Executive Summary

The Department of Environmental Protection (DEP) has prepared the 2013 Annual Act 13 - Unconventional Gas Well Impact Fee Report containing the Natural Gas Energy Development Program (NGEDP) Annual Report and the Office of Oil and Gas Management Environmental Stewardship Fund Annual Report, as required by Act 13 of 2012, for submission to designated legislative committees and the Governor’s Budget Office.

The Oil and Gas Act of 2012 requires that impact fees collected from oil and gas operators during the current reporting period (Jan. 1 – Dec. 31, 2012) be submitted to the commonwealth by Apr. 1, 2013. On Jun. 13, 2013, Governor Corbett announced that the commonwealth collected $202 million in impact fees from wells drilled during the current reporting period; the second year impact fees were collected. This amount, combined with the $204 million collected last year, totals $406 million in impact fee revenue received to date that has been collected to directly benefit the commonwealth and especially those communities where oil and gas operations are occurring.

Based on the statutory funding formula, DEP's Office of Oil and Gas Management was allocated $12 million in 2013, $6 million February 2013 for FY 2012-13 and $6 million in June 2013 for FY 2013-14 from the total amount of impact fees collected. This funding was deposited into DEP's Well Plugging Fund in and DEP has utilized this funding to significantly advance its core mission through developing electronic applications for permitting and public information. In addition to the funds for oil and gas activities, Act 13, through the impact fee, creates a three-year Natural Gas Energy Development Program to be administered by the Department. NGEDP is helping to create a sustainable market for natural gas by developing the natural gas transportation sector in Pennsylvania. This report summarizes the advancements of the Office of Oil and Gas Management and the activities of the NGEDP including the requirements of the initial fiscal year 2012-13 grant solicitation and the awards made during the reporting period.
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OIL AND GAS PROGRAM UPDATE

Introduction

DEP’s Office of Oil and Gas Management, reorganized in 2011, is charged with the authority to regulate and develop policies that ensure the development of oil and gas activities across the commonwealth are done in an environmentally sound manner. DEP is allocated $6 million annually from the total amount of impact fees collected, paid out of the Environmental Stewardship Fund, to account for the rapid expansion needed to properly regulate the developments in unconventional well drilling activities. In 2013, the department received two payments of $6 million in Feb. (FY 2012-13) and Jun. (FY 2012-13) totaling $12 million and DEP has utilized this funding to significantly advance its core mission. This double payment for the calendar year was a result of the retroactive fees for 2011 being reported and available in February 2013 and the 2012 fees being reported and available in June 2013. In addition to providing financial support to the agency to carry out the provisions of the Act, this funding has enabled DEP to develop and launch several innovative tools to improve the Department’s permitting and Geospatial Information System (GIS) capabilities as described below.

Electronic “eWell” Permitting

The eWell Permitting process streamlines the current oil and gas permitting process by converting the paper-based Drill and Operate a Well (DOW) permit, to an online process that includes an electronic application submission, online fee payment and electronic review by DEP staff. Electronic permit issuance is under development; with the goal of this feature being rolled out in 2014. The tool was developed in-house in partnership with DEP's Bureau of Information Technology and Office of Oil and Gas Management.

The eWell permit application is part of DEP's eGov initiative, which also includes other tools such as the Oil and Gas Reporting Electronic (OGRE) database, which is where oil and gas operators complete their well production and waste reports. The eWell permit will result in improved data quality of submitted permit applications, reduced physical storage space needs, and increased ability to locate records to provide timely responses to Right-to-Know requests. DEP staff is also able to quickly route permit applications for review and approval, resulting in a more efficient review process.

