uses strategic planning and management to provide the high quality, innovative, one-stop service and information that adds value in the eyes of our customers and the public; is trusted to exhibit high standards of competency and fairness in all aspects of our work and relationships; and empowers, develops, and treats our employees with fairness and respect creating the workplace of choice in our communities.

## Values

### In Dealing With Our Customers, We Value:

- Operating with a high sense of ethics, honesty, and integrity.
- Demonstrating fairness, respect, responsiveness, straightforwardness, and deliberateness in our actions and communications.
- Functioning in a competent and knowledgeable manner, which emphasizes such principles as: consistency in service provision; attentiveness to customers' needs and their organizational and operational requirements; and being firm, yet flexible, in delivering services which focus on safety, energy, the environment, and economic development.
- Operating in a seamless manner to deliver quality customer services.

### In Dealing With Each Other, We Value:

- Recognizing each other's outstanding accomplishments.
- Setting priorities to ensure that critical/essential services are delivered with quality by staff who are properly supported and equipped with adequate resources.
- Meeting the requirements of the law and externally driven policies, but always being innovative where flexibility exists.
- Innovation and creativity, acknowledging that mistakes will be made from which we can learn.
- Trust and mutual respect.
- Doing the right things, ethically and honestly.
- Developing and training ourselves.
- Going beyond normal duties to help others and to seek and provide accurate and helpful advice.
- Openly communicating agency plans and decisions and, therefore, recognizing each other's need for information and understanding.
- Assuming accountability for work quality, while at the same time, accepting responsibility for working seamlessly.
- Dealing with tough situations by keeping a sense of humor and being "good sports."
- Our safety and well-being.

## Information Technology

### Current Operational IT Investments

All users and hardware follow existing Virginia Information Technologies Agency/Northrop Grumman (VITA/NG) standards. IT service and operation costs for the agency have increased substantially in recent years. Hardware upgrades and operating system updates have required vast amounts DMME staff time. A number of the agency's custom applications required rewrites to make them compatible with Windows 7.

DMME has developed custom software and extensive business applications for its office and field staff. This software has provided advanced capabilities in mapping, enforcement tools and web services. DMME has implemented web-based services for a majority of our industry customers. These nationally recognized innovations have positively impacted service delivery and customer satisfaction. DMME has recently submitted three projects to the National Association for State Chief Information Officers (NASCIO) for award consideration. DMME earned awards from NASCIO in 2011.

### Factors Impacting the Current Agency IT

Increasing IT costs present challenges for DMME to continue to develop new and innovative services. Customers continue to express a high demand for electronic government services and information. DMME is committed to continuously reduce costs while maintaining effective computer system software that meets customer needs.

### Proposed IT Solutions

Server and workstation upgrades will continue over the next year, with the focus on cost reduction and current industry needs. Years of software development are being re-engineered to work more efficiently while maintaining the high standards of service for which DMME is known. To continue to meet these standards, DMME's web-based services will be expanded during the coming biennium to provide the additional services necessary to meet the needs of our customers.

The award-winning DMME electronic permitting system in its Coal Environmental Protection and Land Reclamation service area will be expanded to provide additional functionality to industry customers. A number of mapping web services are already in place and additional ones will be made available to support the wide variety of needs of DMME's mapping customers. A cloud storage service will soon host a mine mapping catalog featuring thousands of mine maps. These maps will serve as an expanding resource for industry customers in meeting safety and reclamation requirements.

For FY 2014, DMME's funding comes from federal funds (42%), general fund appropriation (35%), permit and license fees paid by mineral extraction operators (8%), bond forfeiture proceeds (6%), indirect cost recovery revenue (4%), and miscellaneous sources such as state designated mine rescue team dues, civil penalty payments, and orphaned mineral mine or well reclamation or plugging revenues (5%).

Budget Component	2013 GF	2013 NGF	2014 GF	2014 NGF
Base	10,766,278	21,914,006	10,766,278	21,914,006
Changes to Base	989,840	437,638	1,222,714	546,935
<b>Total</b>	<b>11,756,118</b>	<b>22,351,644</b>	<b>11,988,992</b>	<b>22,460,941</b>

## Agency Goals

- Provide for safe and environmentally sound mineral and fossil fuel extraction.

## Goal Summary and Alignment

Virginia needs energy and mineral resources to support its economy and to give its citizens the materials and resources they need. These resources need to be developed responsibly to ensure the safety and protection of mineral extraction workers, the public and the environment.

## Long Term Goal

Protect, conserve and wisely develop our natural, historical and cultural resources.

Societal Indicator: Energy

## Objectives for this Agency Goal

**Objective**

Eliminate accidents, injuries, and fatalities at mineral and fossil fuel sites.

*Description*

DMME's top objective under its Goal 1 is to eliminate accidents, injuries and fatalities at mineral and fossil fuel sites throughout the Commonwealth. DMME's regulatory divisions work closely with each other, industry personnel and other stakeholders to work toward meeting this objective.

*Objective Strategies*

- The DMME Divisions of Mines, Mined Land Reclamation, Mineral Mining and Gas and Oil will continue to implement procedures to address safety issues involving mining and gas and oil activities occurring in close proximity to each other.
- The DMME Divisions of Mines, Mined Land Reclamation, Mineral Mining, and Gas and Oil will work with industry personnel to identify and eliminate unsafe conditions and practices through assistance, inspections, and training to promote compliance with laws and regulations.
- The DMME Divisions of Mines, Mineral Mining, and Gas and Oil, with assistance from the DMME Divisions of Geology and Mineral Resources, and Mined Land Reclamation, will investigate accidents and complaints and take actions to prevent future occurrences of unsafe acts and conditions.
- The DMME Divisions of Mines, Mineral Mining, Gas and Oil, and Mined Land Reclamation, with assistance from the DMME Division of Geology and Mineral Resources, will provide assistance to enhance safe mining and well site conditions and practices, including regular evaluation of customer operational risk factors, safety performance and emergency preparedness; and proactive review, consultation and follow-up with customers and stakeholders concerning identified risks and needed improvements.
- The DMME Divisions of Mines, Mineral Mining, Mined Land Reclamation, and Gas and Oil will assess company and individual responsibilities for violations of laws and regulations and take appropriate actions to prevent future violations.
- The DMME Divisions of Mines, Mineral Mining, Mined Land Reclamation, and Gas and Oil will use targeted performance measurements to indicate progress on the elimination of accidents, injuries, and fatalities by using a comprehensive database compiled from accident reports, incident rates, inspection reports, and investigation reports. Measures will include the serious personal injury-fatality incident rate and the percentage of safety violations eliminated by the violations' due dates.

*Measures*

- Number of serious injuries and fatalities at mineral and fossil fuel extraction sites per 200,000 worker hours.

Measure Class  Measure Type  Preferred Trend  Frequency

## Data Source and Calculation

Data is collected from reports of serious personal injuries and fatalities submitted by permitted mine operators throughout the year and the reports of employee work hours reported by permitted mine operators on their annual tonnage reports submitted to the Department of Mines, Minerals and Energy (DMME). The rate is calculated as the number of serious personal injuries and fatalities per 200,000 work hours. Data for the previous calendar year become available in April. DMME evaluates the five-year rolling average of this rate to determine the trend.

- Average annual cost of keeping one mineral extraction worker safe.

Measure Class  Preferred Trend  Frequency

## Data Source and Calculation

Annual agency costs (in dollars) for worker safety programs in coal and mineral mining are divided by the number of reported worker hours, then multiplied by 2,000 (the approximate number of hours worked by one "ideal" worker in one year). The measure is based on a calendar year.

**Objective**

Eliminate adverse environmental conditions and public safety hazards associated with mineral and fossil fuel extraction sites.

*Description*

This objective reflects DMME's commitment to the elimination of adverse environmental conditions and public safety hazards associated with mineral and fossil fuel extraction sites throughout the Commonwealth.

*Objective Strategies*

- The DMME Divisions of Mined Land Reclamation, Gas and Oil, and Mineral Mining will continue to evaluate abandoned, orphaned, and forfeited sites to support the development of potential land uses such as wetlands, carbon capture and storage, economic development, and alternative energy.
- The DMME Divisions of Mined Land Reclamation, Gas and Oil, and Mineral Mining will work with local, state and federal agencies to eliminate environmental and public safety hazards and conditions.
- The DMME Divisions of Mined Land Reclamation, Gas and Oil, and Mineral Mining, in cooperation with the DMME Division of Geology and Mineral Resources, will identify and reclaim high priority and emergency, abandoned, orphaned, and forfeited sites using all available resources.
- The DMME Divisions of Mined Land Reclamation, Gas and Oil, and Mineral Mining, in cooperation with the DMME Division of Mines, will provide timely review and approval of permits, certificates, and plans consistent with laws and regulations.
- The DMME Divisions of Mined Land Reclamation, Gas and Oil, and Mineral Mining, in cooperation with the DMME Divisions of Geology and Mineral Resources, Mines, and Administration, will investigate health, safety, and environmental issues, concerns and complaints.
- The DMME Divisions of Mined Land Reclamation, Gas and Oil, Mineral Mining, Administration, and Geology and Mineral Resources will pursue opportunities to advance the elimination of adverse environmental and public health and safety hazards by establishing partnerships and coordinating projects and activities in order to leverage available funding.
- The DMME regulatory divisions will measure this objective by tracking off-site impacts, violations within work areas that present potential hazards to the safety of the public (Red Zones), percentage of environmental violations successfully eliminated by the due date, and will use measures consistent with Virginia Performs and other program measurement requirements.

*Measures*

- Percentage of permitted mineral and fossil fuel extraction sites with no adverse off-site environmental damage or public safety hazards.

Measure Class  Measure Type  Preferred Trend  Frequency

*Data Source and Calculation*

This measure is calculated using information from the Department of Mines, Minerals and Energy's automated enforcement systems. Records of violations show whether there was any off-site damage or public safety hazard related to a violation of environmental laws or regulations. The number of sites with no violations causing off-site impacts is calculated as a percentage of permitted sites. This measure is reported by fiscal year quarters.

- Average annual cost of assuring environmental protection at one mineral extraction site.

Measure Class  Preferred Trend  Frequency

*Data Source and Calculation*

Annual agency costs (in dollars) of environmental protection programs for coal mining, mineral mining, and gas and oil are divided by the average number of sites served per quarter.

**Objective**

Improve the health, safety, and environmental knowledge and skills of mineral and fossil fuel extraction workers.

*Description*

This objective reflects DMME's commitment to the safety of those who work on mineral and fossil fuel extraction sites throughout the Commonwealth.

*Objective Strategies*

- The DMME Divisions of Mines and Mineral Mining will provide for certification and related training programs that ensure required competency in critical job skills and address the needs of mine operators and miners.
- The DMME Divisions of Mines and Mineral Mining will use certification test results, training survey feedback, or compliance records to measure improvement in competency and skills of mineral and coal mining workers and improve effectiveness of training programs. The DMME Divisions of Gas and Oil and Mined Land Reclamation will use survey feedback to measure the effectiveness of their partnerships with training entities and participation in training activities.
- The DMME Divisions of Mines, Mined Land Reclamation, Gas and Oil, Mineral Mining, and Geology and Mineral Resources will develop and deliver innovative certification, education and training services by utilizing web-based programs and external resources.
- The DMME Divisions of Mines, Mineral Mining, Mined Land Reclamation, and Gas and Oil will assess the education and training needs of mineral and fossil fuel workers and provide leadership for the development and delivery of innovative and effective training concepts and methods.
- The DMME Divisions of Mines, Mineral Mining, Mined Land Reclamation, and Gas and Oil will develop and provide educational services and training materials based upon trends to reduce accidents, injuries, health and safety, and environmental violations.

- Encourage economic development through our customers' wise management of Virginia's energy, mineral, land, and water resources.

*Goal Summary and Alignment*

This goal supports DMME's mission to enhance the development and conservation of energy and mineral resources in a safe and environmentally sound manner in

order to support a more productive economy in Virginia.

*Long Term Goal*

Be a national leader in the preservation and enhancement of our economy.

*Societal Indicator:* Energy

Protect, conserve and wisely develop our natural, historical and cultural resources.

*Societal Indicator:* Energy

*Objectives for this Agency Goal*

**Objective**

Improve our customers' ability to establish and maintain efficient, viable operations.

*Description*

This objective supports DMME's commitment to economic development through our customers' wise management of Virginia's energy, mineral, land and water resources.

*Objective Strategies*

- DMME will evaluate customer survey results, timeliness of decisions on permit applications, state agencies' energy savings under performance contracting, jobs created, and percentage of targeted areas with completed geologic mapping.
- DMME will participate in the Governor's Inter-Agency Energy Working Group.
- Each DMME Division will identify a process or service for improvement and will involve its customers and stakeholders in improving that process or service.
- Each DMME Division will provide effective and timely assistance to its customers with the involvement of stakeholders as appropriate.
- The DMME Division of Energy will implement the Virginia Energy Management Program which will:
  - Promote energy savings.
  - Use alternative energy sources and providers.
  - Provide cost certainty through consolidated procurement or other methods.
  - Focus on state, community, and local facilities.
  - Provide support for energy emergency response.
- The DMME Division of Energy will manage and monitor, with assistance from other DMME Divisions, the energy efficiency and renewable energy objectives of the American Recovery and Reinvestment Act.
- The DMME Division of Geology and Mineral Resources, in collaboration with other DMME Divisions, customers, and stakeholders, will prioritize, conduct, and distribute the results of geologic, energy and mineral resource investigations promoting economic development.

**Objective**

Improve our customers' capabilities in the development and wise use of rock, mineral, land, water, and energy resources.

*Description*

This objective demonstrates DMME's commitment to working with our customers and stakeholders to support energy-related economic development projects in the Commonwealth.

*Objective Strategies*

- DMME will evaluate, the number of energy efficiency and renewable energy businesses or projects assisted, customer survey results, the amount of megawatts of renewable capacity added, percentage of targeted data sets included in the Virginia Geologic Information Catalog, outreach activities, number and percentage of alternative fuel vehicles and stations, quantity of alternative fuels produced.
- Each DMME Division will collaborate with economic development organizations & other stakeholders to advance opportunities associated with mineral resources, infrastructure, and energy technologies, such as:
  - Alternative energy sources including, but not limited to, solar, wind, geothermal, and biomass.
  - Alt Fuel vehicles - Carbon capture & storage.
  - Highway or other infrastructure construction.
  - Issues with joint coal & gas resource development.
  - Coal, natural gas & biomass power plants
- Each DMME Division will seek opportunities to partner with stakeholders to develop mined land for economic development, energy production, and other beneficial land uses, such as carbon capture and storage projects, industrial development sites
- Each DMME Division, with assistance from DMME's Office of Management Information Systems (OMIS), will identify, prioritize, develop, index, and provide information that meets customers' needs.
- The DMME Division of Energy will:
  - provide energy efficiency and renewable energy services.
  - Revise and implement the Virginia Energy Plan, integrating new technology and Virginia's goals for energy policy.
  - Provide staff support for the Virginia Offshore Wind Development Authority.
- The DMME Division of Geology and Mineral Resources will continue to standardize and consolidate data collections for the web-based Virginia Geologic Information Catalog and cooperate with OMIS in seeking expanded opportunities for IT support.
- The DMME Office of Public Information will work with each DMME Division to pursue outreach initiatives to address increasing public interest in energy, mineral, land and water issues.

*Measures*

- Amount of guaranteed savings to the Commonwealth from the energy performance contracting program.

Measure Class	Agency Key	Measure Type	Outcome	Preferred Trend	Increase	Frequency	Annually
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*Data Source and Calculation*

Performance contracting is a process by which state agencies can reduce their energy costs through one or more energy conservation or operational efficiency measures. These measures are paid for through the guaranteed savings that will result from implementation of the measures. The Department of Mines, Minerals and Energy partners with government entities to help provide these services. Savings are measured by reviewing reports from performance contractors and agencies providing dollar value of contracts and annual savings generated by the projects implemented.

## Programs and Service Areas for Agency

- 50601: Geologic and Mineral Resource Investigations, Mapping, and Utilization
- 50602: Mineral Mining Environmental Protection, Worker Safety and Land Reclamation
- 50603: Gas and Oil Environmental Protection, Worker Safety and Land Reclamation
- 50604: Coal Environmental Protection and Land Reclamation
- 50605: Coal Worker Safety
- 50705: Energy Conservation and Alternative Energy Supply Programs
- 59901: General Management and Direction

## Customers

Pre-Defined Customer Group	User Specified Customer Group	Customers Served Annually	Potential Annual Customers	Projected Trend in # of Customers
Employer/ Business Owner	Mineral extraction operators	350	350	Stable
Employee	Mineral extraction workers	9,000	9,000	Stable
Resident	Public affected by mineral extraction operations	250,000	250,000	Stable
Contract Employee	Affiliated mineral extraction business interests	2,800	3,000	Stable
State Agency(s),	Other governmental agencies	170	300	Stable
Resident	General public and businesses	1,600,000	8,010,024	Stable

## Key Risk Factors

### DMME Workforce

Reflecting the overall aging of America's workforce, DMME is facing the need to replace a significant proportion of its workforce in the next five years. A number of employees have left the agency in recent years and more will be eligible for retirement in the coming biennium. Specifically, 53 employees (26%) are eligible to retire with more than 30 years of service. In the next five years, 22 (11%) will be eligible. This change in workforce results in the loss of a tremendous amount of the institutional knowledge that helps DMME understand and address the challenges of providing high quality customer service in the worker safety, environmental protection, geology, and energy conservation arenas. Recruitment and retention are made more difficult as regulated industries continue to offer high wages and other incentives to deal with similar labor shortages. DMME has proactively updated its transition plans and task descriptions across the agency to prepare for these changes.

### The Future of Coal

Given the increased pressures from cheaper fuels such as natural gas, uncertain global economic trends and increased federal regulatory requirements, the future of coal is an uncertain one. Mines have been idled or closed. If these trends continue, the economy in Southwest Virginia would be tremendously impacted, with ripple effects felt throughout the Commonwealth.

### The Growth of Alternative Energy

Virginia was the second east coast state selected for a commercial lease sale of submerged federal lands on the Outer Continental Shelf for the development of wind energy resources. The September 2013 auction was a significant milestone achieved because of research, planning and collaboration with multiple stakeholders and users of ocean space and ocean resources. DMME provides staff support to the Virginia Offshore Wind Development Authority and is the pending holder of two offshore research leases from the U.S. Department of Interior's Bureau of Ocean Energy Management. DMME is also involved in other emerging energy technologies. The agency is working with the Department of General Services to facilitate the conversion of the state vehicle fleet to alternative fuels.

## Products and Services

DMME offers a wide variety of products and services to its diverse customer base, which includes the following:

### Permitting of mineral extraction sites:

- DMME's permitting review services ensure mineral extraction operations are safe, protect of the environment, and comply with existing laws and regulations.

### Economic development:

- DMME offers incentives and grant programs for energy industry development to increase jobs and economic activity in Virginia.
- DMME provides mineral resource information to businesses seeking to develop deposits such as precious metals, rare earth elements, industrial minerals and aggregate.

### Customer assistance:

- DMME provides worker certification and training, technical assistance, risk assessment, hazard identification, and cooperative projects, such as mine safety, environmental protection and land reclamation during mineral extraction.

- DMME's customer assistance services help customers maintain safe and environmentally protective mineral extraction sites in compliance with regulatory requirements.

- DMME's geologic and mineral resource information is available to effectively manage development of natural resources, such as coal, natural gas, crushed stone and industrial minerals, and geothermal energy.

### Inspection and enforcement:

- DMME conducts thorough and consistent inspection of permitted sites and enforces laws and regulations addressing worker safety on mineral extraction sites, operational and reclamation environmental controls, and water quality to ensure compliance.

Land reclamation:

- DMME conducts reclamation of abandoned mineral extraction sites, corrects damage and mitigates risks of future damage from improperly reclaimed sites while supporting economic development.

Hazard mitigation:

- DMME works with industry, state and federal agencies and local governments to respond to and mitigate natural and manmade hazards related to mining, drilling, earthquakes and landslides.

