

**County of Lycoming** Community Gas Exploration Task Force Public Safety Sub-committee



# Lycoming County Gas Task Force

## **Safety Sub-Committee**



### Community Gas Exploration Task Force Sub- Committees

- Economic Development
- Education
- Environment
- Public Policy & Legal Issues
- Planning & Zoning
- Public Safety



# **Public Safety Sub-Committee**

- Hazardous Materials Planner
- DEP Emergency Response
- Pennsylvania State Police
- Local Health Care System
- Volunteer Fire Chief
- Former County Commissioner
- 911 Manager
- Deputy Fire Chief



County Coroner / EMS

# **Mission Statement**

"Contribute to the improvement of life by fostering a safe and secure arena for the exploration and production of the area's natural gas resource. This is accomplished by maintaining a leadership role that promotes programs, methods, and approaches to educate both emergency responders and the general public of the County of Lycoming."





# Goals & Objectives "Snapshot"



# Short Term

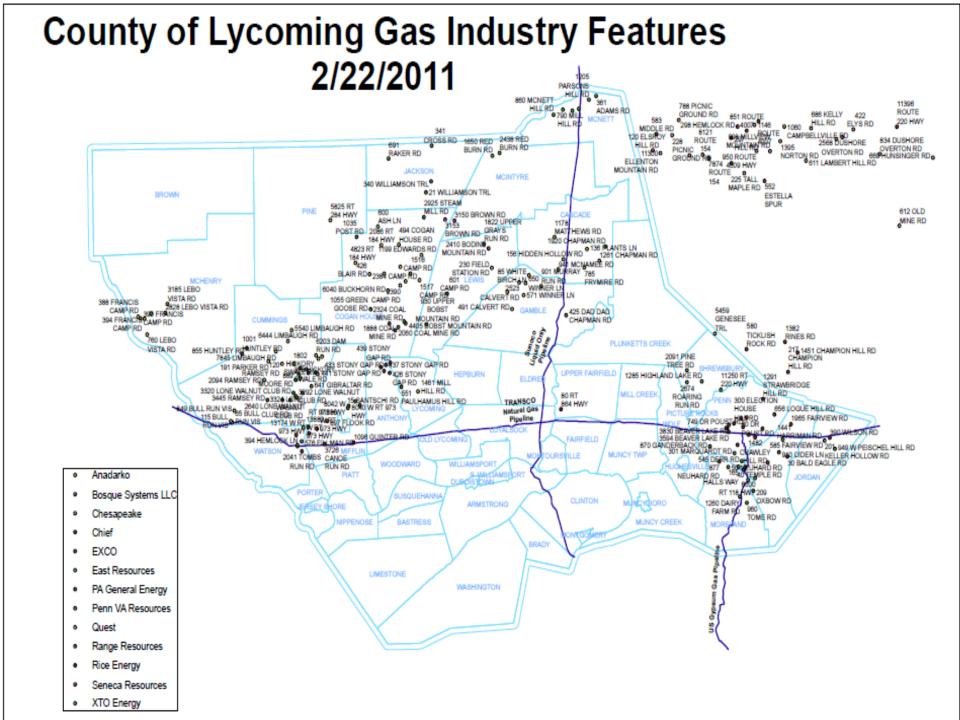
Amend County 911 addressing ordinance to reflect gas wells, compressor stations and impoundments.