DEP convened a user workgroup of oil and gas operators to conduct beta testing of the system in late Aug. 2013. The user workgroup provided feedback to DEP, along with additional internal testing, and assisted in the refinement of the eWell permit tool. On Nov. 13, 2013, the eWell permitting application went live for the initial oil and gas operator pilot group, and is scheduled to be available to all operators in early 2014.
Oil and Gas GIS Mapping Tool

The Oil and Gas GIS mapping tool displays the location of wells across Pennsylvania and allows users to search and view specific types of wells by county, such as conventional gas, unconventional gas, oil or coal bed methane wells. Users are also able to filter search results based on the status of the well by selecting active, plugged or abandoned.

After search filters are applied, users have the ability to view wells via satellite photo view, topographic map view or animated map view. Once an individual well is selected, the mapping tool will display relevant data about the well, such as the operator name, well permit number, location information such as county and township and name of the well. Users will also be able to click the well permit number to view the production and waste data reported for the selected well.

In the future, the mapping tool will provide all records and data collected by the department associated with each individual well across the state. This information could include well permit documents, well drawings and maps, well records, completion reports, inspection reports and photographs of the well and well site.

This tool is available to the public on the DEP website at www.dep.state.pa.us (Select either "Tools" or "Oil and Gas", then "Oil and Gas Reports").

Legacy Oil and Gas Map

The department is developing a "Legacy Oil and Gas Map" tool that will overlay and display all available oil and gas maps utilizing a GIS platform. DEP has already developed a similar tool to display legacy mining maps and this represents the next step in making map information available to the public.

The department has assembled an inventory of about 2,000 maps and will be advancing this initiative to digitize and make this information publically available during 2014. This is expected to be a multi-year initiative and as additional maps become available they will be added to the tool.
NATURAL GAS ENERGY DEVELOPMENT PROGRAM UPDATE

Introduction

Chapter 27 of Title 58 (Oil and Gas) of the Pennsylvania Consolidated Statutes establishes the Natural Gas Energy Development Program to award grants to promote the use of domestic natural gas as vehicle fuel in Pennsylvania. Chapter 27 authorizes DEP to develop program guidelines to distribute up to $20 million in grants from the Marcellus Legacy Fund over three years to help pay for the incremental purchase and conversion costs of natural gas vehicles. Pursuant to Chapter 27, half of the funds from the first 2 years, $8.75 million of the initial $17.5 million, must be allocated to projects benefiting local transportation organizations. This report details the first round of competitive grants offered by DEP. The second round of grants is open until Jan. 10, 2014 and will be included in the 2014 report.

Program Overview

DEP has a history of implementing competitive grant programs to deploy alternative fuel vehicles and technologies including natural gas. The Office of Pollution Prevention and Energy Assistance created and deployed the NGEDP to support the incremental cost for the purchase of natural gas vehicles. In addition, an outreach strategy was created to deliver regional education and assistance forums to ensure consistent information about the program was available and to encourage widespread participation. Approximately 800 people from transportation companies attended the programs. The forums also included information on vehicle technologies, fueling technology strategies, methods for assessing natural gas opportunities and general guidelines for accessing NGEDP funds. In addition to the DEP led programs, DEP personnel presented at various natural gas workshops and conferences such as the Natural Gas Utilization conference which helped to reach over 500 additional potential applicants and stakeholders. DEP provided outreach to potential applicants through emails to the Economic Development Office and opened a Natural Gas Vehicle website on Jun. 4, 2012 to help municipal and commercial fleet owners make informed decisions about converting fleets to natural gas.

Key elements of the NGEDP program are as follows:

- Each project must propose to receive funding for five or more eligible vehicles.
- The vehicles utilizing incremental purchase or retrofit cost funding must be registered in Pennsylvania.
- Each grant will cover no more than 50 percent of the incremental purchase or retrofit cost of eligible vehicles.
- Grants will not provide more than $25,000 for each eligible vehicle.
- Eligible vehicles include purchased or retrofitted new and used vehicles.
- Grantees will not receive incremental costs for a vehicle purchased or retrofitted prior to the award date of the grant.
- Grant funds awarded under this program cannot be used in place of available federal funds.
- A grant funded project must be completed within the grant period of performance which is 18 months from the award announcement.
The following entities are eligible to apply:

- A commonwealth authority;
- A municipal authority;
- The Pennsylvania Turnpike Commission;
- A local transportation organization (LTO), which includes the following:
  - A political subdivision;
  - A public transportation authority, port authority or redevelopment authority, which is organized under the laws of the commonwealth or an interstate compact, or is empowered to render, contract to render or assist in rendering transportation services in a limited area in the state even though it may also render or assist in rendering transportation service in adjacent states;
  - An incorporated nonprofit entity which directly or indirectly provides public transportation service; or,
  - An incorporated nonprofit entity of public transportation providers operating within this state.
- An incorporated nonprofit entity;
- A state-owned or state-related university;
- A for-profit company.

**FY 2012-13 Program Summary**

On Dec. 1, 2012, $10,000,000 was made available for competitive grant applications to support incremental cost share of the purchase of vehicles over 14,000 pounds (lbs.) using compressed natural gas (CNG) and liquefied natural gas (LNG). Of that amount, $5,000,000 was allocated exclusively for local transportation organizations.

49 Applications were received by Feb. 1, 2013, totaling $12,978,834 in grant requests.

- $1,397,292 was requested for Local Transportation Organizations
- $11,581,542 was requested for Non Local Transportation Organizations

19 projects were competitively selected resulting in a total award of $6,809,263.

- $1,364,292 was awarded to Local Transportation Organizations (6 Projects)
- $5,444,971\(^1\) was awarded to Non Local Transportation Organizations (13 Projects)
- 30 applicants did not receive an award
  - One applicant declined an award
  - Three applicants were determined to be ineligible to receive an award

\(^1\)Non-Local Transportation contributions from NGEDP round I were capped at $5,000,000. PADEP's State Energy Program funds provided by the US Department of Energy provided $444,971 of support so as to not partially fund any projects awarded funds under Non-Local Transportation Organizations sector.
The 19 awarded projects are expected to result in:

- 302 vehicles weighing greater than 14,000 lbs. using Compressed Natural Gas
- 27 vehicles weighing greater than 14,000 lbs. using Liquefied Natural Gas
- 3.7 million gasoline gallon equivalents annually displaced²
- 16 new stations in Pennsylvania (15 CNG and 1 LNG)
  - Four have full availability to the public, eight (8) have limited availability to the public, four are private only available to the entities applying
- Support of three existing stations in Pennsylvania (one CNG and two LNG)
  - All three have limited availability to the public

At the conclusion of Round 1, $3,635,708 remained as FY 2012-13 funding not awarded to Local Transportation Organizations due to a lack of qualified applications based on the criteria of the grant and the total requested project funding. Unused funding from the FY 2012-13 round will be made available in the FY 2013-14 round for new competitive applications. This amount will be added to the $7.5 Million available, totaling $11,135,708. As required by Chapter 27, half of this amount ($11,135,708) will be exclusively available to local transportation organizations for awards in fiscal year 2013-14.

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² Estimated gasoline gallon equivalents: Applicants are responsible for determining/calculating and reporting gasoline gallon equivalents (GGE). To convert Diesel Gallon Equivalent (DGE) to GGE, a multiplier of 1.12 GGE per DGE was used. For example, if a vehicle has an estimated usage of 5,000 DGE per year, the applicant would multiply that number by 1.12 GGE per DGE for an estimated usage of 5,600 GGE. This is based on the assumption of 1 GGE = 114,500 Btu and 1 DGE 128,000 Btu.
W.C. McQuaide, Inc. $500,000

W.C. McQuaide, Inc. is a trucking company with two terminals in Bethel and Johnstown, PA that is ready to execute a plan to fully utilize CNG in their daily trucking operations. The full-scale plan includes constructions of two new CNG stations at each of their terminals, the purchase of 65 new dedicated CNG trucks to replace their current fleet, the acquisition of another 25 new trucks, and conversion of all 35 maintenance and company vehicles, all of which is to be in place and operational by 2015.