Energy planning:

- The Code of Virginia directs DMME to prepare a comprehensive Virginia Energy Plan (VEP) covering a 10 year period. The VEP proposes actions consistent with the energy objectives and the Commonwealth Energy Policy enumerated in the Code and is updated shortly after each Governor takes office. The next revision of the VEP is due by July 1, 2014.

Trends

**Rankings & Customer Trends**

Coal production is expected to continue to decrease during this biennium due to market forces and increased federal regulatory requirements. Coal mines in Southwest Virginia have recently been idled and closed which will have a negative impact on the economy in that region of the Commonwealth.

Natural gas production should remain relatively stable or increase slightly. The use of technologies such as horizontal drilling and hydraulic fracturing have produced record amounts of gas and many utilities are converting old power plants to natural gas. Future technological advances as well as the discovery of new shale gas deposits could result in long term natural gas industry growth and expansion into new areas of the Commonwealth.

With respect to mineral mining, demand for minerals and construction aggregate will grow as the economy begins to recover. The Commonwealth's increased emphasis on funding new transportation projects may also help fuel the mineral mining industry's growth as it would increase the demand for gravel and other minerals.

Increasing global demand is driving up the prices of precious metals and energy-critical minerals such as lithium, cobalt, and rare earth elements. DMME offers readily available information about the occurrence of these resources in Virginia which could facilitate the growth of new industries in the Commonwealth.

DMME expects to see the number of government entities participating in demand response or energy performance contracting programs to remain stable or increase slightly. These programs offer participants incentives to curtail energy usage or install more energy efficient systems paid for by the savings those systems generate.

Trend Name	Trend Area
Coal production	Decrease
Natural gas production	Steady
Number of alt. fuel vehicles	Increase

Performance Highlights: Service Performance & Productivity Initiatives

DMME continues to meet or exceed targets in its department-wide measures. Agency metrics for safety, environmental protection, and worker training all reflect high quality performance.

Adjusting to ongoing staff and budget reductions, relevant performance measures continue to reflect DMME's emphasis on efficient, effective core services and continuous quality improvement. Injury rates are trending downward, permits continue to be processed in a timely fashion, and customers consistently rate training provided by DMME as excellent. Productivity and efficiency gains enhance service delivery, and support adjustments in staff and resources.

Management Discussion & Analysis

**Future Direction, Expectations, and Priorities**

DMME continues to focus on its core services in order to fulfill its mission to enhance the development and conservation of energy and mineral resources in a safe and environmentally sound manner in order to support a more productive economy. DMME utilizes its robust strategic planning process, long an agency strength, to identify efficiencies, generate new opportunities and prepare for the future in challenging economic times. As a matter of course, DMME identifies existing processes that can be improved, thus providing increased benefits to its customers.

In fiscal year 2014 and beyond, DMME anticipates coal mining and natural gas drilling to continue to occur in close proximity in Southwest Virginia. DMME's regulatory divisions will continue to work closely together to ensure both activities are conducted in a safe and environmentally responsible fashion.

DMME will continue to search for more innovative and efficient methods to provide training and certification services to its customers. Technological advancements will be utilized across the agency. Geographic information systems and global positioning satellite systems will be utilized to ensure pinpoint accuracy of mineral data on permits, maps and mineral resource information.

With respect to energy, DMME will deliver an updated Virginia Energy Plan to the Governor and General Assembly no later than July 1, 2014. DMME will play an important role in the growth of the renewable energy industry by providing staff support to the Virginia Offshore Wind Development Authority. DMME will also continue to manage the Virginia Energy Management Program (VEMP), providing participating government entities with the tools to conserve and reduce energy usage and provide cost certainty via long term bulk fuel purchase contracts. Additionally, DMME is taking the lead among southeastern states in developing a publicly accessible database of

the region's geothermal energy resources. Finally, DMME will partner with the Department of General Services to convert the state vehicle fleet to alternative fuels.

## 50601: Geologic and Mineral Resource Investigations, Mapping, and Utilization

### Description

This service area develops and delivers information on Virginia's geology, natural hazards, and mineral and energy resources. Most of the work is cooperatively funded with federal agencies. A key role of this service area is to provide unbiased scientific information to decision makers at many levels of government, from localities to the Governor. For example, staff in this service area provide technical expertise to policymakers on current issues such as uranium mining, offshore drilling, and shale gas. Governmental responses to geologic hazards such as earthquakes and landslides benefit from the advice provided by staff geoscientists. Geologic maps, reports, commodity information, and consultations are used by diverse customer groups, including mineral producers, local, state, and federal agencies, developers, consultants, and the general public. The information is used for land use planning, environmental assessments, development of mineral deposits, locating groundwater resources, and other uses. Many activities in this service area are coordinated with the United States Geological Survey (USGS).

### Products and services include:

- Maps and reports depicting Virginia's geology, geologic hazards, mineral resources, and energy resources.
- Customer assistance, such as assisting industry customers with identifying and developing coal, natural gas, precious metals, and other economic mineral deposits; assistance with mine and public safety concerns, mineral industry statistics, and information on geology, geologic hazards, and mineral resources on state-owned lands.
- Assistance with regulatory development through providing geologic information about mining and drilling areas.
- Identification, investigation, and cataloging of abandoned/orphaned mine lands.
- Providing information in support of economic development, such as site geology, mineral availability, and on-site sources of groundwater.

### Mission Alignment and Authority

This service area directly aligns with DMME's mission of enhancing the development and conservation of mineral resources in a safe and environmentally sound manner to support a more productive economy. Assistance provided to customers directly supports economic development, protection of the environment, and assurance of public safety.

### Customers for this Service Area

#### *Anticipated Changes to Customers Base*

#### General public and businesses

- DMME provides information on the state's mineral resources, natural hazards, and geology to the general public, industry, educators, students, economic development organizations, real estate developers, and other customers.

• DMME expects the general public and business customer base to increase over the next few years. Global competition for energy resources such as coal and natural gas, energy-critical minerals such as rare earth elements, and construction materials will drive an increasing need for high-quality, unbiased geosciences information. As residential and commercial development moves into new areas, there is increasing need for geologic and mineral resource information. DMME is constantly expanding access to its information by making its databases, maps and reports available across the Internet. As information is more readily available in electronic form, additional customers will become aware of its availability, thereby increasing DMME's customer base.

#### Other governmental agencies

- DMME provides geologic, natural hazards and mineral resource information to a wide variety of governmental agencies, including policy makers.
- Elected officials use information about energy resources to support sound decision making. For example, uranium mining, offshore drilling, and shale gas will demand decision makers to consider unbiased geosciences information to wisely formulate government policy. Economic development entities use mineral resource information in their comprehensive planning and business development activities. For example, this information is critical to proper planning of transportation projects and for completion of environmental impact assessments. Local governments use geologic information as an input to local land use planning processes. Local and state agencies use geologic information when addressing groundwater issues. They also use geologic information for disaster mitigation planning and request assistance in response to natural disasters. Agencies are increasingly considering mineral resource information when evaluating land for conservation easements.

-- DMME played an important role in response to the August 2011 Virginia earthquake. The earthquake was the most widely felt in U.S. history, and caused significant damage from central Virginia to Washington, DC. DMME geoscientists worked closely with the emergency response community and cabinet-level decision makers in formulating a governmental response to the event. DMME is currently working with the Virginia Department of Emergency Management to develop an earthquake annex to the state's Emergency Operations Plan. This is just one example of how DMME geoscientists are involved in disaster mitigation planning and emergency response. As awareness of geologic hazards grows, we expect local, regional, and state level emergency planning and response activities to require greater levels of attention from DMME geoscientists.

-- DMME provides information on the mineral extraction industry to other state and local agencies that have business relationships with the mineral extraction industry. These agencies look to DMME for guidance on how the extraction industry operates.

- DMME expects the number of governmental agency customers to grow in the next few years. As scarce energy resources grow in importance, state agencies will be increasingly called upon to support wise resource development. Economic development organizations and localities will increasingly need information from DMME as the Coalfield Expressway is developed across Southwest Virginia. VDOT and other agencies need geologic information and information on sources of construction material for planning the I-81 expansion. Local governments will increasingly need mineral resource information to assess how geologic conditions affect land development plans.

#### Mineral extraction operators

- Increases in energy commodity prices drive increased interest in development of Virginia's energy resources. In recent years there has been a sharp increase in the cost of many types of energy, with benchmark grades of oil selling for over \$100/barrel. The price of coal has increased from around \$20/ton to over \$50/ton for steam grade coal and over \$100/ton for metallurgical coal. This has increased the number of customers seeking geologic information about natural gas, coal, and mineral resources.

- The presence of an untapped world-class uranium deposit in Virginia is attracting national attention. Citizens, government agencies, and environmental groups are all demanding information about uranium from DMME geoscientists.

- The price of gold reached an unprecedented \$1900 per ounce during 2011. Virginia, historically a major gold-producing state, is once again attracting interest from the

precious metals industry. DMME's archives of historic mine information are an important source of information to these companies.

- Significant volumes of minerals such as coal, kyanite, titanium sands, and fuller's earth are exported from Virginia. Large quantities of natural gas are also exported. The volume of these exports may increase as Asian markets demand more mineral and energy commodities to meet their economic growth. Additionally, DMME has seen an increase in the number of domestic mining companies contacting the Division of Geology and Mineral Resources for information on deposits of industrial minerals, rare earth elements, and precious metals. These trends are expected to continue and will increase the number of companies exploring for mineral deposits in Virginia.

**Affiliated mineral extraction business interests**

- Numerous businesses support mineral extraction operations such as consulting firms that assist with permit preparation and facility design.

- DMME expects to see an increase in the number of mineral mining industry consulting customers. Mining companies must find and permit new greenfield mine locations; abandoned mines and quarries are being reopened as the economic recovery increases demand for construction materials. These firms have increasingly come to DMME for mineral resource and geologic information to assist in these efforts.

**Current Customer Base**

Pre-Defined Customer Group	User Specified Customer Group	Customers Served Annually	Potential Annual Customers	Projected Trend in # of Customers
Employer/ Business Owner	Mineral Extraction Operators	44	300	Increase
Employer/ Business Owner	Affiliated mineral extraction business interests	142	3,000	Increase
State Agency(s),	Other governmental agencies	95	300	Stable
Resident	General public and businesses	408,305	8,001,024	Increase

**Partners for this Service Area**

Partner	Description
Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE)	BOEMRE provides funding for assessments of offshore mineral resources, such as sand for beach nourishment.
U.S. Department of Energy (DOE)	The DOE provides funding for energy resource studies, for example, adding data to the National Geothermal Data System and characterizing the properties of potential reservoirs for carbon capture and storage.
U.S. Geological Survey (USGS)	The USGS provides cooperative funding for geologic mapping and coal resource studies.
Federal Emergency Management Agency (FEMA)	FEMA provides funding to predict and mitigate the effects of natural hazards such as earthquakes and landslides.

**Products and Services**

**Factors Impacting the Products and/or Services**

Substantial personnel reductions in this service area during the 2008-2010 biennium reduced the agency's ability to provide geologic, energy and mineral resource information and services.

**Anticipated Changes to the Products and/or Services**

DMME has shifted the focus of its geologic and mineral resource staff as grant funding has become available for new areas of investigation, such as assessment of natural hazards, evaluation of energy resources, and identifying geologic repositories for carbon capture and storage. Services offered will continue to be limited by the availability of grant funding, which is typically focused on subject-specific studies, rather than the provision of general assistance to industry, government agencies, and the general public. Demand for general assistance continues to grow while resources for providing such service have contracted.

**Listing of Products and / or Services**

**Customer assistance**

- Hazard identification, mineral and energy resource evaluation, technical assistance, education, and cooperative projects in such areas as environmental protection and land reclamation, and geologic investigation and mapping

- Customer assistance services help customers develop new deposits of mineral and energy resources, maintain safe and environmentally protective mineral resource extraction sites, reduce losses from natural hazards such as landslides and earthquakes, and incorporate geologic information in land use planning.

**Regulatory development**

- Provide geologic information needed to establish minimum operational and reclamation requirements consistent with governing laws for mineral extraction operations.
- These services ensure the legal standards governing mineral extraction operations are based on a clear understanding of how regulated operations must account for the underlying geologic conditions.

**Land reclamation**

- Identification and investigation of abandoned/orphaned mine lands to allow prioritization and design of needed reclamation.
- Land reclamation services correct damage and mitigate risks of future damage from unreclaimed or improperly reclaimed mineral extraction lands.

Economic development

- Provide information in support of economic development (site geology, mineral availability, natural hazards, sources of water, and similar information).
- Economic development services support efforts to increase jobs and economic activity in Virginia.

Financial Overview

Budget Component	2013 GF	2013 NGF	2014 GF	2014 NGF
Base	607,801	367,000	607,801	367,000
Changes to Base	0	69,790	0	69,790
<b>Total</b>	<b>607,801</b>	<b>436,790</b>	<b>607,801</b>	<b>436,790</b>

Objectives for this Service Area

Objectives for this Service Area

**Objective**

Reduce the impact of geologic hazards that pose safety and environmental problems.

*Description*

This objective ensures that we focus on worker and public safety and environmental problems during our studies of geologic conditions. DMME's regulatory divisions use geologic information to enhance their safety and environmental protection services. They need information about geologic conditions that could affect worker or public safety, and accurate digital maps showing abandoned mine workings and locations of geologic and mineral resources and abandoned surface mines.

*Objective Strategies*

- The DMME Division of Geology and Mineral Resources will assist, as requested, with the development and delivery of innovative certification, education, and training services by utilizing web-based programs and external resources.
- The DMME Division of Geology and Mineral Resources will cooperate with the Divisions of Mined Land Reclamation, Gas and Oil, and Mineral Mining in identifying high priority and emergency abandoned, orphaned, and forfeited sites.
- The DMME Division of Geology and Mineral Resources will cooperate with the Divisions of Mines, Mined Land Reclamation, Mineral Mining, and Gas and Oil in addressing unsafe conditions and practices at mine and well sites to include: - Geologic Mapping Section staff will accompany inspectors on site visits to active mineral and fossil fuel extraction sites in geologic mapping project areas. - Economic Geology Section staff will collaborate with the Division of Gas and Oil on geothermal energy an
- The DMME Division of Geology and Mineral Resources will investigate and report on geologic hazards to include earthquakes, landslides and karst.
- The DMME Division of Geology and Mineral Resources will measure the percentage of regional hazard mitigation plans that adequately address known geologic hazards and the number of inquiries related to geologic hazards.
- The DMME Division of Geology and Mineral Resources will pursue external funding, partnerships, and cooperation with other local, state, and federal agencies to identify and reduce the impacts of geologic hazards. Potential activities include applying for VDEM grants, seeking state funding, working with regional hazard mitigation planners.

*Alignment to Agency Goals*

- Provide for safe and environmentally sound mineral and fossil fuel extraction.

*Measures*

- Percentage of regional hazard mitigation plans that address known geologic hazards.

Measure Class  Measure Type  Preferred Trend  Frequency

*Data Source and Calculation*

The Department of Mines, Minerals and Energy's Division of Geology and Mineral Resources (DGMR) reviews regional hazard mitigation plans to ensure known geologic hazards are addressed. A plan is generally considered acceptable if it acknowledges known hazards. DGMR does not currently have a funded program to impact this measure.

**Objective**

Improve customer capabilities in the wise management of energy, mineral, land, and water resources.

*Description*

This objective assures that we focus on economic development when carrying out geologic studies. Geologic and mineral resource information must be available to the public and business community to help them wisely develop available resources.

*Objective Strategies*

- The DMME Division of Geology and Mineral Resources will develop and implement a new customer assistance program by October 1, 2012.
- The DMME Division of Geology and Mineral Resources will measure the percentage completion of geologic mapping in targeted areas, the results of customer surveys, the results of the quarterly survey of key customer groups, and the results of the new customer assistance program.
- The DMME Division of Geology and Mineral Resources will provide effective and timely service to its customers
- The DMME Division of Geology and Mineral Resources will pursue external funding, partnerships, and cooperation with planning authorities to support

comprehensive planning.

- The DMME Division of Geology and Mineral Resources, in collaboration with other DMME Divisions, customers, and stakeholders, will prioritize, conduct, and distribute the results of geologic, energy, and mineral resource investigations that promote economic development.

*Alignment to Agency Goals*

- Encourage economic development through our customers' wise management of Virginia's energy, mineral, land, and water resources.

*Measures*

- Percentage of geologic mapping completed in targeted areas.

Measure Class  Measure Type  Preferred Trend  Frequency

Data Source and Calculation

This measure reflects the percentage geologic maps completed in targeted areas by the Department of Mines, Minerals and Energy's Division of Geology and Mineral Resources. Current targeted areas include the I-81 corridor and the Richmond Metropolitan Statistical Area. Once these areas are complete, new areas will be targeted as long as funding is available.

- Percentage of geologic mapping completed in targeted areas.

Measure Class  Measure Type  Preferred Trend  Frequency

Data Source and Calculation

This measure reflects the percentage geologic maps completed in targeted areas by the Department of Mines, Minerals and Energy's Division of Geology and Mineral Resources. Current targeted areas include the I-81 corridor and the Richmond Metropolitan Statistical Area. Once these areas are complete, new areas will be targeted as long as funding is available.

- The Division of Geology and Mineral Resources' rating in customer satisfaction surveys

Measure Class  Measure Type  Preferred Trend  Frequency

Data Source and Calculation

This measure is based on quarterly surveys sent out to customers of the Department of Mines, Minerals and Energy's Division of Geology and Mineral Resources. The Division is evaluated on promptness, accuracy, usefulness of information and availability of information. Survey responses are on a 0-4 scale, 4 being the highest.

**Objective**

Improve the accessibility and distribution of new and existing geologic information.

*Description*

This objective assures that we focus on economic development when carrying out geologic studies. Geologic and mineral resource information must be available to the public and business community to help them wisely develop available resources.

*Objective Strategies*

- The DMME Division of Geology and Mineral Resources will continue to improve the organization and preservation of geologic information in accordance with geologic information management and data preservation plans.
- The DMME Division of Geology and Mineral Resources will migrate its website to the new Virginia Interactive framework in accordance with VITA Standards.
- The DMME Division of Geology and Mineral Resources will use the continuous quality improvement (CQI) process to evaluate web delivery of products and publications.
- The DMME Division of Geology and Mineral Resources will use volunteers in the accomplishment of this objective.
- The DMME Division of Geology and Mineral Resources, in collaboration with OMIS, will investigate alternative methods for interfacing with the Virginia Geologic Information Catalog (VGIC) and implement solutions in collaboration with the Office of Management Information Systems.
- The DMME Division of Geology and Mineral Resources, in collaboration with the Office of Management Information Systems, will continue to expand the datasets in the Virginia Geologic Information Catalog (VGIC).
- To measure progress towards achieving the objective, the DMME Division of Geology and Mineral Resources will track the percentage of datasets in the VGIC, track web hits and VGIC searches quarterly, and solicit feedback from staff to assess the use, value and ease of access to data and databases.

*Alignment to Agency Goals*

- Encourage economic development through our customers' wise management of Virginia's energy, mineral, land, and water resources.

*Measures*

- Percentage of targeted datasets entered into the Virginia Geologic Information Catalog

Measure Class  Measure Type  Preferred Trend  Frequency

Data Source and Calculation

The measure tracks the percentage of targeted datasets entered in the Virginia Geologic Information Catalog. Current targets focus on two project areas, the I-81 corridor and the Richmond Metropolitan Statistical Area. Once these target areas are completed, new areas will be targeted as long as funding is available.



## 50602: Mineral Mining Environmental Protection, Worker Safety and Land Reclamation

### Description

This service area implements the Virginia Mineral Mine Safety Act and Virginia's mineral mining reclamation laws. The laws and regulations protect workers on mineral mines and citizens affected by the operations from risks due to unsafe conditions and unsafe acts on the operations, and protect the public safety and health from the possible harmful environmental effects of mineral mining operations. Products and services include:

- Customer service, such as training, technical assistance, and risk assessment.
- Inspection and enforcement of the mine safety and reclamation laws and regulations.
- Certification of general mineral mine workers and miners performing specialized mineral mining tasks.
- Permitting and licensing of mineral mine sites.
- Regulatory development to establish minimum requirements for worker and public safety and operation and reclamation of mineral mine sites.
- Land reclamation through use of financial guarantees to ensure proper reclamation on permitted sites and reclamation of orphaned (abandoned) mineral mine lands.
- Economic development support through helping ensure adequate supplies of non-fuel mineral products are available to support Virginia's economic needs.