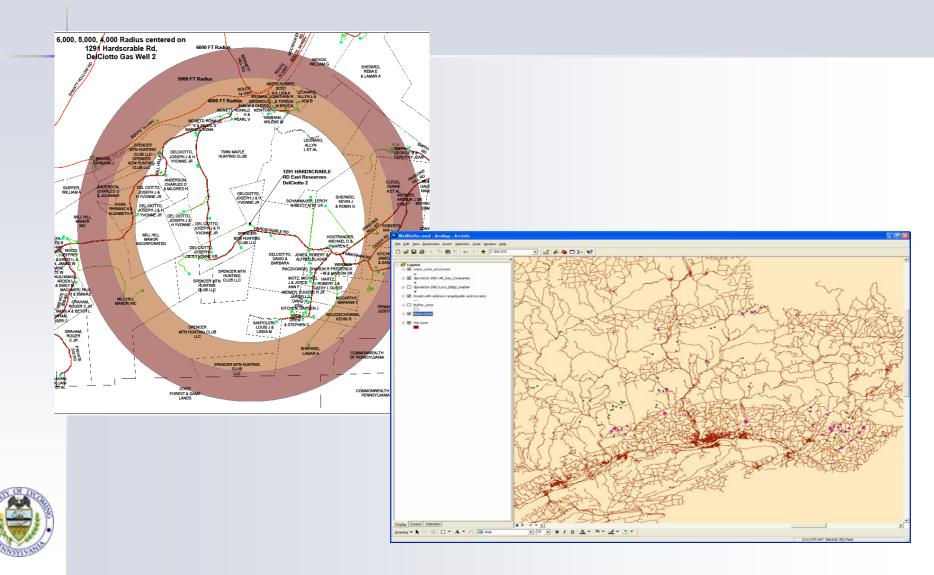
#### COUNTY OF LYCOMING COMMONWEALTH OF PENNSYLVANIA ORDINANCE <u>96-3</u> PROPERTY ADDRESSING

- "SECTION 4: New Structures and Mobile Homes All persons, firms, corporations and other legal entities constructing or proposing to construct new structures or locating or relocating mobile homes in Lycoming County shall obtain an official address number(s) on an Address Notification Form from the Lycoming County 911 Addressing Coordinator prior to taking occupancy of said structure(s) or mobile home or relocated mobile home. For the purpose of natural gas drilling operations, "occupancy" shall mean the date a drilling permit is issued by the Department of Environmental Protection
- <u>"B. Definition of "Structure"</u> For purposes of this Ordinance and the implementing Rules and Regulations the term "structure" shall mean any manmade object having an ascertainable stationary location on or in land or water, whether or not affixed to the land."





### Addressing data in the Lycoming County Geographical Information System (GIS)



# Short Term

Provide awareness training to emergency responders and regional rescue resources.



### Multi-agency Training November 2008





### Emergency Medical Training May 2009

### Emergency Medicine In the Oil Patch and Injuries you will see daily

Case study of a severe injury and what to expect on a daily basis

2009

9

MAY



### Ohio Training November 2009



### Texas Training November 2010



"Gas Exploration, Drilling & Production Hazards Awareness"

### Audience

•Fire/EMS, Law Enforcement, Emergency Management Coordinators, Elected Officials

### <u>Venues</u>

FD meetings, EMA Qtrly, Law Enforcement Associations, Technical Rescue Taskforce

Total Attendees

700 +



## Mid Term

Identify specialized emergency response training, support documentation and equipment needed to sustain response to such incidents.

Develop "Gap Analysis"



### Range Resources Lycoming County Gas Task Force Safety Committee September 2009









# Long Term

### 1. Develop Safety & Training Consortium

- a. To develop a practical, reliable, and competent community emergency response capacity.
- b. Explore industry expectations for the responder community.
- c. Look for gaps and how to fill them in a manner that is supported by the responders and the industry.



## Safety & Training Consortium

(formed November 2009)

#### <u>Industry</u>

Anadarko Aruba Petroleum Baker – Hughes **Clean Harbors** Chief Oil & Gas, LLC **Dallas-Morris Drilling** East Resources/Shell **EXCO** North Coast Halliburton PA General Energy **Precision Drilling** Range Resources Seneca Resources **XTO Energy/Exxon** 

### **Responders**

Local fire dept leadership County hazardous materials team Law enforcement



## **Mission Statement**

"Develop a practical, reliable, and competent community emergency response capacity. To have an industry wide perspective of needed training that is a common good for all. Together we will explore industry expectations for the responder community, look for gaps and how to fill them in a manner that is supported by the responders and the industry. Work together should there be an incident and mitigate the severity of it."





# **Accomplishments**



### "Wellsite Emergency for First Responder" (Phase 1)





### MARCELLUS SHALE COALITION

CGETF Community Gas Exploration Task Force





### "In Progress" (Phase 2)

To further educate the responders in the process i.e production, gathering lines, pipelines etc.