Birkmire Trailer Company $500,000

The company plans to build a filling station at its facility in Fairview, PA capable of filling 30 trucks on slow fill and to install a 200 gallon tank for fast fill. The plan also includes conversion of 15 trucks to dual fuel to run on CNG and diesel. The trucks will have 100 gallon CNG tanks to go within the 1000 mile range with Pennsylvania sourced CNG. The company will also purchase six new trucks over the next year with two 120 gallon tanks to run only on CNG.

Hoopes Turf Farm, Inc. $250,000

Hoopes Turf Farm, Inc., is a female- and family-owned sod production and contract truck transportation company located in Ulysses, Potter County. This alternative fuel infrastructure and vehicle project will include the installation of a new, onsite 16,000 gallon, public access LNG fueling mechanism and the deployment of ten liquefied natural gas fueled heavy duty trucks.

Giant Eagle, Inc. $500,000

The proposed project entails the purchase of 19 Freightliner Volvo CNG fleet vehicles and one Freightliner M112 CNG Powered Day Cab. The vehicles will utilize existing station infrastructure at the Pittsburgh Distribution Facility. In addition, the fleet will have expanded refueling opportunities via a new planned CNG station along the 179 corridor in Cranberry, PA. Upon completion, 60 percent of Giant Eagle's Pittsburgh based fleet will be operating on CNG.

Penske Truck Leasing, Co. LP $500,000

Penske is a trucking company based in Wilkes-Barre, PA that will purchase and deploy 20 heavy-duty Freightliner CNG trucks (seven M2 112 and 13 Cascadia units). The vehicles will fuel at a new limited access CNG station that will be constructed by Penske's leasing customer Core-Mark in Wilkes-Barre. The 20 CNG vehicles will use approximately 292,537 GGE per year.

Waste Management of Pennsylvania $491,444

Waste Management (WM) will deploy 25 heavy-duty CNG solid waste collection vehicles in Northampton County., displacing an estimated 222,300 gasoline gallon equivalents (GGE) per year. The vehicles will fuel at WM's brand new station at its property at 910 Pennsylvania Avenue in Pen Argyl. The new fueling facility will be accessible to the public.
**McKissick Trucking, Inc.** $100,000

McKissick Trucking, Inc., is a company that transports brine from wells in north central Pennsylvania to licensed injection wells in Ohio. This project is the first step in a plan to transition to fuller use of NGV beginning with a five vehicle pilot series of LNG fueled tankers as well as install a LNG fueling station for additional fleet fueling. The initial move will effectively transfer more than two million diesel fueled miles/year to LNG.

**Burgmeiers Hauling, Inc.** $287,980

This project will purchase and deploy 12 heavy duty CNG refuse trucks that will provide refuse collection services throughout Blair, Bedford, Cambria, Somerset, Huntingdon and Centre counties. Each year, this project will displace 73,472 gallons (GGE) of diesel and reduce 21,497 pounds of criteria pollutant and GHG emissions.

**Smith Transport Inc.** $300,000

Smith Transport is a Pennsylvania truckload carrier based in Roaring Spring, operating for over 30 years running routes within the State. Smith will retrofit twelve Freightliner CLI20 trucks to operate on compressed natural gas. The vehicles will be fueled at the Wayne Township Landfill CNG station, which is accessible to the public.

**Lancaster County Solid Waste Management Authority** $350,000

LCSWMA will convert its 14-truck tractor waste transfer fleet to compressed natural gas (CNG). As a part of this project, LCSWMA will displace 156,800 GGEs per year. LCSWMA will develop new CNG fueling infrastructure (fast & time-fill).