### Mission Alignment and Authority

This service area directly aligns with DMME's mission of enhancing the development of mineral resources in a safe and environmentally sound manner to support a more productive economy. Supporting the mineral mining industry with compliance assistance, technical assistance, and worker safety training ensures that the industry operates safely, protects workers, the public, and the environment, and contributes to economic development.

### Customers for this Service Area

#### *Anticipated Changes to Customers Base*

#### Mineral extraction operations

• The tonnage of non-fuel minerals produced in Virginia historically changes in relation to the state of Virginia's economy. As the economy is strong, mineral mine production increases. As the economy is weaker, production decreases. The production of construction aggregates is also affected by the amount of highway construction and repair and amount of housing, commercial, industrial, and institutional development. However, the number of mineral mines producing these materials remains fairly stable, ranging from 425 to 500 mines run by approximately 275 companies.

In 2008, the aggregate industry experienced slowdowns in highway, residential, commercial, and institutional construction resulting in a reduction in production and workforce. DMM has seen a slow upturn in production in the past two years. In 2011, 63.6 million tons of non-fuel minerals were produced from 427 mines and quarries. DMME expects that this trend will continue as Virginia's economy recovers from the recession and demand for minerals and construction aggregate grows. Any increase in production will most likely come from existing mines. New mineral mines are increasingly difficult to open due to pressures to restrict siting of these facilities through local zoning ordinances.

#### Mineral extraction workers

• Mineral mine employment in Virginia changes based on the amount of tonnage produced in Virginia's mineral mines and changes in miner productivity. The number of mineral miners also is affected by the use of independent contractors on mineral mine sites. Some large operators have shifted parts of mining and processing activities away from an employee-based workforce to contractor employees. While the number of operators has been relatively stable during the economic downturn, there has been a significant decline in contract employment. In 2011, DMM has continued to see a reduction in the number of contractor workers by nine percent while companies experienced only a one percent reduction in their workforce.

• Virginia had 2,991 production workers and 4,898 independent contractor employees in 2011. This represents a seven percent reduction in total mineral mine workforce. DMME anticipates the number of mineral miners to slowly rise as the demand for mineral mine production increases and the economy recovers. This increase will most likely be made up of contractor workers requiring new mineral miner certification. It is also DMM experience that approximately one-third of mineral miners and one-half of mineral mine supervisors are replaced through normal turnover every five years, causing further ongoing demand for new mineral miner and other certified personnel.

• Mineral miner productivity is currently 21,278 tons/miner/year; and represents a steady increase in productivity from a low of 17,153 tons/miner/year in 2009.

#### Citizens affected by mineral extraction operations

• Citizens located near mineral extraction operations may be affected by activities at the operations. These effects may include such impacts as ground and air vibrations from blasting; effects on groundwater quantity or quality; effects from uncontrolled release of material such as flyrock or pushed or tracked material from the site; dust from blasting, construction, or travel on unsurfaced roads; noise; light; or truck traffic. DMME's regulations address many of these impacts. While some impacts, such as light, ambient noise, and local truck traffic, are subject to local government ordinances, DMME receives and investigates all complaints received on mineral mine sites.

• Mineral mine operators are required to notify property owners within 1,000 feet of the permit area boundary when applying for new permits. DMME used this distance to measure the number of citizens affected by mineral extraction operations. The applicant for a typical new mineral mine permit notifies 20 property owners. The actual number notified may range from one or two for rural operations to hundreds of property owners in more built-up areas. DMME uses an average of 20 affected property owners per mine (427 mineral mines in 2011) times 2.60 average people per household times the number of mines totals to approximately 22,000 people affected.

• DMME expects there will be additional people affected by mineral extraction operations in the coming years. Mineral mines have typically been located on the fringes of built-up areas. As suburban sprawl moves farther out from urban areas, residential and commercial development comes closer to existing mineral mine locations. This results in increasing numbers of persons affected by the operations.

• The increasing proximity between mineral mines and the public is expected to result in increased opposition to the locations of existing and new operations. This may cause an increased number of public interest advocacy groups to become active on mineral mine site issues.

• Citizens are affected by orphaned (abandoned and not reclaimed) mineral mine lands. Such lands may cause water pollution from nonpoint source runoff or acid mine drainage. Abandoned quarries or other mines may be public safety hazards from abandoned equipment, water-filled pits, unprotected highwalls, or other features. DMME

does not have a count of the numbers of people affected by these orphaned mineral mine sites.

**Affiliated mineral extraction business interests**

- Numerous businesses support mineral extraction operations. These range from engineering firms that assist with permit preparation and facility design; to independent contractors providing services at mine sites (such as blasting, mobile equipment lubrication and maintenance, logging, overburden removal, plant construction); to independent trucking companies hauling material to consumers.

- DMME expects to see an increase in the number of affiliated business interests. Mining companies are increasingly outsourcing work on mines. DMME has been given expanded responsibility for regulation of activities of independent contractors on mineral mines. DMME currently has over 3,170 independent contractors registered with the division employing more than 5,000 persons who are actively working or seeking work in the mineral mining industry. The department expects the number of independent contractor customers to continue to grow.

**General public and businesses**

- All Virginia residents are potentially served through DMME's mineral mining activities. All Virginians travel on Virginia roads constructed with Virginia-produced aggregates. All Virginians use public infrastructure and private facilities constructed with Virginia-produced aggregates. DMME does not track actual numbers of individual people served.

- DMME expects the general public and business customer base to increase over the next few years. As development moves into new areas, there is increasing need for geology and mineral resource information to properly plan for and support new mineral mine development. DMME also is expanding the information available across the Internet. As information is more readily available in electronic form, additional customers will become aware of its availability, thereby increasing DMME's customer base.

**Other governmental agencies**

- DMME provides geologic, mineral resource, and energy information to a wide variety of governmental agencies.

- Economic development entities use mineral resource information in their business development activities. Economic development organizations contact DMME for information about the availability of specific minerals in response to companies wishing to locate operations in Virginia. Availability of construction aggregate is critical to proper planning of transportation projects. Local governments use mineral resource information as an input to local land use planning processes. Mineral mine information is used by local or state agencies addressing groundwater issues.

- DMME provides information on the mineral extraction industry to other state and local agencies that have business relationships with the mineral extraction industry. These agencies look to DMME for guidance on how the extraction industry operates.

- DMME coordinates mineral extraction regulatory activities with the similar regulatory agencies in neighboring states and in the federal government. Environmental impacts such as water pollution can cross state lines.

- In accordance with state law, DMME does not conduct regular safety inspections on mineral mines inspected by the federal Mine Safety and Health Administration (MSHA). DMME instead uses its mineral mine safety resources to provide training and technical support to enhance worker safety. Both DMME and MSHA investigate accidents that result in serious personal injuries or fatalities on mineral mines. MSHA recognizes Virginia mineral mine worker certifications. This requires coordination between DMME and MSHA.

- Virginia's mineral mining reclamation law allows localities, at their discretion, to regulate the operation and reclamation on mineral mine sites. The local programs must provide for at least the same level of regulatory coverage as DMME's mine reclamation activities. DMME periodically reviews the local programs to ensure they maintain this minimum level of regulatory coverage. Currently, only Fairfax and Henrico counties exercise this authority.

**Current Customer Base**

Pre-Defined Customer Group	User Specified Customer Group	Customers Served Annually	Potential Annual Customers	Projected Trend in # of Customers
Employer/ Business Owner	Mineral extraction operators	427	427	Stable
Employee	Mineral extraction workers	2,991	2,991	Increase
Property Owner	Public affected by mineral extraction operations	22,000	22,000	Increase
Employer/ Business Owner	Affiliated mineral extraction business interests	1,889	2,550	Stable
Local or Regional Government Authorities	Other governmental agencies	13	150	Stable

**Partners for this Service Area**

Partner	Description
No partners currently entered in plan	

**Products and Services**

**Factors Impacting the Products and/or Services**

**Anticipated Changes to the Products and/or Services**

**Listing of Products and / or Services**

Customer assistance • Job safety analysis, risk assessment, hazard identification, training, technical assistance, education, and cooperative projects – in such areas as mine safety, environmental protection, and land reclamation during mineral extraction. • Customer assistance services assist customers to maintain safe and environmentally protective mineral extraction sites in compliance with regulatory requirements and use mineral production information to manage development and natural resources.

Inspection and enforcement • Thorough and consistent inspection and enforcement of laws and regulations addressing worker safety on mineral extraction sites and operational and reclamation environmental controls. Assess company and individual responsibility and liability as appropriate. Investigate accidents and complaints. Note that DMME does not inspect for worker health and safety on those mineral mines inspected by the federal Mine Safety and Health Administration (MSHA). The agency does

complete these inspections on those mines not inspected by MSHA. DMME does investigate accidents and complaints and complete reclamation inspections on all mine sites. Appeals to DMME's reclamation enforcement actions are conducted in accordance with the Administrative Process Act. • Inspection and enforcement services assist customers to maintain safe and environmentally protective mineral extraction sites in compliance with regulatory requirements.

**Certification** • Certification of persons performing mining and other specialized tasks on mineral mine sites, such as certification of general mineral miners, mine foremen, blasters, electricians, and others. Enforcement actions against certified workers can be made to the Division of Mineral Mining and addressed in accordance with the Administrative Process Act. • Mineral extraction worker certification services assure workers performing specialized tasks necessary to maintain safe mineral extraction sites are qualified to perform these tasks

**Permitting** • Permit and plan review and approval, financial bonding, coordination with other agencies' regulatory requirements. • Permitting and plan review services ensure mineral extraction operations can be conducted safely and protective of the environment (operations, land reclamation) and in compliance with mineral mining laws and regulations

**Regulatory development** • Establishing minimum operational and reclamation requirements consistent with governing laws for mineral mining operations. DMME is the regulatory authority for mine safety and reclamation regulations. The Division of Mineral Mining promulgates regulations governing certification of mineral miners. • Regulatory services ensure the legal standards governing mineral mining operations will result in safe and environmentally protective operations while establishing the minimum required intrusion in permitted and licensed operations

**Land reclamation** • Reclamation of orphaned (abandoned and not reclaimed) mineral mine lands and bond forfeiture sites. Funding for the orphaned land program, until recently, came from interest earned on monies paid by permitted mine operators into the Minerals Reclamation Fund. DMME uses these funds to reclaim orphaned mineral mine sites, eliminating public safety, and environmental hazards. DMM will continue to use the remaining balance of the Orphaned Land Fund, until such time as it is exhausted. The orphaned land program uses the Orphaned Land Advisory Committee for guidance on which orphaned lands should receive the highest priority for reclamation. • Land reclamation services correct damage and mitigate risks of future damage from improperly reclaimed mineral extraction lands.

**Economic development** • Providing information on mineral availability in support of economic development. • Reclaimed mineral mines may be developed into new commercial, industrial, or residential sites. • Economic development services support efforts to increase jobs and economic activity in Virginia.

#### Financial Overview

Budget Component	2013 GF	2013 NGF	2014 GF	2014 NGF
Base	1,318,269	1,236,120	1,318,269	1,236,120
Changes to Base	-30,000	30,000	-80,000	30,000
<b>Total</b>	<b>1,288,269</b>	<b>1,266,120</b>	<b>1,238,269</b>	<b>1,266,120</b>

#### Objectives for this Service Area

##### Objectives for this Service Area

###### Objective

Eliminate accidents, injuries and fatalities at mineral mine sites.

###### Description

This objective focuses on safety programs that decrease the number of injuries and fatalities at mineral mine sites. Protection of worker and public safety from the dangers on mineral mine sites is of critical importance to ensure the safety of Virginians working on or living near mineral mine sites. Dangers may be present due to improper conditions or improper actions by miners. The DMME Division of Mineral Mining provides customer assistance and inspection and enforcement of mine safety based on a risk assessment of mines, with the riskiest mines receiving a higher level of services.

###### Objective Strategies

- The DMME Division of Mineral Mining (DMM) will continue to implement methods to provide delivery of contractor customer services that will improve mine safety awareness and contractor responsibilities on mine sites.
- The DMME Division of Mineral Mining (DMM) will develop and provide site-specific educational services and products targeted to eliminate accidents, injuries, fatalities, and adverse health effects. DMM will improve quality and accessibility of training services provided to miners by: • Using accident and enforcement data to develop training materials. • Posting training materials, safety alerts, and accident abstracts on the web. • Developing and implementing a web update notification process
- The DMME Division of Mineral Mining (DMM) will establish baseline indices, with targeted performance measures, to indicate progress in the elimination of injuries and fatalities. A comprehensive database, including accident reports, will be used. Serious personal injury and fatality incident rates will be measured annually with targets established at rates below the previous five-year moving average. DMM will measure the number of safety violations eliminated by the due dates. DMM will measure
- The DMME Division of Mineral Mining (DMM) will investigate accidents and resolve safety and health complaints associated with mineral mine sites. DMM will seek other DMME divisions' assistance when applicable.
- The DMME Division of Mineral Mining (DMM) will provide certification and related training programs and services that ensure required competency and improve safe mining practices. • Continuing to update certification training materials to reflect changes to laws and regulations. • Developing the capability to track and report accident statistics and trends. - Developing a web-based certification application process with assistance from OMIS. • Implementing electronic training programs. - Developing
- The DMME Division of Mineral Mining (DMM) will work with other DMME Divisions to address common safety issues involving mining and gas and oil activities.
- The DMME Division of Mineral Mining will provide customer assistance and conduct thorough and consistent inspections, utilizing the risk assessment process to achieve compliance with mine safety laws and regulations.

###### Alignment to Agency Goals

- Provide for safe and environmentally sound mineral and fossil fuel extraction.

###### Measures

- Number of serious personal injuries and fatalities on mineral mine sites per 200,000 worker hours.

Measure Class  Measure Type  Preferred Trend  Frequency

Data Source and Calculation

Data is collected from reports of serious personal injuries and fatalities submitted by permitted mineral mine operators throughout the year and the reports of employee work hours reported by permitted mineral mine operators on their annual tonnage reports submitted to the Department of Mines, Minerals and Energy (DMME). The rate is calculated as the number of serious personal injuries and fatalities per 200,000 work hours. DMME evaluates the five-year rolling average of this rate to determine the trend.

- Percentage of safety violations successfully eliminated on mineral mine sites.

Measure Class  Measure Type  Preferred Trend  Frequency

Data Source and Calculation

This measure is calculated using information from the Department of Mines, Minerals and Energy's automated enforcement systems. Records of violations show date issued, target date for correcting the violation, and date the violation is corrected. The percentage is calculated based on total number of safety violations corrected by their due dates and of total safety violations issued.

**Objective**

Eliminate adverse environmental conditions and public safety hazards associated with mineral mine sites.

*Description*

This objective reflects an emphasis on a core function of DMME: protecting the environment and the safety of the public by eliminating adverse conditions at mineral mine sites. Protection of the public safety and the environment from the off-site effects of activities on mineral mine sites is of critical importance, including protecting against harm to people near the mines from such items as blasting, discharge of materials, and protecting against the deleterious effects mining may have on the environment. The DMME Division of Mineral Mining provides customer assistance, hazard identification, and inspection and enforcement of mine reclamation to meet this objective.

*Objective Strategies*

- The Division of Mineral Mining will monitor the issues concerning uranium mining.
- The DMME Division of Mineral Mining (DMM) will assess all potential bond forfeiture sites and take actions to prevent bond forfeitures using customer and stakeholder involvement. DMM will maintain a bond forfeiture inventory.
- The DMME Division of Mineral Mining will communicate with and provide assistance to county governments on issues related to mineral mining activities and monitor and evaluate waiver programs to ensure consistency with laws and regulations.
- The DMME Division of Mineral Mining will measure the number of off-site adverse environmental conditions and public safety hazards by tracking the number of off-site impacts reported/identified and maintain a 3 year rolling average above 95% of mineral mines that are impact free. Environmental violations will be successfully eliminated by due date with an elimination rate of at least 80%.
- The DMME Division of Mineral Mining will provide a timely and complete review of mine permit applications and amendments consistent with laws and regulations.
- The DMME Division of Mineral Mining will provide assistance, inspections and investigations in a manner that is efficient and customer oriented and will cooperate with local, state and federal agencies to eliminate adverse environmental conditions and public safety hazards.
- The DMME Division of Mineral Mining will work with customers to evaluate and acquire quality reclamation and environmental educational materials for use by the mineral mine industry.

*Alignment to Agency Goals*

- Provide for safe and environmentally sound mineral and fossil fuel extraction.

*Measures*

- Percentage of mineral mine sites with no adverse off-site environmental damage or public safety hazards.

Measure Class  Measure Type  Preferred Trend  Frequency

Data Source and Calculation

This measure is calculated using information from the Department of Mines, Minerals and Energy's mineral mining automated enforcement system. Records of violations show whether there was any off-site damage or public safety hazard related to a violation of environmental laws or regulations. The number of sites with no violations causing off-site impacts is calculated as a percentage of permitted sites. The percentages for the most recent three years are then averaged.

- Percentage of environmental violations on mineral mine sites successfully eliminated.

Measure Class  Measure Type  Preferred Trend  Frequency

Data Source and Calculation

This measure is calculated using information from the Department of Mines, Minerals and Energy's mineral mining automated mineral mining enforcement system. Records of violations show date issued, target date for eliminating the violation, and date the violation is eliminated. The total number of environmental violations eliminated by their due date is divided by the total environmental violations issued.

**Objective**

Eliminate environmental and public safety hazards associated with orphaned mineral mines and bond forfeiture sites.

*Description*

This objective assures that we focus on eliminating environmental and public safety hazards in our programs related to orphaned mineral mines and bond forfeiture sites. Orphaned (abandoned and not reclaimed) mineral mine lands and permitted mine sites not properly reclaimed by the permit holder may cause water pollution from nonpoint source runoff or acid mine drainage. Abandoned mineral mines may cause public safety hazards from abandoned equipment, water-filled pits, unprotected highwalls, or other features. This objective directs DMME's work to reclaim the highest priority orphaned mineral mine sites.

*Objective Strategies*

- The DMME Division of Mineral Mining (DMM) will measure the objective by recording the number of orphaned mineral mine sites inventoried and the percentage of increase in inventoried orphaned mineral mine sites based on an estimated 4,000 sites. In addition, DMM will record the number of orphaned mineral mine sites where safety and health hazards have been eliminated and the percentage of orphaned mineral mine sites where safety and health hazards have been eliminated versus the number of sites i
- The DMME Division of Mineral Mining will administer the nonpoint source (NPS) pollution control program for orphaned mineral mines and apply for funding to continue the NPS coordinator position.
- The DMME Division of Mineral Mining will continue to evaluate orphaned mineral mines and forfeited sites to support the development of potential land uses such as wetlands, carbon capture and storage, economic development, and alternative energy.
- The DMME Division of Mineral Mining will increase the watershed inventory of orphaned mineral mines.
- The DMME Division of Mineral Mining, with the involvement of customers and stakeholders, will reclaim the highest priority orphaned sites and bond forfeiture sites by using all available funds and resources.

*Alignment to Agency Goals*

- Provide for safe and environmentally sound mineral and fossil fuel extraction.

*Measures*

- Percentage of orphaned mineral mine sites inventoried.

Measure Class **Other Agency** Measure Type **Outcome** Preferred Trend **Increase** Frequency **Semi-Annually**

*Data Source and Calculation*

The Department of Mines, Minerals and Energy has estimated that there are 4,000 orphaned mineral mine sites based on historical records of mineral mining activity in the state. Orphaned lands are those areas disturbed by the mining of all minerals, except coal, which were not required by law to be reclaimed or have not been reclaimed. The total number of inventoried mineral mine sites is taken from the orphaned mined land information system. The percentage is calculated from these data.