#### **Natural Gas Applied Technology and Safety Training Center**

Pennsylvania College of Technology

(Phase 3)









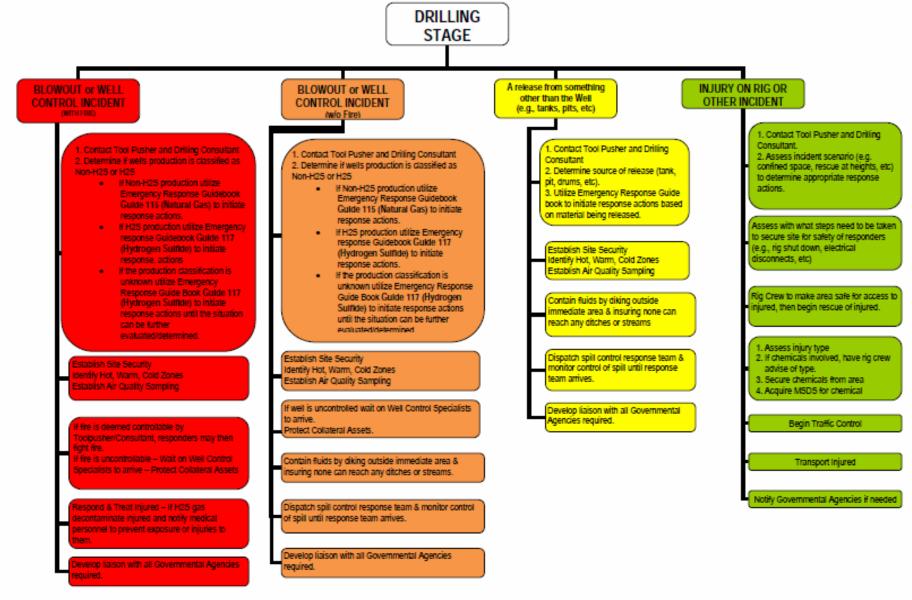




# **Tools for Response**



#### Fire / Rescue Response





#### Glossary of Terms

Annulus: the space around a pipe in a well bore, sometimes termed the annular space.

Barrel: a measure of volume for petroleum products in the United States. One barrel is the equivalent of 42 U.S. gallons

Blowout Preventer (BOP): one or more valves installed at the wellhead to prevent the escape of pressure either in the annular space between the casing and the drill pipe or in open hole during drilling or completion operations.

Bottomhole: the lowest or deepest part of a well.

Brine: water that has a quantity of salt, especially sodium chloride, dissolved in it; salt water.

Bulk tank: on a drilling rig, a large metal bin that usually holds a large amount of a certain mud additive that is used in large quantities in the makeup of the drilling fluid.

Casing: 1. steel pipe placed in an oil or gas well to prevent the wall of the hole from caving in, to prevent movement of fluids from one formation to another and to aid in well control.

Casing string: the entire length of all the joints of casing run in a well.

Cellar: a pit in the ground to provide additional height between the rig floor and the well head.

Cement: a powder consisting of alumina, silica, lime, and other substances that hardens when mixed with water. Extensively used in the oil industry to bond casing to the walls of the wellbore.

Company man: an employee of an operating company who supervises the operations at a drilling site or well site. Also called company hand, operator's representative.

Derrick: a large load-bearing structure, usually of bolted construction. In drilling, the standard derrick has four legs standing at the corners of the substructure and reaching to the crown block. The substructure is an assembly of heavy beams used to elevate the derrick and provide space to install blowout preventers, casingheads, and so forth.

Doghouse: a small enclosure on the rig floor used as an office and/or as a storehouse for small objects. Also, any small building used as an office or for storage.

Downhole: pertaining to the wellbore.