**Park's Garbage Service, Inc.** $335,840

This project involves the purchase of 15 CNG refuse trucks to be used at two locations: five vehicles at Shirley Twp. near Mount Union, Huntingdon County, and 10 at Greene Township, Franklin County. The 15 CNG trucks will replace 56 percent of the present total fleet of 27 diesel-powered refuse trucks. The CNG refuse trucks will be fueled by two new fast fill CNG fueling stations that will be constructed, one at each location. Both CNG fueling stations will have public access for other fleets and the general public.

**Borough of Chambersburg** $472,500

The Borough of Chambersburg, , with IESI and the Borough of Shippensburg, project partners, will purchase or retrofit 19 vehicles to operate on compressed natural gas. The vehicles include refuse and recycling trucks, a utility bucket truck, and an ambulance. The Borough of Chambersburg will also develop a new CNG station adjacent to the Interstate 81Exit 14 off ramps.

**Erie Metropolitan Transport Authority (EMTA)** $300,000

EMTA has signed a contract with Gillig for CNG buses with 12 buses to be purchased as a part of this project. Seven buses were delivered in late May of2013 and the remaining five buses will be delivered in late Dec. 2013 or early Jan. 2014. The buses will be fueled at EMTA's existing fueling facility in Erie.
Rose Tree Media School District  $499,994

Rose Tree Media School District will begin upgrading its school bus fleet to natural gas vehicles by converting 14 existing diesel buses to compressed natural gas, and purchasing eight new CNG 2013 Thomas Built Buses. The fuel capacity will be supported by a new hybrid fueling station (time-fill and fast-fill) owned/operated by the district, to be built as an extension to the transportation center located in Media, PA.

Shipley Fuels Marketing, LLC  $224,178

Shipley Energy is a heating and cooling company headquartered in York, PA. Working with the City of York, Shipley Energy will retrofit three diesel powered tractors to CNG hi-fuel, replace five tractors with brand new dedicated CNG vehicles, and replace one diesel powered street sweeper with a brand new dedicated CNG powered street sweeper. The project will have a fuel displacement of 115,600 GGE annually, and result in the construction of a new, fast-fill fueling facility in York.

Greater Philadelphia Clean Cities  $492,216

The Montgomery County Natural Gas Vehicle Conversion Initiative seeks to help the project partners with the foray into utilizing CNG as a fuel for their fleets. This project partners ARAMARK, Delaware Valley Concrete, King Limousine, Sustainable Waste Solutions, Lower Merion Scholl District, Lower Providence Township, and TransNet. The project will convert 35 vehicles to CNG, for a fuel displacement of 114,413 GGE annually, and includes construction of a fueling station in King of Prussia, PA.

Centre County Commissioners  $140,359

Centre County, along with its partners the Centre County Recycling and Refuse Authority and Centre Area Transportation Authority (CATA), will purchase or convert ten CNG vehicles; nine to serve as paratransit buses and one as a refuse truck. A new fueling station will be constructed by a private partner by the fourth quarter of 2014, and in the meantime, the partners will use the existing CATA station. The station will be located within two miles of an interstate and accessible by the public and the participating entities.

McAneny Brothers, Inc.  $173,307

McAneny Brothers, Inc. is a Pennsylvania-based family-owned regional wholesale food distributor. For the project they will purchase eight CNG vehicles to replace eight diesel vehicles currently in use in its truck fleet. These vehicles will operate throughout western Pennsylvania, eastern Ohio and northern Maryland and West Virginia at a fuel displacement of 100,510 GGE per year. McAneny will install a CNG fueling station at its company site in Cambria County to fuel these vehicles, and will utilize existing fueling stations in the area until its fueling station is completed.

Lehigh Gas Wholesale, LLC  $391,445

Lehigh Gas will acquire or convert 35 vehicles from gasoline/diesel to compressed natural gas. The partners on the project include national firms UPS, Midatlantic AAA, Lehigh Gas and Philadelphia Gas Works. The fueling location will be at 80 W. Oregon Ave., Philadelphia, and will represent the first publicly available retail CNG location in the City of Philadelphia, which will provide significant encouragement to other local businesses to consider converting to CNG.