- Percentage of orphaned mineral mine sites on which safety and health hazards have been eliminated

Measure Class **Other Agency** Measure Type **Outcome** Preferred Trend **Increase** Frequency **Semi-Annually**

*Data Source and Calculation*

The Department of Mines, Minerals and Energy (DMME) has estimated that there are 4,000 (This estimate was revised from 3,000 in FY2011) orphaned mineral mine sites based on historical records of mineral mining activity in the state. Orphaned sites are those areas disturbed by surface mining of minerals other than coal which were not required by law to be reclaimed or which have not been reclaimed. The total number of reclaimed mineral mine sites is tracked by DMME staff after the final inspection of the reclamation work is completed. The percentage is calculated from these data. DMME has limited funding with which to reclaim these sites.

**Objective**

Improve our customers' ability to establish and maintain efficient, viable operations.

*Description*

This objective focuses on assisting customers in a way that helps them improve their ability to establish and maintain efficient, viable operations. Activities under this objective are aimed at providing timely, effective and useful service to customers, involving customers and stakeholders in process improvement, and making timely permit decisions. DMME helps regulated entities establish and maintain economically viable operations that will be both profitable and operate safely and respectfully of the environment. DMME works with its customers to implement process improvements to increase efficiency of interaction with DMME and provide mineral information needed for economic development.

*Objective Strategies*

- The DMME Division of Mineral Mining (DMM) will measure performance by making timely permit decisions on initial permit applications for mineral mines within 60 days and maintain the five year rolling average above 95%, measuring the effectiveness of assistance through the use of customer surveys seeking a satisfaction rate of 90%, increasing the percentage of permit forms submitted electronically to achieve a target of 90%.
- The DMME Division of Mineral Mining will involve its customers and stakeholders in continually identifying, developing, and implementing process improvements.
- The DMME Division of Mineral Mining will involve its customers and stakeholders to investigate alternative systems for electronic permitting to improve customer service.
- The DMME Division of Mineral Mining will provide effective and timely assistance to customers with the involvement of stakeholders as appropriate.

*Alignment to Agency Goals*

- Encourage economic development through our customers' wise management of Virginia's energy, mineral, land, and water resources.

*Measures*

- Percentage of timely decisions on new mineral mine permit applications.

Measure Class **Other Agency** Measure Type **Outcome** Preferred Trend **Stable** Frequency **Semi-Annually**

*Data Source and Calculation*

This measure is calculated using permit-tracking data from the Department of Mines, Minerals and Energy's mineral mining database system. The number of permit decisions made within the time deadlines for the mineral mining permitting program (60 days of in-house time) is compared to total permit decisions due during the review period. These numbers are used to calculate the percentage of timely permit decisions. The percentage for the most recent five years is then averaged to generate the measure.

- Percentage of customer forms submitted electronically.

Measure Class  Measure Type  Preferred Trend  Frequency

Data Source and Calculation

The Department of Mines, Minerals and Energy's Division of Mineral Mining counts the number of forms submitted from activity logs. The measure is calculated as a percentage of forms submitted electronically as compared to the estimate of the total number of forms submitted to the division.

**Objective**

Improve our customers' capabilities in the development and wise use of rock, mineral, land, water resources, and energy resources.

*Description*

This objective focuses on assisting our customers in ways that help them improve their capability to make informed decisions regarding the development of rock, mineral, land, water and energy resources. DMME provides its customers with information to help them have the knowledge needed to make decisions about their operations. This can take the form of providing information on mineral development opportunities, help permitted mine operators and economic development organizations develop mined land for beneficial land uses, and respond to emerging issues that may affect their operations.

*Objective Strategies*

- The DMME Division of Mineral Mining (DMM) will assist customers and stakeholders in the wise use of mineral resources, environmental stewardship and the reclamation of mined land by providing accurate, timely and appropriate information and by building relationships with local governments to inform them of DMM services.
- The DMME Division of Mineral Mining (DMM) will implement and evaluate new methods for obtaining customer feedback.
- The DMME Division of Mineral Mining in coordination with the DMME Division of Administration will measure the effectiveness of information through the use of a customer/stakeholder survey to achieve a 90 percent satisfaction rate. Customer forms submitted will be tracked and measured as follows: total percentage of electronic forms submitted with a target of 75%, percentage of available electronic forms with an 80% target, percentage of available forms submitted with a 90% target.
- The DMME Division of Mineral Mining will identify, compile and distribute information that meets customers' needs in an easily accessible web-based format.

*Alignment to Agency Goals*

- Encourage economic development through our customers' wise management of Virginia's energy, mineral, land, and water resources.

*Measures*

- Percentage of customers satisfied with the Department of Mines, Minerals and Energy's Division of Mineral Mining services.

Measure Class  Measure Type  Preferred Trend  Frequency

Data Source and Calculation

Data is derived from the Department of Mines, Minerals and Energy Division of Mineral Mining's customer surveys addressing satisfaction with DMME's services in providing information, permitting, and field inspections. The number of customers expressing satisfaction or higher is counted as a percentage of total questionnaires received from customers.

## 50603: Gas and Oil Environmental Protection, Worker Safety and Land Reclamation

### Description

This service area implements the Virginia Gas and Oil Act and gas and oil regulations promulgated by the Virginia Gas and Oil Board and the Department of Mines, Minerals and Energy. The law and regulations protect the property ownership interests of persons owning gas and oil rights around gas and oil wells, and protect the public safety and health from possible environmental effects of gas and oil wells and gas gathering pipelines. Products and services include:

- Customer service, such as training, technical assistance, and information sharing.
- Inspection and enforcement of the gas and oil laws and regulations.
- Permitting gas and oil exploration and development wells, and gathering pipelines.
- Protection of property interests around gas and oil wells through pooling and unitization of property interests, and establishment of escrow accounts for unknown or unlocatable owners or where ownership of coalbed methane is contested.
- Regulatory development to establish minimum requirements for protection of correlative rights of gas and oil owners and operations, plugging and reclamation of gas and oil wells, and gathering pipeline sites.
- Land reclamation through use of financial guarantees to ensure proper reclamation on permitted sites and orphaned (abandoned) wells.

### Mission Alignment and Authority

This service area directly aligns with DMME's mission of enhancing the development of energy resources in a safe and environmentally sound manner to support a more productive economy.

### Customers for this Service Area

#### *Anticipated Changes to Customers Base*

#### Gas and Oil Operators and Operators

- The number of permitted gas and oil sites historically changes based on the price of energy. As the price per thousand cubic feet of natural gas or barrel of oil increases, the level of reserves and production generally increases. In recent years there has been a sharp increase in energy costs, with benchmark grades of oil selling for over \$100/barrel. Spot Appalachian natural gas prices have ranged near \$3-7/thousand cubic feet through 2010 and 2011. Current price projections suggest natural gas prices will remain in the \$3-8/thousand cubic feet over the next few years.

- The increasing price for natural gas, coupled with federal tax credits for producing coalbed methane, has caused an increase in the number of new companies interested in producing natural gas in Virginia and an increase in the number of producing gas and oil wells. In 1990, just prior to the start of coalbed methane production in Virginia, there were 841 producing gas and oil wells in Virginia. This had jumped to 1,692 wells in 1995, to 3,068 wells in 2000, to 5,672 wells in 2006, and 7,781 wells in 2011. This has increased the number of producing wells per inspector (currently 7 inspectors in the field) from 280 in 1990 to 1,080 in 2010, or an increase of 386%. DMME also permits natural gas gathering pipelines and ancillary facilities. DMME had 10,978 total sites under permit and 1,568 inspectable units per inspector (currently 7 inspectors in the field). The number of producing gas wells is expected to increase, but at a slower rate than in years past.

The number of wells drilled annually in 2010 and 2011 in Virginia has declined from the 2007 and 2008 highs. This is attributed to gas operators in Virginia pursuing the Marcellus shale play in West Virginia and Pennsylvania. This trend is likely to continue through 2013 or 2014.

- Gas and oil companies are increasingly relying on new technologies to help them operate. They increasingly expect to use electronic commerce with DMME and that the agency will make information available through geographic information systems (GIS) and in other digital forms.

#### Gas and oil workers

- As DMME does not have primary jurisdiction for worker safety on gas and oil exploration and production sites, it does not maintain records of the number of persons working on gas and oil exploration and production operations in Virginia. However, as the number of permitted wells, gathering pipelines, and associated facilities increases in Virginia, the number of workers drilling the wells, constructing the pipelines and associated facilities, and maintaining the facilities will continue to increase. Virginia expects this trend to continue over the next five or more years.

#### Citizens affected gas and oil operations

- Citizens located near gas and oil operations may be affected by activities at the operations. This includes items, such as runoff to surface waters; effects on groundwater quantity or quality; effects from uncontrolled release of material such as material pushed from a site during construction; dust from construction or travel on gravel roads; noise; light; or truck traffic. DMME's regulations control many of these impacts. While some impacts, such as light, ambient noise, and local truck traffic, are subject to local government land use controls, DMME receives and must investigate complaints on all of these issues.

- Citizens that own gas or oil interests receive income from gas and oil operations. Most general public owners receive royalty payments from produced gas. They also may have the right to use gas at a house or other facility located near a well. These customers regularly contact DMME for production information related to their ownership interests. They increasingly are interested in obtaining this information in electronic forms.

- DMME expects there will be additional people affected by gas and oil operations in the coming years.

-- Natural gas producers have indicated that they may need to drill wells more closely together than is currently practiced. This will result in a denser population of well drilling locations and additional gathering pipeline locations. This will expose more people to the operations than with current practices.

-- As the number of gas wells in Virginia increase, the numbers of citizens living or working near gas wells and the number of resource owners receiving income from the operations will increase.

#### Affiliated mineral extraction business interests

- Numerous businesses support gas and oil operations. These range from engineering firms that assist with permit preparation and facility design, to independent contractors providing services at gas and oil sites (such as well drilling; mobile equipment lubrication and maintenance; logging; site development, and pipeline and other construction), to independent trucking companies hauling liquids from wells, to title attorneys, and others.

- DMME expects to see an increase in the number of affiliated business interests as more wells are drilled in Virginia and as gas and oil companies continue to outsource work on exploration and production sites.

**Other governmental agencies**

- DMME provides gas and oil information to other governmental agencies. DMME provides information on the mineral extraction industry to other state and local agencies that have business relationships with the mineral extraction industry. DMME provides gas and oil production reports to Southwest Virginia counties who collect severance taxes on gas and oil production.

- DMME coordinates gas and oil regulatory activities with the similar regulatory agencies in neighboring states and in the federal government. This includes agencies, such as the Virginia State Corporation Commission (SCC), the Department of Environmental Quality, the Department of Conservation and Recreation, or the U.S. Fish and Wildlife Service. For example, the 2005 General Assembly gave the SCC pipeline safety jurisdiction over gathering pipelines in high consequence areas. This will require close coordination between DMME, the SCC, and pipeline operators to identify where DMME and SCC jurisdiction begins and ends.

- Gas and oil operations also may cross state lines along Virginia's borders with Kentucky and West Virginia. Virginia communicates with the gas and oil regulatory agencies in these states as needed. Virginia also is a member of the Interstate Oil and Gas Compact Commission, an organization of states with gas and oil interests.

**Current Customer Base**

Pre-Defined Customer Group	User Specified Customer Group	Customers Served Annually	Potential Annual Customers	Projected Trend in # of Customers
Employer/ Business Owner	Gas and oil operators	19	19	Stable
Employee	Gas and oil workers	700	700	Increase
Resident	Public affected by gas and oil operations	70,000	70,000	Increase
Employer/ Business Owner	Affiliated business interests	150	150	Stable
State Agency(s),	Other governmental agencies	13	150	Stable

**Partners for this Service Area**

Partner	Description
No partners currently entered in plan	

**Products and Services**

**Factors Impacting the Products and/or Services**

Virginia's natural gas industry has grown steadily for nearly 25 years. DMME will be challenged to find the resources to maintain current levels of service.

**Anticipated Changes to the Products and/or Services**

As long as energy prices remain stable and Virginia's regulatory environment encourages the development of existing resources, the level of activity in this industry is anticipated to remain at current levels or to grow.

**Listing of Products and / or Services**

**Customer assistance** • Training, technical assistance, education, hazard identification, and cooperative projects – in such areas as worker safety, environmental protection and land reclamation during gas and oil operations. This helps customers maintain safe and environmentally protective extraction sites in compliance with regulatory requirements. • Information about production and revenue to persons owning gas and oil resources, or those whom claim ownership of contested coalbed methane proceeds held in escrow. • Information on the natural gas and oil resources and related geology in Virginia to companies wishing to develop the state's gas and oil resources.

**Inspection and enforcement** • Thorough and consistent inspection and enforcement of laws and regulations addressing operational and reclamation environmental controls and worker safety on gas and oil sites. Assessing company and individual responsibility and liability as appropriate. Investigate accidents and complaints. Note that DMME is not the primary agency with worker safety jurisdiction on gas and oil sites. DMME may shut down equipment or operations if it finds an imminent danger to persons, but works with the Virginia Department of Labor and Industry (the agency with primary jurisdiction) on other worker safety issues. Appeals to DMME enforcement actions are taken to the Virginia Gas and Oil Board. • Inspection and enforcement services assist customers to maintain safe and environmentally protective mineral extraction sites in compliance with regulatory requirements.

**Permitting** • Permit and plan review and approval, financial bonding, coordination with other agencies' regulatory requirements. • Permitting and plan review services ensure gas and oil operations can be conducted safely and protective of the environment (operations, well plugging, land reclamation) and be in compliance with governing laws and regulations.

**Regulatory development** • Establishing minimum operational and reclamation requirements consistent with governing laws for gas and oil operations. DMME is the regulatory authority for environmental controls on gas and oil operations. The Virginia Gas and Oil Board promulgates regulations governing protection of gas or oil owners' correlative rights (rights related to ownership interest in gas or oil around a well location). • Regulatory services ensure the legal standards governing gas and oil operations will result in safe and environmentally protective operations while establishing the minimum required intrusion in permitted operations. The services also ensure that gas and oil owners receive their proportional share of income from sale of gas and oil from wells near their property.

**Land reclamation** • Plugging of orphaned (abandoned and not plugged) gas and oil wells, reclamation of gas and oil lands and bond forfeiture sites. Funds for the land reclamation activities come from the Orphaned Well Fund, performance bonds posted by gas and oil operators, or the Gas and Oil Plugging and Restoration Fund when bond proceeds are insufficient. • Plugging and land reclamation services correct damage and mitigate risks of future damage from improperly plugged wells and unreclaimed gas and oil well and pipeline sites.

**Correlative rights protection** • Virginia Gas and Oil Board issues orders pooling the ownership interests of owners of gas and oil in the area around gas and oil wells (correlative rights) to ensure all owners receive compensation for the gas and oil resources they own. • The identity of some gas and oil owners may not be known or the owners may not be locatable from available records due to heirships or other unregistered transfer of title. In other cases, there may be a conflict among potential owners of coalbed methane (surface owner, gas owner, coal owner). In these cases, the Gas and Oil Board provides for establishment of or manages escrow accounts to hold the proceeds from gas or oil development until the proper owner is found or determined. • Protects ownership interest of persons owning gas or oil rights, ensuring that the proper owners will receive the proceeds from sales of produced gas or oil.

Budget Component	2013 GF	2013 NGF	2014 GF	2014 NGF
Base	463,049	738,000	463,049	738,000
Changes to Base	377,835	0	377,835	0
<b>Total</b>	<b>840,884</b>	<b>738,000</b>	<b>840,884</b>	<b>738,000</b>

## Objectives for this Service Area

*Objectives for this Service Area***Objective**

Eliminate dangers to workers on gas and oil operations.

*Description*

This objective assures that DMME focuses on protecting workers at oil and gas operations. Protection of worker and public safety from the dangers on gas and oil sites is of critical importance to ensure the safety of Virginians working on or living near the sites. Dangers may be present due to unsafe conditions or improper actions by workers. The DMME Division of Gas and Oil works with the Department of Labor and Industry's Virginia Occupational Health and Safety program to help operators maintain safe operations.

*Objective Strategies*

- The DMME Division of Gas and Oil will conduct inspections, using established worker safety guidelines, to eliminate imminent dangers and unsafe practices and conditions.
- The DMME Division of Gas and Oil will investigate incidents and complaints, seeking assistance as needed from other Divisions within DMME, and take actions to prevent future occurrences of unsafe practices and conditions.
- The DMME Division of Gas and Oil will make available electronic data in order to identify safety issues involving mining and gas well activities by:
  - Continuing to maintain the access road map.
  - Develop a format to make pipeline data available in the DMME mapping system.
  - Developing a process for updating the pipeline/facility map on a regular basis.
  - Make available a searchable set of Topographic Quadrangle digital maps on the Division of Gas and Oil website.
  - Implement the Division of Ga
- The DMME Division of Gas and Oil will measure progress on the elimination of imminent dangers and unsafe practices by documenting, recording, and categorizing all identified occurrences from inspections and incident reports, and calculating the percentage of unsafe acts identified during inspections on permitted gas and oil operations.
- The DMME Division of Gas and Oil will provide assistance to ensure compliance and continually refine the established guidelines for consistent inspection of safety conditions and practices of gas and oil operations.
- The DMME Division of Gas and Oil will work with the Division of Mines, Division of Mined Land Reclamation and Division of Mineral Mining to develop and implement safety issues involving mining and gas and oil activities occurring in close proximity.

*Alignment to Agency Goals*

- Provide for safe and environmentally sound mineral and fossil fuel extraction.

*Measures*

- Percentage of inspections finding unsafe acts on permitted gas and oil operations.

Measure Class  Measure Type  Preferred Trend  Frequency

*Data Source and Calculation*

Data is collected from inspection reports completed by the Department of Mines, Minerals and Energy's Division of Gas and Oil (DGO) inspectors. Through inspections, DGO works with gas and oil operators to ensure worker safety and environmental protection. The total number of unsafe acts identified during inspections is divided by the total number of inspections to calculate a percentage. The measure is based on a five year rolling average.

**Objective**

Eliminate adverse environmental conditions and public safety hazards resulting from gas and oil operations.

*Description*

Protection of the public safety and the environment from the off-site effects of activities on gas and oil sites is of critical importance in such areas as controlling runoff and sedimentation from sites; protecting groundwater quality; protecting from unmanaged discharges of gas, oil, or other fluids from wells or sites; and avoiding contamination or interruption of domestic water supplies from actions on coalbed methane sites. The DMME Division of Gas and Oil provides customer assistance, hazard identification, and inspection and enforcement of gas operations to meet this objective.

*Objective Strategies*

- 1.01.09 The DMME Division of Gas and Oil will monitor progress toward the elimination of adverse environmental conditions and public safety hazards by tracking and reporting quarterly the percentage of correction of identified potential problems, tracking and reporting quarterly the number of off-site impacts normalized to the total number of permitted operations, tracking and reporting quarterly the number of incidents by type, tracking and reporting the percentage of gas and oil sites with no
- The DMME Division of Gas and Oil will continue to investigate public safety, health and environmental issues, concerns, and complaints.
- The DMME Division of Gas and Oil will continue to monitor procedures employed to protect the environment and public's health and safety resulting from fracing operations as needed through June 30, 2013.
- The DMME Division of Gas and Oil will continue to require the plugging of abandoned gas and oil wells, monitor operators' plans for plugging, review records of plugging and abandonment of wells, and encourage the release of permits if applicable. The Division of Gas and Oil will notify operators to identify the status of

abandoned or non-producing wells.

- The DMME Division of Gas and Oil will evaluate its frequency policy and procedures, and make changes as necessary by December 31, 2012.
- The DMME Division of Gas and Oil will provide consistent enforcement of law and regulations, maintain quality inspections on regulated sites at required frequency, and perform joint inspections as necessary. Assistance and inspections will be coordinated among DMME Divisions and other local, state, and federal agencies.
- The DMME Division of Gas and Oil will provide technical assistance to customers and stakeholders on significant emerging issues.
- The DMME Division of Gas and Oil will pursue opportunities to advance the elimination of adverse environmental and public health and safety hazards by establishing partnerships and coordinating projects and activities in order to leverage available funding.
- The DMME Division of Gas and Oil will to locate and prioritize the orphaned well sites. The Division of Gas and Oil will plug at least six orphan well sites by June 30, 2013.