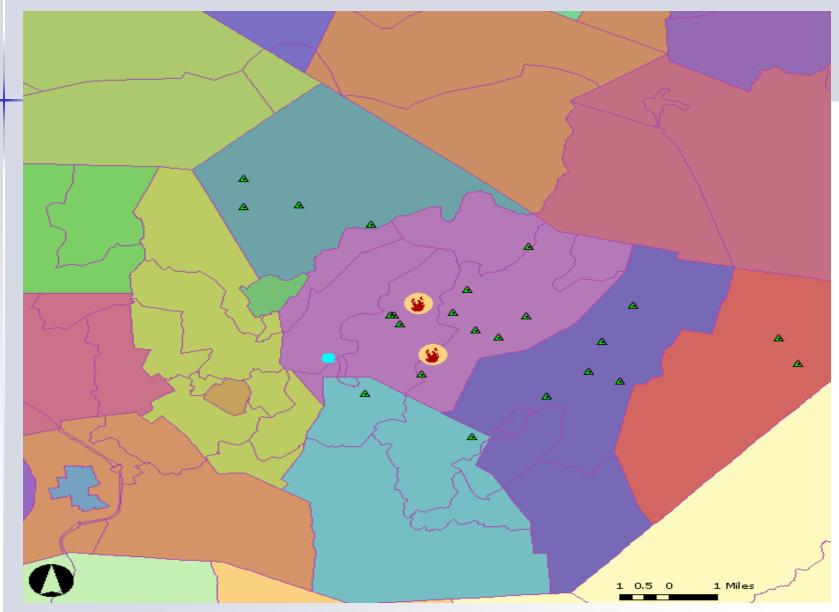
Frac fluid: a fluid used in the fracturing process. Under extremely high hydraulic pressure, frac fluids (such as distillate, diesel fuel, crude oil, dilute hydrochloric acid, water, or kerosene) are pumped downward through production tubing or drill pipe. The pressure causes cracks to open in the formation, and the fluid penetrates the formation through the cracks. ie: Sand, aluminum pellets or similar materials (propping agents) are carried in suspension by the fluid into the cracks.

Geronimo line: an escape line that provides a rapid escape path for the derrickman should well conditions or massive mechanical failure warrant.

Horizontal drilling: deviation of the borehole from vertical so that the borehole penetrates a productive formation in a manner parallel to the formation.

Hydraulic fracturing (fracing): an operation in which a specially blended liquid is pumped down a well and into a formation under pressure high enough to cause the formation to crack open.

# Flaring Log





# **Tools for Industry**



#### LYCOMING COUNTY EMERGENCY RESPONSE MATRIX WELL SITE OWNER, OPERATOR, SUB CONTRACTOR COUNTY 911 CENTERS COUNTY FIRE EMERGENCY MNGMT LAW \*\*DEPT OF COUNTY DEPTS ENFORCEMENT ENVIROMENTAL LOCAL PROTECTION FIRE / RESCUE ELECTED \*\*DEPT OF \*\*PEMA HAZMAT OFFICIALS CONSERVATION AND NATURAL RESOURCES MEDICAL AMBULANCE PARAMEDIC HOSPITAL \*\*calling 9-1-1 does not preclude any regulatory HELICOPTER requirements for the responsible party to call this MEDICAL agency directly. 3/2009 SEARCH RESCUE

# **Emergency Contact Card**

EMERGENCY NUMBER 911

SATELLITE EMERGENCY NUMBER 570-433-3696

<u>NON-EMERGENCY</u> FLARINGS OR BLOWDOWNS 570-433-3166

PA STATE POLICE MONTOURSVILLE 570-368-5700

LYCOMING CO POLICE AGENCIES 570-433-3166



#### **HOSPITALS**

Bradford County Robert Packer 1-888-448-8474 Towanda Memorial 570-265-2191

Lycoming County Williamsport 570-326-8000 Jersey Shore 570-398-0100 Muncy Valley 570-546-8282

Tioga County Soldiers & Sailors 570-723-7764

Potter County Charles Cole 814-274-9301



## **Cell vs Satellite**

VS







# In progress.....

- Full Scale Exercise October 2011
- Incident Management training for industry personnel.
- Regional task forcing
- State & Federal level networking group



### **QUESTIONS?**

Craig Konkle Lycoming County Department of Public Safety 542 County Farm Rd Montoursville, Pa 17754 570-433-4461

