Compressor Station Fact Sheet

Time Requirement: variable, as part of Awareness Program

Number of Instructors: 1 facilitator for a class of 25 participants, consistent with Minimum Criteria

Materials

- Student materials (Compressor Station Fact Sheet; list of additional resources)
- Plan Guide, if group is committing to follow up

Objectives

When completed, participants will be better able to:

- Describe purpose of a compressor station
- Identify health and safety concerns
- Describe gaps in information relevant to local concerns
Teaching Methods

Discussion, presentation
Small group activity (plan, optional)

Suggested Instructor Preparation

- Review fact sheet, and cited resources
- Identify the concern of the expected participants—siting of future stations, construction of a station (noise, traffic, dust), concerns about existing station (odor, noise, health symptoms)
- Identify any current litigation or local government action that may be in process
- Gather additional professionals, based on reconnaissance to identify concern(s)
- Identify if there are state or local regulations that apply to the concern(s) or reports from other states.
- Assure that needed device to show video is available
- Assure internet is available, if agenda includes interactive map use

The following may be useful:

Overall resource, including state links (after page 39)

interactive map to obtain information for each state (as of 2014)


Interpretation of PHMSA regulations

This site shows responses to requests for clarification on various pipeline topics:
https://www.phmsa.dot.gov/regulations/title49/b/2/1/list?filter= Pipelines
Fires and Explosions

The most recent (as of December 2019) event in the MWC states occurred in Michigan. See the links below for the initial reports:

https://marcellusdrilling.com/2019/01/michigan-natgas-compressor-station-catches-fire-explodes/


https://www..com/blog/michigan-natgas-compressor-station-catches-fire-explodes/

and result of company and state investigations:


https://www.michigan.gov/mpsc/0,9535,7-395-93307_93313_17280-489076--,.00.html

https://www.michigan.gov/mpsc/0,9535,7-395-93307_93313_17280-501127--,.00.html

https://www.michigan.gov/mpsc/0,9535,7-395-93307_93313_17280-500972--,.00.html


https://www.shaledirectories.com/blog/what-caused-the-mi-natgas-compressor-stn-fire-in-january/

additional documents at https://www.michigan.gov/mpsc, search on Ray Compressor Station.
Noise studies

Pennsylvania (where much of the work has been done, and can serve as ‘lessons learned’)


Multiple construction/operation considerations for residents

Virginia: https://www.deq.virginia.gov/Programs/Air/BuckinghamCompressorStationAirPermit.aspx


Air Quality

North Dakota: https://performanceenergy.net/services/facility-and-compressor-station-construction/ (photos);
https://deq.nd.gov/aq/permitting/construction.aspx;
https://deq.nd.gov/aq/oilgas/OilGasMidStream.aspx

Ohio: http://epa.ohio.gov/Portals/47/nr/CompressorStations.pdf

Nuisance is defined state-by-state or locally. One example:

Texas: http://www.energyandthelaw.com/2012/02/01/is-your-compressor-station-a-permanent-nuisance/

Summary: much of the reported work has been done in Pennsylvania. In reading this work, exposures may be to fracking operations, not just transportation of natural gas. Identify the source of an exposure when reading and limit your information to natural gas transport.

• Test web links prior to the session and if any are inoperative please notify the Midwest Consortium at alerdilr@ucmail.uc.edu
Minimum Content Requirements

- Fact sheet with video
- Search (optional)

  for local pipelines (http://pstrust.org/about-pipelines/regulators-regulations/state-pipeline-safety-policy/)


- Local concerns
- Plan (optional)

Questions You May Be Asked

1. Why is so little known? The boom in use of natural gas has generated need for more compressor stations.

2. Has anyone ever stopped construction of a compressor station? It is likely. Generally, compressor stations have been in rural areas, but recent proposals in residential areas have prompted concern. See http://hingham.wickedlocal.com/news/20170203/commentary-compressor-station-threatens-hingham;

Follow Joelton, TN for a long-standing campaign to block a station:

Because little is available about the extent of many of the potential hazards, be prepared to reply: ‘I don’t know’ or ‘to my knowledge that has not been investigated here’.
Presentation of the Session

This session can be presented as follows:

Review the objectives

Fact sheet

Distribute the fact sheet and provide an opportunity for participants to review content.

Show the video of how the station works, https://www.youtube.com/watch?v=-nOhsyuIV3o.

Discussion

Facilitate a discussion to address issues of concern to the participants. An important aspect is finding information—the internet is useful to track activities in other areas that may provide useful/adaptable approaches.

It may be useful to generate some lists:

- Topics that we need to explore—need more information
- Questions we need to answer
- People/agencies with responsibilities that we need to identify/contact
- Other groups that may have interest in this issue

Exercise – Search (optional)

Use interactive maps to identify local pipelines or compressor stations.
Exercise – Make a Plan (optional)

During this exercise participants will work in small groups to plan steps to accomplish a stated goal.

Use the Plan elements from the Fracking Exercise to document steps, as shown at https://mwc.umn.edu. The Plan Worksheet is shown as the last page of this Guide.

Explain the follow up that will occur to chart success/barriers.

Summary

- Review the learning objectives.
- Ask for additional questions.

Facilitator Follow up

- Forward Plans to Tim Hilbert at UC

Make this program better:
  - Forward suggestions to UC
  - Are there other ‘Questions you may be asked’ that should be included?

NOTE: The Midwest Consortium developed this guidance under cooperative agreement number U45 ES 06184 from the National Institute of Environmental Health Sciences.
**Worksheet: Build a plan**

**Goal:** 

<table>
<thead>
<tr>
<th>Plan action item</th>
<th>Who ‘owns’ each action</th>
<th>Anticipated barriers and approach to each</th>
<th>Date to be completed</th>
<th>Reason for Delay</th>
<th>Date done</th>
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<tr>
<td>Action 1</td>
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<td>Action 2</td>
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<td>Finalize work plan and set deadlines for each action</td>
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<td>Report final results to participants/community</td>
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