*Alignment to Agency Goals*

- Provide for safe and environmentally sound mineral and fossil fuel extraction.

*Measures*

- Percentage of gas and oil sites with no adverse off-site environmental damage or public safety hazards.

Measure Class **Other Agency** Measure Type **Outcome** Preferred Trend **Stable** Frequency **Semi-Annually**

Data Source and Calculation

This measure is calculated using information from the Department of Mines, Minerals and Energy's gas and oil automated enforcement system. Records of violations show whether there was any off-site damage or public safety hazard related to a violation of the Virginia Gas and Oil Act or the department's gas and oil regulations. The number of sites with no violations causing off-site impacts is calculated as a percentage of permitted gas and oil sites. The percentages for the most recent five years are then averaged.

- Percentage of environmental violations on gas and oil sites that are successfully eliminated.

Measure Class **Other Agency** Measure Type **Outcome** Preferred Trend **Increase** Frequency **Semi-Annually**

Data Source and Calculation

This measure is calculated using information from the Department of Mines, Minerals and Energy's automated gas and oil enforcement system. Records of violations show the date issued, target date for eliminating the violation, and date the violation is eliminated. The number of environmental violations eliminated by their due dates is divided by the number of environmental violations issued, and then calculated as a percentage. The percentages for the most recent five years are then averaged.

**Objective**

Improve our customers' ability to establish and maintain efficient, viable operations.

*Description*

DMME helps regulated gas and oil operations establish and maintain economically viable operations that will be both profitable and operate safely and respectful of the environment. DMME works with its customers to implement process improvements to increase efficiency of interaction with DMME and provide gas and oil resource information needed for growth of the state's gas and oil exploration and production industry.

*Objective Strategies*

- The DMME Division of Gas and Oil will collect information on the benefit to customer, timeliness, and accuracy of data and services through: • Informal point of contact information gathering both in the field and office with quarterly review to assess effectiveness. • Tracking the percentage of permit applications reviewed within 30 days. • Tracking the percentage of forms submitted electronically.
- The DMME Division of Gas and Oil will involve its customers and stakeholders in implementing a system for processing and archiving electronic logs through June 30, 2013.
- The DMME Division of Gas and Oil will process, review, and comment on all permit applications within 30 days of receipt of application.
- The DMME Division of Gas and Oil will provide effective, timely, and useful assistance to its customers and will involve interest groups and governmental agencies, as appropriate.

*Alignment to Agency Goals*

- Encourage economic development through our customers' wise management of Virginia's energy, mineral, land, and water resources.

*Measures*

- Percentage of timely decisions on gas and oil permit applications.

Measure Class **Other Agency** Measure Type **Outcome** Preferred Trend **Increase** Frequency **Semi-Annually**

Data Source and Calculation

This measure is calculated using permit tracking-data from the Department of Mines, Minerals and Energy's gas and oil regulatory database system. The number of permit decisions made within 30 days of receipt of a complete application is compared to the total number of permit decisions due during the review period. The numbers are used to calculate the percentage of timely permit decisions. The percentages for the most recent five years are then averaged.

**Objective**

Improve the quality of information and data provided to customers for the expansion of knowledge of Virginia's resources.

*Description*

DMME provides its customers with information to help them have the knowledge needed to make decisions about their operations. This can take the form of providing information on such items as gas and oil production or locations of wells and pipelines; coordinating DMME regulatory coverage with other agencies; and responding to emerging issues. DMME provides this information through a variety of forms, both digitally and in paper form, as is needed by its customers.

*Objective Strategies*

- The DMME Division of Gas and Oil will collaborate with other Divisions and stakeholders to advance opportunities associated with carbon capture and storage, energy development and alternate fuel vehicles.
- The DMME Division of Gas and Oil will collect information on the accuracy, ease of access, timeliness, and benefit of the customer of data and services through tracking the number and method of information requests, and the method and timeliness of response, - tracking the number of returned responses from electronic correspondence, - tracking hits on DGO website.
- The DMME Division of Gas and Oil will improve the escrow estimator to include provisional units and conventional units in the mapping application; along with continued maintenance.
- The DMME Division of Gas and Oil will provide customers with current gas and oil data and information updated via use of website and electronic mailings.
- The DMME Division of Gas and Oil will work with the Office of Public Information to pursue outreach activities to address increasing public interest in energy, mineral, land and water issues.
- The DMME Division of Gas and Oil, in collaboration with the DMME Office of Management Information Systems, will continue to evaluate and improve its web-based delivery of gas and oil-related customer services. Customers will be encouraged to check the website as a first source for information.
- The DMME Division of Gas and Oil, with assistance from the Office of Program Support and Office of Public Information, will prepare and distribute an electronic communication to stakeholders through June 30, 2013 to include • Legislative updates. • Emerging issues. • Division initiatives.

*Alignment to Agency Goals*

- Encourage economic development through our customers' wise management of Virginia's energy, mineral, land, and water resources.

*Measures*

- Percentage of timely responses to customers' requests for gas and oil information.

Measure Class  Measure Type  Preferred Trend  Frequency

*Data Source and Calculation*

The Department of Mines, Minerals and Energy (DMME) Division of Gas and Oil measures the percentage of responses to public requests for gas and oil information made within 7 days. Data is taken from logs kept by the DMME Division of Gas and Oil.

**Objective**

Provide effective and efficient services to the Virginia Gas and Oil Board and the Board's customers.

*Description*

The DMME Division of Gas and Oil serves as staff to the Virginia Gas and Oil Board and provides support to persons whose property interest is affected by Virginia Gas and Oil Board decisions. The Division will ensure that Board members receive timely materials for Board meetings, Board orders are timely filed, and information on funds escrowed or other Board action is available on a timely basis to customers.

*Objective Strategies*

- In order to improve the quality, effectiveness and services provided to the VGOB, the DMME Division of Gas and Oil will review and present findings to the Board relative to the status of escrow account and other emerging issues requiring Board action.
- The DMME Division of Gas and Oil will collect information on timeliness, ease of access, accuracy, and benefit to the customer of data and services through: • Tracking Board requests and timeliness of responses. • Tracking time to record and distribute Board orders. • Tracking supplemental orders submitted within 120 days. • Tracking supplemental orders processed within 60 days.
- The DMME Division of Gas and Oil will develop and implement policies and procedures and seek funding with support of the Board to provide continuous updated data to the DGO Board E-forms system through June 30, 2013.
- The DMME Division of Gas and Oil will provide assistance and support in the completion of the Virginia Gas and Oil Board escrow audit.
- The DMME Division of Gas and Oil will provide support to the Virginia Gas and Oil Board.

*Alignment to Agency Goals*

- Encourage economic development through our customers' wise management of Virginia's energy, mineral, land, and water resources.

*Measures*

- Percentage of timely recordation and distribution of Virginia Gas and Oil Board orders.

Measure Class  Measure Type  Preferred Trend  Frequency

*Data Source and Calculation*

The Department of Mines, Minerals and Energy's Division of Gas and Oil tracks the date Board orders are signed by the Board Chairman and the date the orders are filed in local Circuit Court offices. The number of orders filed within five working days is compared to the total number of Board orders filed and calculated as a percentage. This measure is under consideration for revision for fiscal year 2014.

## 50604: Coal Environmental Protection and Land Reclamation

### Description

This service area implements the Virginia Coal Surface Mining Control and Reclamation Act of 1979 (Act) and attendant regulations. Virginia operates the coal surface mining regulatory program under approval (primacy) of the federal Office of Surface Mining. The law and regulations protect the public safety and health from the possible harmful environmental effects of coal mining operations. Products and services include:

- Customer service, such as training, technical assistance, and information sharing.
- Inspection and enforcement of the coal mine reclamation laws and regulations.
- Certification of blasters on surface coal mines.
- Permitting of coal mine sites and point-source pollution discharges to surface waters.
- Regulatory development to establish minimum requirements for operations on and reclamation of surface coal mine sites.
- Land reclamation through use of financial guarantees to ensure proper reclamation of permitted sites and use of the Abandoned Mine Land Program for coal mine lands abandoned and left inadequately reclaimed prior to December 15, 1981.
- Economic development support through assessing reclaimed mine land for residential, commercial, or industrial use and identification of coalfield resources (water, land, infrastructure) available for economic development uses.

### Mission Alignment and Authority

This service area directly aligns with DMME's mission of enhancing the development of energy resources in a safe and environmentally sound manner to support a more productive economy.

### Customers for this Service Area

#### *Anticipated Changes to Customers Base*

#### Coal mining companies

- The number of permitted coal mining operations and tonnage of coal mined has historically changed based on the price of energy. Although actual coal resources are fixed, as the price per ton of coal increases, the level of economically recoverable resources and production generally increases. This trend has been offset in recent years by the declining availability of easily mined coal, causing a steady drop in the amount of coal mined. Recently there has been a sharp increase in energy costs. The price of coal has increased to over \$55-65/ton for steam grade coal and over \$120-150/ton for metallurgical coal.

-- The number of Virginia coal mines and tonnage mined had been generally decreasing since 1990. Recent years have witnessed an exception to this trend. In 2008, the prices of both steam and metallurgical coal increased significantly, in part to increased demand in emerging worldwide markets. This boom ended in early 2011 as the result of electric utilities' increasing reliance on natural gas as the primary fuel for power generation. Increasing federal regulatory constraints also has impacted coal markets. In 2011, 22,333,989 tons of coal were produced in Virginia. DMME expected the number of coal mines to remain relatively stable and the tonnage produced to be stable or slightly increase as long as the price of coal remained above \$40/ton. Beginning in late 2011, significant workforce layoffs have occurred in the Appalachian coalfields, though Virginia has largely avoided the majority of the job losses.

-- Coal mines must remain under bond for a minimum time after completing active operations to guarantee that the land has been successfully reclaimed. For most mines, the liability period runs for five years after final reclamation is established. Therefore, the number of permitted coal mines, active or in reclamation (referred to as inspectable units), has remained higher than the number of producing coal mines. There were 565 inspectable units in 2006 (compared to 562 in 2004). As of the 2nd quarter of 2012, there are 534 inspectable units. DMME expects this number of inspectable units to be fairly stable over the next five to seven years as the older mines reaching final permit and bond release are replaced with new or reopened sites. Permit review activities will increase as coal mining customers must address additional permitting requirements from the Environmental Protection Agency, U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, and other agencies.

#### Citizens affected by mineral extraction operations

- Citizens located near coal mining operations may be affected by such items as ground vibrations from blasting; degradation of groundwater quantity or quality; uncontrolled release of material such as flyrock or pushed or tracked material from the site or landslides; dust from blasting, construction, or travel on soft-surfaced roads; noise or light pollution; or off-site traffic. DMME's coal mining regulations control many, but not all, of these impacts. While some impacts, such as lights, noise, local truck traffic, and hours of operation, may be subject to local government land use controls, DMME receives and must investigate all complaints of the effects of mining.
- Citizens located near abandoned coal extraction sites may be affected by hazards on the abandoned sites, such as open shafts or portals, landslides, ground or surface water pollution discharges, sediment buildup causing flooding, land subsidence, hazardous equipment and facilities, hazardous gases, or dangerous highwalls.
- DMME works with a number of public interest and environmental advocacy groups on coal mining issues that affect the public. These include such groups as The Nature Conservancy, local and regional watershed groups, Upper Tennessee River Roundtable, the Dickenson County Citizens Committee, and others. The agency works in partnership with some groups on projects and invites others to participate in regulatory development processes as representatives of affected public.
- DMME expects there will be additional people affected by coal mining operations in the coming years.
- Surface coal mining operations are locating closer to residential areas as the available remotely located coal resources suitable for surface mining dwindle. This brings more of the public into close contact with the mining operations.
- Residential and commercial development is moving into areas containing historic, unreclaimed coal mine land, increasing the number of people at risk from these abandoned sites.
- The increasing proximity between mineral extraction operations and the public is expected to result in increased opposition to the locations of existing and new operations. This is already causing an increased number of public interest advocacy groups to become active on coal mine site issues. Since 2010, community and regional environmental groups have become more involved in the public participation opportunities in the permitting process.

#### Affiliated mineral extraction business interests

- Numerous businesses support mineral extraction operations. These include such groups as engineering firms that assist with permit preparation and facility design and independent contractors providing non-mining services at mine sites (blasting, reclamation contractors, loggers).

- The coal surface mining reclamation program has limited involvement with many of the affiliated mineral extraction businesses. Its main interaction is with independent engineering firms that complete permit applications for mine operators and companies completing reclamation of abandoned mine land. DMME expects the number of engineering companies and land reclamation construction contractors to remain stable.

**General public and businesses**

- All Virginia residences and businesses are potentially served through DMME's coal mining activities. In 2010, 29.3% of electricity generated in Virginia was powered by coal. Approximately 45% of coal used in Virginia's power plants comes from in-state mines. Maintaining this supply of coal is critical to maintaining the reliability of Virginia's electric generating industry.

- Use of Virginia coal at Virginia's electric generating plants is expected to remain stable in the next few years. The new coal-fired power plant located in Virginia City in Southwest Virginia went online in July 2012. As a result of federal emission standards and the low price of natural gas, power companies are looking to replace old coal-fired plants with new facilities powered by natural gas.

**Other governmental agencies**

- DMME provides geologic, mineral resource, and energy information to a wide variety of governmental agencies.

-- Economic development entities use mineral resource information in their business development activities. Other government agencies use geologic information to plan their projects. For example, information on location of coal mines has been critical to proper planning and design of the coalfield expressway. Coal resource information is used when assessing locations for economic development projects such as new electric generating plants. Economic development organizations use information on abandoned mine land to help locate new residential, commercial, or industrial sites. Local governments in Southwest Virginia use information on location of coal mines and coal resources as an input to local land use planning processes.

-- DMME provides information on the mineral extraction industry to other state and local agencies that have business relationships with the mineral extraction industry. Agencies such as the Departments of Conservation and Recreation and Environmental Quality look to DMME for guidance on how the extraction industry operates. DMME also deposits proceeds from water pollution discharge permit violations with the Department of Environmental Quality for use in the Virginia Emergency Environmental Response Fund.

-- DMME coordinates mineral extraction regulatory activities with the similar regulatory agencies in other coal producing states. Areas, such as DMME's electronic permitting, mapping systems, and performance measurement processes, are regularly benchmarked by other coal regulatory agencies. Much of the coordination is handled through the Interstate Mining Compact Commission.

- DMME works with the LENOWISCO and Cumberland Plateau Planning District Commissions, and Southwest Virginia local governments and public service authorities to implement water supply replacement projects in areas where drinking water supplies have been affected by historic coal mining. Since 1984, over 8,200 households have been supplied with replacement drinking water systems.

- Soil and water conservation districts, the U.S. Department of Agriculture, Natural Resource Conservation Service, and similar agencies partner with DMME to address water quality issues through mined land reclamation projects.

- DMME expects the number of governmental agency customers to grow in the next few years. For example, economic development organizations and localities will increasingly need information from DMME as the Coalfield Expressway is developed across Southwest Virginia.

**Current Customer Base**

Pre-Defined Customer Group	User Specified Customer Group	Customers Served Annually	Potential Annual Customers	Projected Trend in # of Customers
Employer/ Business Owner	Coal mining companies	30	30	Stable
Resident	Public affected by coal mining operations	165,000	165,000	Increase
Employer/ Business Owner	Affiliated business interests	116	116	Stable
Federal Agency	Other governmental agencies	52	52	Stable

**Partners for this Service Area**

Partner	Description
The Nature Conservancy	Provides funding for priority reclamation projects and partners to identify abandoned mine land features in high priority watersheds.
U.S. Army Corps of Engineers	Provides 50/50 match funding for reclamation projects and studies
U.S. Fish and Wildlife Service	Provides funding for priority reclamation projects
U.S. Office of Surface Mining, Reclamation and Enforcement (OSM)	Provides large-scale funding for Virginia's coal mine reclamation administration and enforcement program, and the abatement of human health and safety features from mining prior to December 15, 1981.
Virginia Department of Conservation and Recreation	Provides funding for priority reclamation projects

**Products and Services**

**Factors Impacting the Products and/or Services**

**Anticipated Changes to the Products and/or Services**

Permitting and regulatory guidelines revisions implemented in 2009 by federal regulatory agencies, specifically the U. S. Environmental Protection Agency, Army Corps of Engineers, and the Department of Interior's Office of Surface Mining, have resulted in additional permitting requirements that have adversely impacted the DMME's permitting and review decision processes and companies' ability to obtain new permits or significant revisions to existing operations.

**Listing of Products and / or Services**

Customer assistance • Risk assessment, hazard identification, technical assistance, education, and cooperative projects to enhance environmental protection and land reclamation during coal extraction. • Customer assistance services assist customers to maintain safe and environmentally protective coal mines in compliance with regulatory requirements.

Inspection and enforcement • Thorough and consistent inspection and enforcement of laws and regulations addressing operational and reclamation environmental

controls, and water quality on coal mines. Investigate accidents and complaints. Civil penalty assessment. • Inspection and enforcement services assist customers to maintain safe and environmentally protective coal mines in compliance with regulatory requirements.

Certification • Certification of persons performing blasting on surface coal mines. • Certification services assure workers performing surface coal mine blasting are qualified to perform these tasks.

Permitting • Permit and plan review and approval, financial bonding, coordination with other agencies' regulatory requirements. • Permitting and plan review services ensure coal mining operations can be conducted safely and protective of the environment (operations, land reclamation, water quality) and in compliance with coal operation and reclamation laws and regulations.

Regulatory development • Establishing minimum operational and reclamation requirements consistent with governing laws for coal mining operations. • Regulatory services ensure the legal standards governing coal mining operations will result in safe and environmentally protective operations while establishing the minimum required intrusion in permitted operations.

Land reclamation • Reclamation of abandoned coal mine land and bond forfeiture sites; replacement of water supplies damaged from historic coal mining operations; emergency reclamation of imminent dangers caused from abandoned mine land; and restoration of streams damaged by acid mine drainage and sedimentation. • Land reclamation services correct damage and mitigate risks of future damage from improperly reclaimed coal mined lands.

Economic development • Providing mapping and information in support of economic development (site geology, mineral availability, sources of water, and similar information). • Economic development services support efforts to increase jobs and economic activity in Southwest Virginia.

#### Financial Overview

Budget Component	2013 GF	2013 NGF	2014 GF	2014 NGF
Base	1,851,797	15,741,389	1,851,797	15,741,389
Changes to Base	-82,000	50,000	-132,000	50,000
<b>Total</b>	<b>1,769,797</b>	<b>15,791,389</b>	<b>1,719,797</b>	<b>15,791,389</b>

#### Objectives for this Service Area

##### Objectives for this Service Area

###### Objective

Eliminate adverse environmental conditions and public safety hazards associated with coal mine sites

###### Description

This objective is intended to protect the public and the environment from offsite impacts of permitted coal mine sites. Protection of the public safety and the environment from the off-site effects of activities on coal mine sites is of critical importance in such areas as blasting, discharge of materials from the site, and protecting against the deleterious effects mining may have on the environment. DMME provides customer assistance, hazard identification, and inspection and enforcement of mine operational and reclamation requirements to meet this objective.

###### Objective Strategies

- The DMME Division of Mined Land Reclamation will collaborate with other Divisions on safety issues involving mining and gas and oil activities, including: • Assisting in the development and implementation of procedures to address safety issues involving mining and gas and oil activities. • Continuing to work with industry personnel, DM, DMM, and DGO to eliminate unsafe conditions and practices on coal mine sites. • Maintaining and continuing to develop a comprehensive automated mapping of all
- The DMME Division of Mined Land Reclamation will continue to work with other agencies, customers, and stakeholders on the development of Total Maximum Daily Loads (TMDL) and ensure permits are issued consistent with approved TMDL including: • Finalizing review procedures for applications within TMDL watersheds. • Finalizing guidelines for offsets and best management practices. • The Water Quality Section developing software tools to perform TMDL reviews.
- The DMME Division of Mined Land Reclamation will develop and implement a GIS to record and track DMLR mitigation areas by December 31, 2012.
- The DMME Division of Mined Land Reclamation will develop procedures and guidance memorandum to address mitigation requirements as it relates to bonding and bond release by December 31, 2012.
- The DMME Division of Mined Land Reclamation will develop the first edition of CHIA software by May 31, 2013 to assess cumulative hydrologic impacts.
- The DMME Division of Mined Land Reclamation will finalize and implement guidelines for reviewing and permitting underground slurry injection operations.
- The DMME Division of Mined Land Reclamation will measure: • Number of off-site impacts. • Number of Red Zone violations. • Environmental violations successfully eliminated by the violations' due dates.
- The DMME Division of Mined Land Reclamation will partner with other providers of training programs and services.
- The DMME Division of Mined Land Reclamation will promote reforestation/carbon capture and storage post mining land uses implementing the forestry reclamation approach.
- The DMME Division of Mined Land Reclamation will provide consistent, thorough inspections and assistance to ensure compliance with laws, regulations and permit conditions to include determining company and individual responsibility for violations of laws and regulations and taking appropriate statutory or regulatory action to prevent future violations.
- The DMME Division of Mined Land Reclamation will review and approve ground control plans including red zones, spill prevention plans on sites such as slurry impoundments/slurry injection and emergency action, preparedness and response plans.
- The DMME Division of Mined Land Reclamation, collaborating seamlessly, will investigate health, safety, and environmental issues, concerns, and complaints in a timely manner.
- The DMME Division of Mined Land Reclamation, with appropriate agencies, will conduct site visits and review and approve permit applications that are environmentally sound and meet regulatory requirements by continuing coordination with state and federal agencies, developing updated review procedures for NPDES permit applications, working with OMIS to develop NPDES permit software and capture required data, and implementing waste load reduction actions in appropriate TMDL watersheds.

*Alignment to Agency Goals*

- Provide for safe and environmentally sound mineral and fossil fuel extraction.

*Measures*

- Percentage of coal mine sites with no adverse off-site environmental damage or public safety hazards.

Measure Class **Other Agency** Measure Type **Outcome** Preferred Trend **Increase** Frequency **Semi-Annually**

Data Source and Calculation

This measure is calculated using information from the Department of Mines, Minerals and Energy's coal reclamation automated enforcement system. Records of violations show if there is any off-site damage or public safety hazard related to violations of reclamation laws or regulations. The number of sites with no violations causing off-site damage is calculated as a percentage of total permitted sites. The percentages for the most recent five years are then averaged.

- Percentage of environmental violations on coal mine sites successfully eliminated

Measure Class **Other Agency** Measure Type **Outcome** Preferred Trend **Increase** Frequency **Semi-Annually**

Data Source and Calculation

This measure is calculated using information from the Department of Mines, Minerals and Energy's coal reclamation automated enforcement system. Records of violations show the date the violation is issued, the target date for eliminating the violation, and the date the violation was eliminated. The number of environmental violations eliminated by their due dates is calculated as a percentage of total environmental violations issued.

**Objective**

Eliminate public safety hazards and adverse environmental conditions from abandoned coal sites.

*Description*

This objective is intended to protect the public and the environment from impacts of abandoned coal mine sites. Abandoned coal mine lands left unreclaimed, or permitted coal mine sites not properly reclaimed by the permit holder, may cause water pollution from non point source runoff or acid mine drainage. Abandoned mines may cause public safety hazards from abandoned equipment, water-filled pits, unprotected highwalls, open mine portals, possible blowouts of trapped water, or other problems. This objective directs DMME to work to reclaim the highest priority abandoned coal mine sites and replace water supplies damaged by historic coal mining.

*Objective Strategies*

- The DMME Division of Mined Land Reclamation units will measure: • The percentage of declared emergencies (1) initiated within 30 days; and (2) abated within six months and the number of people directly affected. • The number of hazards eliminated by type, actual units, and number of people no longer at risk for these hazards. • The miles of stream chemically or physically improved. • The number of active partnering and leveraging agreements; amount of increased funds, including in kind eff
- The DMME Division of Mined Land Reclamation will evaluate abandoned and forfeited sites for potential land uses such as wetlands, carbon capture and storage, economic development, excess spoil storage, and alternative energy.
- The DMME Division of Mined Land Reclamation will investigate and take appropriate action on complaints and issues related to abandoned mine land and bond forfeiture sites.
- The DMME Division of Mined Land Reclamation will maintain and update an inventory of abandoned mine land features including acid mine drainage sites, Clean Water Act 404 mitigation sites, and sites where reclamation will enhance Total Maximum Daily Loads implementation plans or carbon capture and storage by: • Continuing on-the-ground mapping of features by field staff. • Increase access to AML GIS data. • Outreach to corporate land/mineral owners and industry. • Continue to improve the GIS-
- The DMME Division of Mined Land Reclamation will proactively seek and target additional funding and alternative funding sources for the Virginia Coal Mine and Mine Map Inventory System through expanded contacts with state and federal agencies and other customer groups.
- The DMME Division of Mined Land Reclamation will revise its State Reclamation Plan to incorporate program revisions in accordance with the AML Reauthorization legislation.
- The DMME Division of Mined Land Reclamation will target additional funding sources and opportunities through expanded contacts with state and federal agencies and customers to facilitate reclamation.
- The DMME Division of Mined Land Reclamation will utilize available resources to address abandoned mine land sites including: • Emergencies. • High priority sites. • Public water supply systems. • AML enhancements and no-cost agreements. • Bond forfeitures.

*Alignment to Agency Goals*

- Provide for safe and environmentally sound mineral and fossil fuel extraction.

*Measures*

- Number of converted acres of abandoned mine land reclaimed.

Measure Class **Other Agency** Measure Type **Output** Preferred Trend **Stable** Frequency **Semi-Annually**

Data Source and Calculation

This new measure utilizes a conversion process adapted from the federal Government Performance and Results Act to ensure all types of abandoned mine land reclamation activities are counted. This includes reclamation of items such as portals, highwalls, landslide areas, and acid mine drainage but does not include water supply replacement projects. Continued federal funding for this program is highly uncertain, and as a result the Department of Mines, Minerals and Energy cannot predict an increase in reclaimed acres in the future.

**Objective**

Improve our customers' ability to establish and maintain efficient, viable operations.

*Description*

This objective is intended to assist our customers in developing and maintaining successful businesses, while complying with applicable laws, regulations, and standards. DMME works with its customers to implement process improvements to increase efficiency of interaction with DMME and provide coal mining related information needed for economic development.

*Objective Strategies*

- The DMME Division of Mined Land Reclamation (DMLR) will participate in meetings with industry to provide customers an opportunity to assist and coordinate with DMLR in identifying and improving areas in permitting and other DMLR service areas.
- The DMME Division of Mined Land Reclamation Director will appoint an awards team by July 01, 2012 to assist with awards programs of the Virginia Mining Association, Office of Surface Mining, Interstate Mining Compact Commission, National Association of State Land Reclamationists, and others to identify and promote best practices in reclamation.
- The DMME Division of Mined Land Reclamation Director will appoint and utilize a Continuous Quality Improvement team by August 1, 2012, working with staff and customers to identify process improvement.
- The DMME Division of Mined Land Reclamation will assist the DMME Division of Geology and Mineral Resources, per DMME 2.01.05, to prioritize, conduct, and distribute the results of geologic, energy, and mineral resource investigations that promote economic development.
- The DMME Division of Mined Land Reclamation will assist the DMME representative to the Governor's interagency working group.
- The DMME Division of Mined Land Reclamation will continue coordination of beneficial (progressive) activities with appropriate state and federal agencies through methods such as participating in joint interagency meetings to review proposed projects and issue resolution meetings with state and federal agencies.
- The DMME Division of Mined Land Reclamation will continue its efforts to implement improvements in the permit review/approval and other agency processes.
- The DMME Division of Mined Land Reclamation will provide effective and timely assistance to its customers and stakeholders, as appropriate.
- The DMME Division of Mined Land Reclamation will work with federal agencies, coal mine operators, utilities, landowners, public-private partnerships, and community interests to expand land reclamation and development through reminding by promoting reclamation and partnership opportunities through DMME's web pages, e-mails, and personal contacts.
- The DMME Division of Mined Land Reclamation, in coordination with the DMME Division of Administration, will measure the effectiveness of our assistance in enabling our customers and other agencies to make informed decisions by gathering data from customers and other agencies, primarily on usefulness, as well as on timeliness, quality and ease of access. The data will be gathered via personal contact surveys, site visits and meetings. D MLR will evaluate: - Customer survey results. Timeliness of

*Alignment to Agency Goals*

- Encourage economic development through our customers' wise management of Virginia's energy, mineral, land, and water resources.

*Measures*

- Percentage of timely decisions on coal mine permit applications.

Measure Class **Other Agency**    Measure Type **Outcome**    Preferred Trend **Increase**    Frequency **Semi-Annually**

*Data Source and Calculation*

This measure is calculated using permit-tracking data from the Department of Mines, Minerals and Energy's coal mine regulatory database system. The number of permit decisions made within 60 working days permit review time is compared to the total number of permit decisions made. The number is calculated as a percentage. The percentages are then averaged over the most recent five years. The percentage may fluctuate in coming years due to increased federal regulatory scrutiny.

**Objective**

Expand economic development opportunities in the coalfield region.

*Description*

This objective is intended to improve the economic environment of the coalfield region of southwest Virginia through collaboration with localities, customers, and other stakeholders. DMME will support use of reclaimed coal mine lands for industrial, commercial, and residential uses through approving post-mining land uses for economic development and partnering with outside organizations to develop economic uses for mined lands.

*Objective Strategies*

- The DMME Division of Mined Land Reclamation (DMLR), with assistance from the Office of Management Information Systems (OMIS), will identify, prioritize, develop, index, and make available information that meets customer needs. DMLR, with the assistance of OMIS, will expand the number of electronic products/services.
- The DMME Division of Mined Land Reclamation will assist the Public Information Office to pursue outreach initiatives to address increasing public interest in energy, mineral, land, and water issues.
- The DMME Division of Mined Land Reclamation will collaborate with economic development organizations, customers, and other stakeholders to enhance economic development and job creation.
- The DMME Division of Mined Land Reclamation will evaluate the effectiveness of our economic development initiatives that it participates in by tracking public support and participation of stakeholders and partnerships and by measuring the number of people employed as a result of reclamation construction projects.
- The DMME Division of Mined Land Reclamation will identify emerging issues and work with its customers to address potential impacts.
- The DMME Division of Mined Land Reclamation will identify, track, and evaluate mining-related litigation, and will work with its stakeholders to address potential impacts.

*Alignment to Agency Goals*

- Encourage economic development through our customers' wise management of Virginia's energy, mineral, land, and water resources.

*Measures*

- Number of people employed as a result of abandoned mine land reclamation construction projects.

Measure Class **Other Agency** Measure Type **Output** Preferred Trend **Increase** Frequency **Semi-Annually**

Data Source and Calculation

The Department of Mines, Minerals and Energy collects employment statistics directly from contractors completing abandoned mined land construction projects. Data are summed to provide six-month employment figure. Numbers can fluctuate depending on various economic conditions.

## 50605: Coal Worker Safety

### Description

This service area implements the Virginia Coal Mine Safety Act and attendant regulations. The coal mine safety laws and regulations protect workers on coal mines and other public affected by the operations from risks due to unsafe conditions and unsafe acts on the operations. Products and services include:

- Customer service, such as training, technical assistance, job safety analysis, and risk assessment.
- Inspection and enforcement of the coal mine safety laws and regulations.
- Certification of general coal mine workers and miners performing specialized coal mining tasks.
- Licensing of and approval of mining plans on coal mine sites.
- Regulatory development to establish minimum requirements for worker and public safety on coal mine sites.
- Emergency response to mine accidents.

### Mission Alignment and Authority

This service area directly aligns with DMME's mission of enhancing the development of energy resources in a safe and environmentally sound manner to support a more productive economy.

### Customers for this Service Area

#### *Anticipated Changes to Customers Base*

#### Coal mine operators

• The number of permitted coal mining operations has historically fluctuated based on the change in energy price. The price fluctuates based on supply and demand of the types of coal produced in Virginia. As the price rises, production generally increases as known coal reserves become economically viable and are brought on line. The increasing demand for metallurgical coal has resulted in a slight increase in coal production in Virginia from 22,150,000 tons in 2010 to 22,333,989 in 2011. DMME expects the number of coal mines and tonnage produced to be stable or slightly decrease in the near future. Remaining minable and merchantable reserves are of high quality, metallurgical or steam compliance grade, and are in demand in the marketplace.

• Coal supply contracts with utility users typically run for two to five years. As utilities rebid or renew their supply contracts, operators may open or close mines depending on the outcome of the bidding. This can cause the number of mines and tonnage to fluctuate over time.

• While the overall trend of production should be stable, there may be some temporary fluctuations in the tonnage of coal produced as large mines are put in or taken out of operation.

#### Coal mine workers

• Coal mine employment in Virginia is related to the amount of coal produced in the state and the mechanization of mining. The number of Virginia coal miners peaked in 1949 at 18,341 (coincident with the introduction of continuous mining machines, which mechanized the industry and reduced the labor needed) and peaked again in 1977 at 15,742 (coincident with rising energy prices at that time).

• The number of coal miners in Virginia has decreased since 1977, with 10,265 miners producing coal in 1989; 8,318 producing coal in 1994; 5,456 producing coal in 1999; 4,558 producing coal in 2004, and 4,303 in 2009. The increased demand for metallurgical coal has also resulted in an increase in total coal mine workers to 4,771 in 2010 and 4,970 in 2011, an increase of more than 15% over the two year span. DMME expects the total number of miners to remain relatively stable or decrease slightly in the near future.

• The average age of a coal miner in Virginia is over 50. A large percentage of working miners has or will be reaching retirement age in the next five years. Mining companies are already facing difficulties replacing these miners with new employees. This need for new miners is causing an increasing demand for coal miner certification training and other new miner services. Use of new miners also increases the need for mine safety services. New miners traditionally are more likely to be involved in a mine accident or be injured.

• Virginia coal mine workers' productivity has increased over time, so that fewer workers are needed to mine each ton of coal. This has primarily been made possible by the use of new technologies for coal extraction, ventilation control, roof control, and other areas. Despite increased federal regulatory pressure, productivity has increased from 4,430 tons/miner/year in 1989 to 4741 tons/miner/year in 2010.

#### Affiliated mineral extraction business interests

• Numerous businesses support mineral extraction operations. These include engineering firms that assist with permit preparation and facility design; independent contractors providing non-mining services at mine sites (such as blasting, mobile equipment lubrication and maintenance, logging, overburden removal, plant construction); off-site contractors (such as equipment manufacturers, machine repair or rebuild companies, specialty clothing suppliers); independent trucking companies hauling mined material from a mine; to title attorneys and others. Coalbed methane well operators are also affiliated with coal mining. Many coal mines could not be operated due to excessive amounts of methane found in the coal if some of the methane is not removed first from coalbed methane wells.

• DMME expects the number of affiliated business interests to remain relatively stable. Mining companies are increasingly outsourcing work on mines. DMME has been given expanded responsibility for regulation of activities of independent contractors on coal and mineral mines. The department expects the number of independent contractor customers to continue to grow.

#### Other governmental agencies

• DMME provides geologic, mineral resource, and energy information to a wide variety of governmental agencies that have business relationships with the mineral extraction industry. For example, DMME provides information on coal tonnage to counties collecting severance tax and conditions issuance of coal mine licenses upon proof

of payment of local coal severance, personal property, real estate, and mineral land taxes. The agency also provides coal tonnage and worker data to the Department of Taxation for use in evaluating the Coalfield Employment Enhancement Tax credits, and provides worker and accident data to the State Corporation Commission in its evaluation of workers' compensation insurance rates.

- DMME coordinates mineral extraction regulatory activities with the similar regulatory agencies in neighboring states and in the federal government. Coal miners living in the area regularly cross state borders in the course of their employment and mining companies operate mines in all three states. DMME has implemented reciprocal agreements with neighboring states addressing worker certification and coordination of programs and regulatory coverage. Additionally, both the federal and state governments inspect coal mines for worker safety, requiring coordination among the programs.

- DMME also works closely with Southwest Virginia and Mountain Empire Community Colleges on miner training by providing training material and train-the-trainer instruction.

- The number of governmental agency customers related to coal mine safety should remain relatively stable over time.

**Current Customer Base**

Pre-Defined Customer Group	User Specified Customer Group	Customers Served Annually	Potential Annual Customers	Projected Trend in # of Customers
Employer/ Business Owner	Producing coal mines	120	120	Decrease
Employee	Coal mine workers	5,000	5,000	Stable
Resident	Public affected by mineral extraction operations	180,000	180,000	Stable
Employer/ Business Owner	Affiliated mineral extraction business interests	600	600	Stable
State Agency(s),	Other governmental agencies	30	30	Stable

**Partners for this Service Area**

Partner	Description
U.S. Mine Safety and Health Administration (MSHA)	DMME coordinates mine inspections with federal counterparts in MSHA, and MSHA funds part of DMME's miner safety training program.

**Products and Services**

**Factors Impacting the Products and/or Services**

**Anticipated Changes to the Products and/or Services**

**Listing of Products and / or Services**

Customer assistance • Job safety analysis, risk assessment, hazard identification, training, technical assistance, education, and cooperative projects to enhance mine safety. • Customer assistance services assist customers to maintain safe coal mines in compliance with regulatory requirements.

Inspection and enforcement • Thorough and consistent inspection and enforcement of laws and regulations addressing worker safety on coal mines. Assessment of company and individual responsibility and liability as appropriate. Investigate accidents and complaints. • Inspection and enforcement services assist customers to maintain safe coal mines in compliance with regulatory requirements.

Certification • Certification of persons performing mining and other specialized tasks on coal mines, such as certification of general coal miners, mine foremen, blasters, electricians, underground diesel equipment mechanics, gas detection, hoisting engineer, and others. • Coal miner certification services assure workers performing specialized tasks necessary to maintain safe sites are qualified to perform these tasks.

Licensing and plan review • Plan review and approval and coordination with other agencies' regulatory requirements. • Plan review services ensure coal mining operations can be conducted safely and in compliance with mineral extraction laws and regulations.

Regulatory development • Establishing minimum safety requirements consistent with the Virginia Coal Mine Safety Act. • Regulatory services ensure the legal standards governing coal mining operations will result in safe operations while establishing the minimum required intrusion in licensed operations.

**Financial Overview**

Budget Component	2013 GF	2013 NGF	2014 GF	2014 NGF
Base	4,056,861	594,075	4,056,861	594,075
Changes to Base	0	0	-50,000	0
<b>Total</b>	<b>4,056,861</b>	<b>594,075</b>	<b>4,006,861</b>	<b>594,075</b>

**Objectives for this Service Area**

*Objectives for this Service Area*

**Objective**  
Eliminate unsafe practices and conditions, which contribute to accidents, injuries, and fatalities.

*Description*

Protection of worker and public safety from the dangers on coal mine sites is of critical importance to ensure the safety of Virginians working on or living near coal mine sites. Dangers may be present due to unsafe conditions or improper actions by miners. DMME's coal mine safety program provides inspection and enforcement of mine safety based on a risk assessment of mines, with the riskiest mines receiving a higher level of services.

*Objective Strategies*

- The DMME Division of Mines will assess management and individual responsibility for violations of laws and regulations, and take appropriate actions to prevent future violations by reviewing compliance performance with customers, providing operator assistance services, conducting follow-up inspections, implementing action plans that may include training, individual violations, on-site examinations of certified foremen and referrals to the Board of Coal Mining Examiners.
- The DMME Division of Mines will conduct individual job and site specific safety communications through personal contacts, safety talks, new miner contacts, new foremen contacts, semi-annual formal job safety observations, and other meetings.
- The DMME Division of Mines will continue to implement procedures to address safety issues involving mining and gas and oil activities occurring in close proximity to each other.
- The DMME Division of Mines will investigate all accidents, serious personal injuries, and complaints taking actions to prevent recurrence.
- The DMME Division of Mines will provide assistance to enhance safe mining including regular evaluation of customer operational risk factors, safety performance, and emergency preparedness and • Proactive review, consultation, and follow-up with customers and stakeholders concerning identified risks and needed improvements.
- The DMME Division of Mines will review and maintain plans and maps by following the established routing process, coordinating site visits, conducting follow-up visits, and communication and coordination with the workforce where significant plan changes occur.
- The DMME Division of Mines will work with industry personnel to identify and eliminate unsafe conditions and practices through assistance, inspections, and training to promote compliance with laws and regulations.
- The DMME Division of Mines, working with the Office of Program Support, will use targeted performance measurements to indicate progress on frequency and severity of accidents, injuries and fatalities, compliance history and customers' surveys.

*Alignment to Agency Goals*

- Provide for safe and environmentally sound mineral and fossil fuel extraction.

*Measures*

- Number of serious personal injuries or fatalities on coal mine sites per 200,000 worker hours.

Measure Class  Measure Type  Preferred Trend  Frequency

Data Source and Calculation

Data is collected from reports of serious personal injuries and fatalities submitted by licensed coal mine operators throughout the year, and the reports of employee work hours reported by licensed coal mine operators on their annual tonnage reports submitted to the Department of Mines, Minerals and Energy (DMME). The rate is calculated as the number of serious personal injuries and fatalities per 200,000 work hours. This measure is calculated on a calendar year basis. Worker hours are not available until April for the previous year, so numbers reported between January and April should be considered preliminary. DMME evaluates the five-year rolling average of this rate to determine the trend.

- Percentage of safety violations on coal mine sites successfully eliminated.

Measure Class  Measure Type  Preferred Trend  Frequency

Data Source and Calculation

This measure is calculated using information from the Department of Mines, Minerals and Energy's automated enforcement systems. Records of violations show date issued, target date for correcting the violation, and date the violation is corrected. The percentage is calculated based on total number of safety violations corrected by their due dates divided by the total number of safety violations issued.

**Objective**

Improve the health and safety knowledge and skills of coal mine workers.

*Description*

Unsafe acts are a substantial cause of mine safety problems. DMME provides services to coal mine operators and miners through the Accident Reduction Program, Small Mine Safety Services, education and training of miners, and certification of general coal miners and miners performing specialized mining tasks to ensure miners have the knowledge and skills to work safely.

*Objective Strategies*

- The DMME Division of Mines will assess the education and training needs of coal mine workers and develop training materials based upon mining trends to reduce accidents, injuries, and violations.
- The DMME Division of Mines will develop and provide educational services and training materials based upon trends to reduce accidents, injuries, health and safety, and environmental violations.
- The DMME Division of Mines will provide for certification and related training programs that: • Ensure required competency in critical job skills. • Address the needs of mine operators and miners. • Develop and promote web delivery capabilities.
- The DMME Division of Mines will provide the Accident Reduction Program according to industry needs and available resources
- The DMME Division of Mines will provide the Small Mine Safety Service to participating coal-mining operations.

*Alignment to Agency Goals*

- Provide for safe and environmentally sound mineral and fossil fuel extraction.

*Measures*

- Percentage of coal miners rating coal mine safety training provided by the Department of Mines, Minerals and Energy as outstanding.

Measure Class **Other Agency** Measure Type **Outcome** Preferred Trend **Increase** Frequency **Semi-Annually**

Data Source and Calculation

Data are taken from forms completed by participants in the Department of Mines, Minerals and Energy's mine safety training classes. Responses are given on a scale of 1 (poor) to 5 (very helpful or very effective). The number of persons rating the training as 5 (very helpful or very effective) is divided by the total number of persons responding to the training evaluation questions to calculate a percentage.

**Objective**

Improve the quality of emergency preparedness and responsiveness.

*Description*

Coal mine rescue capability must be maintained to respond to mine accidents and emergencies. Companies may maintain internal mine rescue teams or contract with outside mine rescue teams. DMME manages the state-designated mine rescue team service to provide these outside mine rescue services. DMME also maintains two coal mine emergency response teams. These teams must maintain regular training. Rescue team capability is measured through rescue team facility inspections and regular mine rescue team competitions.

*Objective Strategies*

- The DMME Division of Mines (DM) will develop a baseline indicator with targeted performance measures by calculating the percentage of external respondents indicating satisfaction with DM's services in improving the quality of emergency preparedness and calculating the violation rate per inspection hour for selected sections of the Mine Safety Act related to emergency response standards.
- The DMME Division of Mines will assist the emergency preparedness of impoundment operators by providing an annual review of the mine emergency warning and evacuation plans, providing assistance to enhance safe conditions and practices, and coordinating tabletop emergency response exercises with local governments.
- The DMME Division of Mines will assist, instruct, and evaluate the abilities and expertise of mine personnel on key elements of emergency response plans during mine level emergency response drill visits.
- The DMME Division of Mines will coordinate a tabletop mine emergency response exercise with the Department of Emergency Management, other state agencies, and local governments.
- The DMME Division of Mines will coordinate and/or participate in mine rescue contests with the Virginia Mining Institute, Virginia Mining Association, VA Post #7 National Mine Rescue Association, and additional local mine rescue contests.
- The DMME Division of Mines will maintain two, well trained and equipped mine emergency response teams with attention given to diversity of member skills, member rotation, and employee interest.
- The DMME Division of Mines will make the emergency response video, "Lead The Way", available to coal miners and other interested parties.
- The DMME Division of Mines will participate with the Mine Safety and Health Administration and the Interstate Mining Compact Commission in developing coal mine emergency response procedures and strengthen cooperation between state and federal governments.
- The DMME Division of Mines, with the assistance from other divisions, will provide coordinating services for small underground mining operations in meeting mine rescue requirements of federal regulations.

*Alignment to Agency Goals*

- Provide for safe and environmentally sound mineral and fossil fuel extraction.

*Measures*

- Violation rate of emergency response provisions of the Coal Mine Safety Act.

Measure Class **Other Agency** Measure Type **Outcome** Preferred Trend **Decrease** Frequency **Semi-Annually**

Data Source and Calculation

This measure is calculated using information from the Department of Mines, Minerals and Energy's automated coal mining enforcement system. The number of violations written against emergency response provisions of the law are divided by the total inspection hours during that quarter, multiplied times 100. The five-year rolling average is then calculated from quarterly data.

**Objective**

Improve our customers' ability to establish and maintain efficient, viable operations.

*Description*

DMME helps regulated entities establish and maintain economically viable operations that will be both profitable and operate safely and respectful of the environment. DMME provides services, such as safety site visits, training, 30-day contact visits for new mine operators, reopening inspections, consulting services, and technology transfer.

*Objective Strategies*

- The DMME Division of Mines (DM) will evaluate customer survey results, timeliness of plan approvals, number of "Walk and Talk" safety contacts, and percentage of forms submitted electronically to assess the effectiveness of services in improving our customers' ability to maintain efficient, viable operations. DM will measure the percentage of customer forms submitted electronically as a measure of customer capabilities to efficiently operate within DMME regulatory programs.
- The DMME Division of Mines will assist customers through site visits, training, technology transfers, referrals, five-day contacts for new mine operations, reopening inspections, and customer requests. Assistance will focus on preparing and equipping customers to achieve proactive process development and control.
- The DMME Division of Mines will assist in preparing our customers to comply with new federal regulations regarding mine examinations.
- The DMME Division of Mines will conduct meetings with the Mine Safety and Health Administration, other state agencies, and industry groups in regards to inspection and technical assistance, effectiveness, consistency, problem solving, communications, relations, and emerging issues. Key results will be communicated to staff and other interested parties.

- The DMME Division of Mines will continue to identify, develop, and implement web-delivery capability to increase the effectiveness and accountability of certification, education, and training services.
- The DMME Division of Mines will encourage customers to submit forms, plans, and maps electronically.
- The DMME Division of Mines will, upon request, collaborate with state, regional, and local economic development organizations to provide information on the mineral and energy infrastructure available for business development.
- The DMME Division of Mines will, upon request, collaborate with the Division of Geology and Mineral Resources in distributing the results of their resource investigations that promote economic development.

*Alignment to Agency Goals*

- Encourage economic development through our customers' wise management of Virginia's energy, mineral, land, and water resources.

*Measures*

- Percentage of coal mine operators satisfied that mine safety assistance provided by the Department of Mines, Minerals and Energy helps them maintain efficient, viable operations.

Measure Class  Measure Type  Preferred Trend  Frequency

Data Source and Calculation

Data is taken from external surveys of the Department of Mines, Minerals and Energy's (DMME) customers. They are queried about whether DMME assistance helps them maintain efficient, viable operations. The percentage of positive responses is calculated from the total number of surveys received. The measurement is based on the five year rolling average.

**Objective**

Improve our customers' knowledge of coal mining related activities.

*Description*

DMME helps regulated entities establish and maintain economically viable operations that will be both profitable and operate safely and respectful of the environment. DMME provides services, such as safety site visits, training, 30-day contact visits for new mine operators, reopening inspections, consulting services, and technology transfer.

*Objective Strategies*

- The DMME Division of Mines (DM) will continue to identify improvements in delivery of miner training services which focus on achieving effective allocation of DM training resources, coordination of joint opportunities for training services delivery with other providers, updated, innovative miner training program services and opportunities to expand innovative technologies for training methods such as equipment simulators, visual and practical applications.
- The DMME Division of Mines (DM) will explore opportunities to expand the number of products that are electronically available. DM will seek assistance from the Office of Management Information Systems, as needed.
- The DMME Division of Mines will actively participate in programs sponsored by industry associations, schools, civic and professional groups, including award programs, workshops, and seminars.
- The DMME Division of Mines will assist the Office of Public Information in pursuing initiatives to address increasing public interest in issues involving coal.
- The DMME Division of Mines will collaborate with economic development organizations and other stakeholders to advance opportunities associated with miner resources, infrastructure, and energy technologies such as highway construction and other infrastructure, issues with joint coal and gas resource development, and recycled coal refuse disposal piles.
- The DMME Division of Mines will evaluate customer survey results to assess the effectiveness of services in improving our customers' capabilities in the development and wise use of resources.
- The DMME Division of Mines will identify, prioritize, develop, and make available information that meets our customers' requests.

*Alignment to Agency Goals*

- Encourage economic development through our customers' wise management of Virginia's energy, mineral, land, and water resources.

*Measures*

- Percentage of customers satisfied with coal mine safety information and data provided by the Department of Mines, Minerals and Energy.

Measure Class  Measure Type  Preferred Trend  Frequency

Data Source and Calculation

Data is taken from customer survey questions addressing satisfaction with the Department of Mines, Minerals and Energy's Division of Mines safety information. The percentage of customers rating themselves as satisfied is calculated. The measurement is based on the five year rolling average.

**50705: Energy Conservation and Alternative Energy Supply Programs**

**Description**

This service area works to increase the use of renewable and alternative energy products and services, increase energy efficiency in state government operations, and improve other customers' ability to make informed choices related to energy efficiency, renewable and alternative energy uses, environmental stewardship, and economic development activities. Products and services include:

- Customer service, such as training, technical assistance, education, managing state government centralized electric, natural gas, and fuel oil purchasing, and emergency fuel supply management.
- Managing economic development incentives for renewable and alternative energy industry development and providing information needed for new energy business development.
- Assisting energy extraction operators in developing new markets for their products and assisting mineral extraction operators reduce energy costs to improve productivity.
- Maintaining and participating in the implementation of the Virginia Energy Plan.

This service area also serves as the conduit for delivery of American Reinvestment and Recovery Act funds for citizens, businesses, state and local governments to invest in energy-saving and renewable energy activities.

**Mission Alignment and Authority**

This service area directly aligns with DMME's mission of enhancing the development and conservation of energy resources in an environmentally sound manner to support a more productive economy.

**Customers for this Service Area**

*Anticipated Changes to Customers Base*

**General public and businesses**

- All Virginia residents and businesses are potentially served through DMME's energy efficiency, renewable and alternative energy supply activities. Energy efficiency information is provided to all Virginia citizens through DMME's energy efficiency publications and web site. All Virginians using petroleum are affected by DMME's emergency management activities. All Virginia citizens and businesses, particularly energy businesses, will be served through the Virginia Energy Plan. Specific sub groups of general public and business customers include:
  - Environmental organizations.
  - Economic development organizations.
  - Educational institutions.
  - Homeowners.
  - Fleet managers.
  - Commercial, industrial, and agricultural businesses.

- DMME expects the general public and business customer base to increase over the next few years. As energy costs are expected to remain high, there will be increased interest in obtaining information about and financial support for energy efficiency and alternative energy technologies. There is expanding interest in developing biomass technologies, such as biodiesel production and wood-based fuels, hydrogen as an energy source, and wind resources. DMME also is expanding the information it makes available across the Internet. As information is more readily available in electronic form, additional customers will become aware of its availability, thereby increasing DMME's customer base. The release of the Virginia Energy Plan in September 2007 and its subsequent updates have also served to increase the public's interest in DMME's energy programs.

**Other governmental agencies**

- DMME provides energy conservation and alternative energy supply services to a wide variety of governmental agencies:
  - State agencies are a primary customer of DMME's energy efficiency services. DMME assists agencies in implementing energy service contracts for energy efficiency improvement projects in their facilities. DMME assists with submetering energy use in state facilities, in procurement of conventional and alternative sources of energy (electricity, natural gas, oil, and renewable energy supplies), and in educating state agency energy managers as to how to reduce energy costs.
  - DMME provides information on the energy business opportunities to economic development organizations to identify opportunities for new business investments and jobs in Virginia.
  - DMME partners with other governmental agencies to reach joint energy-related goals in such areas as environmental protection, forest product uses, agriculture, transportation, and housing.
  - DMME assists the Department of Emergency Management as the commodity manager for petroleum and solid fuels under the state's Emergency Operations Plan.
- DMME expects this customer group to grow in the next few years. As energy prices rebound from current lows or price volatility occurs, continue to run high, additional state agencies will need assistance with energy efficiency projects. Two executive initiatives, on conversion of state vehicles to alternative fuels and centralizing management of energy consumption by state facilities, promise to increase the need for DMME support of state agencies.

**Mineral extraction operators**

- The DMME Division of Energy partners with other DMME divisions serving the mineral extraction industry to provide opportunities to develop new markets for their energy sources and to increase efficiency of their operations.
- Mineral extraction operators are expected to request more assistance than in the past as high energy costs (fuel and power) cause their production costs to rise. Energy producers also are looking for new uses for their products, particularly marginal products such as low BTU gas that cannot be marketed through traditional channels.

*Current Customer Base*

Pre-Defined Customer Group	User Specified Customer Group	Customers Served Annually	Potential Annual Customers	Projected Trend in # of Customers
Employer/ Business Owner	Mineral extraction operators	1	300	Increase
State Agency(s),	Other governmental agencies	130	225	Stable
Resident	General public and businesses	1,600,000	8,001,024	Increase

**Partners for this Service Area**

Partner	Description
No partners currently entered in plan	

## Products and Services

### Factors Impacting the Products and/or Services

Beginning in June 2012, DMME will begin winding down from a three-year cycle under the American Recovery and Reinvestment Act (ARRA), under which the Division of Energy (DE) administered more than \$100 million in grants, rebates and loans to state and local governments, non-profits, businesses and residential property owners for energy efficiency, renewable and alternative energy products, services and programs.

The Division invested about \$11 million of these funds to create several revolving loan programs which will provide continuing access to capital to revolve as new loans for energy efficiency, renewable and alternative energy projects and programs.

Several Executive Branch initiatives also will direct how DE resources are focused, including:

- Facilitating private development of energy resources, including wind energy, off of Virginia's coast
- Conversion of the state fleet to alternative fuel vehicles in a partnership with businesses that provide vehicles, conversion products and services, and refueling infrastructure
- Improving management of energy costs by state facilities and developing a fee-based program that covers the costs of the program by sharing the savings and avoided costs of implementing energy conservation measures and other energy management programs

### Anticipated Changes to the Products and/or Services

Federal requirements dictate that most ARRA funding for energy programs be completely disbursed by December 31, 2012.

### Listing of Products and / or Services

Customer assistance • Provide energy planning, training, technical assistance, education, and cooperative projects to implement energy efficiency and alternative energy projects. • Customer assistance services help customers efficiently use energy resource and develop new energy supply options.

Grants and financing • Provide direct grants, serve as a grants manager for federal funds, and develop alternative financing sources for energy efficiency. • Grant services provide funds to facilitate mineral and energy projects that would not be undertaken without the extra financial support.

Economic development • Manage economic development incentives, such as the biofuels incentive grant program, for energy industry development and provide information needed for new energy business development. • Economic development services support efforts to increase jobs and economic activity in Virginia.

## Financial Overview

Budget Component	2013 GF	2013 NGF	2014 GF	2014 NGF
Base	579,949	1,907,024	579,949	1,907,024
Changes to Base	281,152	144,848	781,152	144,848
<b>Total</b>	<b>861,101</b>	<b>2,051,872</b>	<b>1,361,101</b>	<b>2,051,872</b>

## Objectives for this Service Area

### Objectives for this Service Area

#### Objective

Enable public bodies to reduce peak electrical demand through participating in Demand Response programs.

#### Description

The Demand Response Program is a key element of the Virginia Energy Management Program (VEMP) within DMME's Division of Energy. It aims to take advantage of payments offered by electric utilities for facilities that reduce their load during periods of peak demand. VEMP staff work with state facilities to implement procedures, install equipment and enroll in demand response programs offered by utilities.

#### Objective Strategies

- The DMME Division of Energy Virginia Energy Management Program (VEMP) staff will develop an electrical demand load reduction plan for participating public bodies.
- VEMP staff will communicate progress, challenges, and program changes to key stakeholders.
- VEMP staff will educate state agencies and other public bodies about the benefits of Demand Response programs to facilitate wider participation.
- VEMP staff will track the number of facilities in the program, load reductions and revenue generated.

#### Alignment to Agency Goals

No Agency Goals for this Objective

#### Measures

- Number of state and local government facilities enrolled in demand response programs

Measure Class **Other Agency** Measure Type **Outcome** Preferred Trend **Increase** Frequency **Annually**

Data Source and Calculation

The Department of Mines, Minerals and Energy tracks the number of state and local government facilities that have enrolled in demand response programs. Demand response programs offer incentives to large energy users to reduce or shift their electric demand during periods when total demand is very high. The Commonwealth benefits from these programs because the overall efficiency of the flow of electricity is increased. The Department of Mines, Minerals and Energy works with state agencies and public bodies to enter into demand response agreements.

- Total amount of revenue generated from the demand response program

Measure Class **Other Agency** Measure Type **Output** Preferred Trend **Increase** Frequency **Annually**

Data Source and Calculation

Demand response programs offer incentives for state agencies and public bodies who reduce or shift their facility's energy use during times of peak demand. The Commonwealth benefits from these programs because the overall efficiency of the flow of electricity is increased. The Department of Mines, Minerals and Energy works with state agencies and public bodies to enter into demand response agreements. Revenue is based on current program guidelines as administered by PJM Interconnection. New programs could significantly increase demand response revenue by 2016.

**Objective**

Implement and manage a multi-fuel energy procurement program, incorporating renewables

*Description*

This objective outlines one of the key functions of the Virginia Energy Management Program (VEMP). Housed in DMME's Division of Energy, VEMP is the subject matter expert and technical specialist for all energy contracts for state facilities. In this role it supported \$162,905,131 of contract spend for FY2011 and resolved all non-contract issues for natural gas and electricity. VEMP is the Energy Sector Lead for the Homeland Security Working Group and is the lead for emergency petroleum disruptions.

*Objective Strategies*

- The DMME Division of Energy's Virginia Energy Management Program (VEMP) staff will work with its energy assurance vendor to review and manage a supply and cost risk management plan for energy procurement, through June 30, 2013, to include natural gas, electricity (conventional and renewable), non-transportation petroleum, propane, coal and biomass.
- VEMP staff will encourage state/local government groups and other public bodies to participate in the multi-fuel contracts.
- VEMP staff will make recommendations on new energy management services that could offer additional value.
- VEMP staff will manage multi-fuel purchases/contracts.
- VEMP staff will measure the total dollar value of energy contracts and illustrate the benefits on the DE webpage.
- VEMP staff will monitor fuel use of state and participating local government agencies and other public bodies.
- VEMP staff will purchase long-term energy commodities and capacity on interstate gas pipelines.

*Alignment to Agency Goals*

- Encourage economic development through our customers' wise management of Virginia's energy, mineral, land, and water resources.

*Measures*

- Amount of energy contracts for state agencies.

Measure Class **Other Agency** Measure Type **Output** Preferred Trend **Stable** Frequency **Annually**

Data Source and Calculation

This measure reflects the total amount of energy contracts administered by the Department of Mines, Minerals and Energy (DMME) for state facilities in millions of dollars. Cost certainty for participating agencies is the primary function of the energy procurement programs administered by DMME. Total dollars of energy contracts normally increases slightly each year as new facilities are added and to cover rate increases. No significant increases in the cost of energy are expected through 2016 due to market forces, efficiency and conservation efforts.

**Objective**

Implement and manage a multi-fuel energy procurement program, incorporating renewables

*Description*

This objective outlines one of the key functions of the Virginia Energy Management Program (VEMP). Housed in DMME's Division of Energy, VEMP is the subject matter expert and technical specialist for all energy contracts for state facilities. In this role it supported \$162,905,131 of contract spend for FY2011 and resolved all non-contract issues for natural gas and electricity. VEMP is the Energy Sector Lead for the Homeland Security Working Group and is the lead for emergency petroleum disruptions.

*Objective Strategies*

- The DMME Division of Energy's Virginia Energy Management Program (VEMP) staff will partner with government entities to provide customized services including performance contracting, use of renewable energy sources, other technical and financial assistance, demand response, energy conservation/maintenance education/training.
- VEMP staff will pursue administrative changes to facilitate and make performance contracting attractive to all state agencies.
- VEMP staff will pursue methods that will generate program revenue, such as fees for administration, procurement contracts, percentage of payments from the Demand Response Program, and utility improvements.
- VEMP staff will recommend an Executive Directive 2 implementation path for improved tracking and reporting of energy consumption by state agencies.

- VEMP staff will support the implementation of Executive Order 19, Conservation and Efficiency in the Operation of State Government by assisting state agencies and institutions to develop and implement the process and tools to achieve and measure the 5% energy savings goal when purchasing electricity, natural gas, and fuel oils.
- VEMP staff will track and report reductions in energy consumption by participating state agencies.

*Alignment to Agency Goals*

- Encourage economic development through our customers' wise management of Virginia's energy, mineral, land, and water resources.

**Objective**

Implement and manage energy efficiency and renewable energy programs.

*Description*

This objective reflects one of the core functions of DMME's Division of Energy, to implement and manage energy efficiency and renewable energy programs.

*Objective Strategies*

- The DMME Division of Energy staff will assess and prioritize the viability of the continuation of ARRA and SEP programs upon expiration of federal funding.
- The DMME Division of Energy staff will continue to collect and report data required to comply with performance metrics, reporting requirements and special transparency/accounting provisions for ARRA and SEP
- The DMME Division of Energy staff will develop and administer a Revolving Loan Fund using ARRA funds to finance Energy Efficiency and Renewable Energy Projects. rounds 2 and 3
- The DMME Division of Energy staff will develop the Voluntary Solar Resource Development Fund.
- The DMME Division of Energy staff will explore alternative funding sources and/or partnerships to ensure ongoing program support and sustainability.
- The DMME Division of Energy staff will implement and manage the American Recovery and Reinvestment Act of 2009 (ARRA) and ongoing State Energy Programs (SEP), including: • Home Efficiency Rebate Program. • Renewable Energy Rebate Program. • Appliance Rebate Program. • Biomass Energy Program. • State Facility Renewables Grant Program. • Local Government and Community College Renewable Grant Programs. • Economic Development Program. • Energy Efficiency and Conservation Block Grant Program.
- The DMME Division of Energy staff will work with the Office of Public Information to develop a plan to publicize our ARRA and SEP Program accomplishments.

*Alignment to Agency Goals*

- Encourage economic development through our customers' wise management of Virginia's energy, mineral, land, and water resources.

*Measures*

- Percentage of alternative fuel vehicles used by participating governments in Virginia.

Measure Class  Measure Type  Preferred Trend  Frequency

Data Source and Calculation

The Department of Mines, Minerals and Energy (DMME), in conjunction with Virginia Clean Cities, a government-industry partnership, provides outreach, technical assistance and grant funding to participating government fleet managers. DMME has also provided over \$4 million to the Virginia Alternative Fuel Conversion Fund. Information is collected from fleet managers and the Virginia Clean Cities programs. Data on purchase history and vehicle type is evaluated to determine the annual percentage of alternative fueled vehicles in their fleets.

**Objective**

Improve our customers' ability to make informed energy choices to support economic development, create jobs and enhance the environment.

*Description*

DMME's Division of Energy (DE) plays a vital role in supporting economic development in the energy sector. DE provides staff support to the Virginia Offshore Wind Development Authority, administers the Virginia Biofuels Tax Credit Program, and spearheads the state fleet conversion project.

*Objective Strategies*

- The DMME Division of Energy staff will administer the Virginia Biofuels Production Incentive Grant, the Biofuels Tax Credit Program and the Solar Photovoltaic Manufacturing Incentive Grant Program as well as provide staff support for the Virginia Economic Development Partnership's administration of the Clean Energy Manufacturing Incentive Grant.
- The DMME Division of Energy staff will collaborate with other DMME divisions, state agencies, localities, and other stakeholders to advance opportunities associated with mineral resources, infrastructure, energy technologies, energy conservation and renewable energy projects, such as: • State Corporation Commission (SCC) Virginia Energy Sense consumer education campaign. • Utility energy efficiency programs. • Virginia Department of General Services (DGS) programs related to state facilities. •
- The DMME Division of Energy staff will collaborate with state and regional stakeholders, including • Virginia Wind Energy Collaborative (VWEC). • Virginia Coastal Energy Research Consortium (VCERC). • Virginia Offshore Wind Development Authority (VOWDA). • Bureau of Ocean Energy Management, Regulation, and Enforcement (BOEM). • Atlantic Offshore Wind Energy Consortium.
- The DMME Division of Energy staff will continually improve the processes used to respond to customer inquiries to increase the efficiency of customer service.
- The DMME Division of Energy staff will provide emergency response support to petroleum supply constraints in Virginia.
- The DMME Division of Energy staff will provide staff support for the Virginia Offshore Wind Development Authority.
- The DMME Division of Energy staff will track performance through customer service surveys and measurement of programs such as: • Biofuels production. • Increase in the number of alternative fuel vehicles in participating fleets. • Installed renewable energy capacity.
- The DMME Division of Energy staff will update its website.
- The DMME Division of Energy staff will work with its customers and publicize the benefits of its programs resulting in increased jobs, reduced energy consumption, increased renewable energy generation, and energy dollars saved.
- The DMME Division of Energy staff will work with the DMME Division of Gas and Oil stakeholders and other entities to advance opportunities and develop

infrastructure for the use of indigenous natural gas in coalfield communities.

*Alignment to Agency Goals*

- Encourage economic development through our customers' wise management of Virginia's energy, mineral, land, and water resources.

*Measures*

- Amount of installed renewable energy capacity in kilowatts within the Commonwealth.

Measure Class  Measure Type  Preferred Trend  Frequency

Data Source and Calculation

The Department of Mines, Minerals and Energy will track the number of kilowatts of installed renewable energy capacity in the Commonwealth, using data obtained from the State Corporation Commission. This is a new measure for fiscal year 2013.

**Objective**

Ensure continuation of core program functions as federal funding is reduced or depleted.

*Description*

*Objective Strategies*

- The DMME Division of Energy staff will assess and prioritize the viability of continuing ARRA and SEP programs upon the reduction or elimination of federal funding support.
- The DMME Division of Energy staff will collaborate with other DMME divisions, state agencies, localities, and other stakeholders to advance opportunities associated with energy conservation and renewable energy projects, such as utility energy efficiency programs, Department of General Services' programs related to state facilities, the Governor's initiatives on energy, jobs and economic development, and state and local economic development organizations.
- The DMME Division of Energy staff will explore alternative funding sources and/or partnerships to ensure ongoing support and sustainability of core, priority programs.
- The DMME Division of Energy staff will provide a final report on active core program functions that will continue after June 30, 2013 to the DMME Strategic Team by that date.
- The DMME Division of Energy staff will publicize the benefits of its programs such as increased jobs, reduced energy consumption, increased renewable energy generation, and energy dollars saved.
- The DMME Division of Energy staff will report on program status and needs to the DMME Strategic Team at their July 2012 meeting.

*Alignment to Agency Goals*

- Encourage economic development through our customers' wise management of Virginia's energy, mineral, land, and water resources.

*Measures*

- Number of residential building energy retrofits

Measure Class  Measure Type  Preferred Trend  Frequency

Data Source and Calculation

The Department of Mines, Minerals and Energy (DMME) will track the number of residential building energy retrofits. This data is reported periodically to DMME by regional energy alliances across the Commonwealth.

**59901: General Management and Direction**

**Description**

This service area provides management direction and administrative support to the Department of Mines, Minerals and Energy's other service areas. Products and services include:

- Customer assistance to other DMME staff, energy and mineral businesses, vendors, other federal, state and local agencies, and the general public.
- Regulatory development to establish minimum requirements for worker and public safety and operation and reclamation of coal, gas and oil, and mineral mine sites.
- Fee collection for permits, licenses, certifications, bonding, and land reclamation.
- Management and administrative support to ensure compliance with mandates and effective and efficient delivery of service to DMME's customers.

**Mission Alignment and Authority**

This service area aligns with DMME's mission of enhancing the development and conservation of energy and mineral resources in a safe and environmentally sound manner to support a more productive economy.

**Customers for this Service Area**

*Anticipated Changes to Customers Base*

The customer base for this service area should remain stable.

*Current Customer Base*

Pre-Defined Customer Group	User Specified Customer Group	Customers Served Annually	Potential Annual Customers	Projected Trend in # of Customers
Employer/ Business Owner	Mineral extraction operators	350	350	Stable
Employee	Mineral extraction workers	5,000	9,000	Stable
Resident	Public affected by mineral extraction operations	100,000	250,000	Increase
Employer/ Business Owner	Affiliated mineral extraction business interests	150	3,000	Stable
State Agency(s),	Other governmental agencies	100	300	Stable
Resident	General public and businesses	3,000,000	8,001,024	

**Partners for this Service Area**

Partner	Description
No partners currently entered in plan	

**Products and Services**

**Factors Impacting the Products and/or Services**

**Anticipated Changes to the Products and/or Services**

Minimal changes are anticipated to the products and services offered by this service area. Administrative support to DMME divisions and their customers is vital to the success of DMME in meeting its mission.

**Listing of Products and / or Services**

**Customer assistance:**

- Assistance to vendors, access to management and decision makers, public information services, DMME's Internet web services, and other services are provided to DMME's customers.
- General management and administrative customer assistance services helps DMME employees operate efficiently and effectively, with the proper equipment, support, and training needed to complete their jobs.

**Regulatory development:**

- Establishing minimum operational and reclamation requirements consistent with governing laws for mineral extraction operations.
- General management and administrative regulatory services ensure the regulations are clearly written, will be effective in meeting their purpose, and are coordinated among the various DMME activity areas. Administrative services staff work with regulatory program staff to draft required regulatory submittal and review packages, and ensure that DMME has complied with the Administrative Process Act, Virginia Register Act, executive orders, and other governing documents.

**Land reclamation:**

- Reclamation of abandoned coal mine lands, orphaned mineral mine lands, and orphaned gas and oil wells, and bond forfeiture sites; replacement of water supplies damaged from historic coal mining operations; emergency reclamation of imminent dangers caused from abandoned mined lands; restoration of streams damaged by acid mine drainage and sedimentation.
- Administrative services supports land reclamation services through collection of reclamation fees and assisting with the contracting process for reclamation projects.

**Correlative rights protection:**

- Establishment of orders protecting the property interests for persons owning gas or oil interests around producing gas and oil wells (called correlative rights). Management of escrow accounts where ownership of coalbed methane gas is contested and when owners of the gas or oil interests are unknown or unlocatable.
- General management and administrative support services contracts for the escrow agent that manages the escrow accounts.

**Grants and financing:**

- Providing direct grants, serving as a grants manager for federal funds, and developing alternative financing sources for energy efficiency.
- General management and administrative grant services provide the grant approval, budgeting, reporting, and cash management services for the DMME grants.

**Economic development:**

- Managing economic development incentives for energy industry development and providing information in support of economic development (site geology, mineral availability, sources of water, and similar information).
- General management provides economic development services by coordinating assistance DMME provides to state, regional, and local economic development organizations.

**Management and administrative support:**

- Grant management, budgeting, accounting, accounts payable, human resources, procurement, inventory, information technology services and computer security, document retention, media relations, public information, regulatory and legislative review and development, intellectual properties management, internal auditing, fleet management, and issues management services.
- Management and administrative support services assure compliance with externally mandated program and administrative laws, regulations, and policies (state and federal) and internal management standards, and promote effectiveness and efficiency (doing the right things well) in DMME's operations.

**Financial Overview**

Budget Component	2013 GF	2013 NGF	2014 GF	2014 NGF
Base	1,888,552	1,330,398	1,888,552	1,330,398
Changes to Base	442,853	143,000	325,727	252,297
<b>Total</b>	<b>2,331,405</b>	<b>1,473,398</b>	<b>2,214,279</b>	<b>1,582,695</b>

**Objectives for this Service Area**

*Objectives for this Service Area*

**Objective**

Ensure the Department of Mines, Minerals and Energy's compliance with applicable state and federal requirements.

*Description*

DMME is required to comply with numerous management administrative requirements addressing areas such as financial controls, human resources management, regulatory development, legislative affairs, fleet management, purchasing, asset management, information technology, public information management, document management, performance reporting, and intellectual property management. This objective ensures that the agency performs those functions in compliance with all legal and administrative requirements.

*Objective Strategies*

- Each DMME Division of Administration office will work with customers to provide accurate and timely administrative services and policy interpretation all in compliance with state, federal, and agency regulations, laws and procedures.
- The DMME Division of Administration will continue to cooperate with the Governor's Commission on Government Reform and Restructuring.
- The DMME Division of Administration will use the results of audits, reviews, reports, surveys, and other customer feedback to measure the level of compliance with prompt pay, eVA, regulatory deadlines, FOIA requests and SWAM utilization.
- The Office of General Services and the DMME Environmental Work Group will complete the implementation of the DMME Environmental Management System strategies for reducing the environmental impact of agency operations.
- The Office of Management Information Systems Manager will lead the DMME Technology Management Team to continually update and maintain the Technology Management Plan subject to quarterly review by the Strategic Team.
- The Office of Program Support will assist other DMME divisions in pursuing regulatory, legislative and policy changes.
- The Public Relations Manager will work with the division directors to ensure that agency records are retained and destroyed in accordance with records retention and destruction schedules.

*Alignment to Agency Goals*

- Provide for safe and environmentally sound mineral and fossil fuel extraction.
- Encourage economic development through our customers' wise management of Virginia's energy, mineral, land, and water resources.

*Measures*

- Percentage of agency compliance with prompt pay rules.

Measure Class  Measure Type  Preferred Trend  Frequency

*Data Source and Calculation*

Data is taken from Department of Accounts' reports of prompt pay compliance. The percent of total payments made within 30 days of the invoice date is

calculated, then averaged over the fiscal year.

**Objective**

Improve continuously the quality of the Department of Mines, Minerals and Energy's processes.

*Description*

DMME strives to provide first-class service to its customers, both external service area customers and internal administrative services customers. Agency employees are empowered to take measures to ensure that their customers' needs are met consistent with the department's strategic and operational goals, objectives, and strategies. This objective ensures that the agency focuses on continually improving its internal processes.

*Objective Strategies*

- 1.02.10 The DMME Division of Administration will use internal customer surveys to assess the quality of DMME process improvements.
- A Division of Administration Continuous Quality Improvement Team lead by the Office of Management Information Systems Manager will develop improvements in the use and management of email.
- The Office of Human Resources will assist each Division as requested with updates to their Transition Plans to ensure the continuation of staff capabilities through vacancies, retirements, reductions, and other transitions.
- The Office of Management Information Systems will continue to implement the approved projects from the project priority list established by the Strategic Team.
- The Office of Management Information Systems will lead a team of DMME representatives to assess and develop web delivery capabilities consistent with the DMME Technology Management Plan.
- The Office of Program Support will gather, monitor and report performance measures on a division-wide and department-wide basis, notifying the Strategic Team of any exceptions
- The Public Relations Manager will assist the Division of Energy in developing a plan to publicize their program accomplishments.
- The Public Relations Manager will lead a team of DMME representatives to re-organize the layout of the DMME Intranet home page by August 31, 2012.
- The Public Relations Manager will work with each Division to pursue outreach initiatives to address increasing public interest in energy, mineral, land and water issues.
- The Public Relations Manager will work with each division to select a representative(s) who will be trained and responsible for updating their Web pages by June 30, 2012.

*Alignment to Agency Goals*

No Agency Goals for this Objective

*Measures*

- Percentage of customers satisfied with the Department of Mines, Minerals, and Energy's administrative services.

Measure Class  Measure Type  Preferred Trend  Frequency

Data Source and Calculation

Data is taken from surveys conducted by the Department of Mines, Minerals and Energy. Historical data reflects an older version of the customer survey. A revised and updated version of the survey was utilized starting in FY2013.

**Objective**

Enable all Department of Mines, Minerals and Energy's Division of Administration employees to perform at their full potential.

*Description*

*Objective Strategies*

- Each DMME Division of Administration supervisor will encourage their employees to participate in CommonHealth programs.
- The DMME Division of Administration supervisors and employees will use the results of the annual evaluation of the Employee Work Profile to determine if objectives have been met.
- The DMME Division of Administration supervisors shall ensure new employees, including contractual employees, are trained in their job responsibilities and that all employees are aware of the Agency's mission, values, policies, procedures and organization.
- The DMME Division of Administration supervisors will work with employees to update Employee Work Profiles to successfully implement the strategic and operational plans through establishing the appropriate level of authority to accomplish expectations, documentation of work by position to facilitate cross-training, assurance of safety procedures, training, and equipment appropriate to the employee's work environment, job-related training, recommended at 40 hours per year, improved communication s
- The Human Resources Manager with the assistance from other Division of Administration Managers, will convene via teleconference semi-annual staff meetings.
- The Office of Program Support will identify and coordinate training opportunities for Division of Administration staff. Training shall be job-related, based on a training needs assessment of the Division of Administration staff, and coordinated with other DMME divisions.

*Alignment to Agency Goals*

No Agency Goals for this Objective

**Objective**

Improve continuously the Division of Administration's organizational and staff capabilities.

*Description*

*Objective Strategies*

- DMME Division of Administration will promote and encourage utilization of the DMME Employee Recognition Program.
- The Division of Administration Operational Team will identify, evaluate and implement changes to at least one process to improve efficiency.
- The Division of Administration sections will annually update their transition plan to ensure the continuation of staff capabilities through vacancies, retirements, reduction, and other transitions.
- The Division of Administration, in coordination with the Public Relations Manager, will update its website to be used for new employee orientation, public information and outreach
- The Division of Administration's Operational Team will continue to meet quarterly via teleconference to evaluate, discuss, and determine progress on performance measures, needed actions, and emerging issues.
- The DMME Division of Administration's Performance Measurement Team will survey its customers each quarter to determine their satisfaction with services provided with a 90% meets or exceeds target. The team will also use focus group meetings and one-to-one contacts as requested to address customer service issues.
- The Office of Program Support will identify training needs within the Division of Administration and trainers within DMME by August 1, 2012.

*Alignment to Agency Goals*

*No Agency Goals for this Objective*