

Q1. How far apart are shutoff valves distributed along the lines? Are they automatic? Where are the nearest ones on either side of Monkton?

Based on the code and VGS' decision to design valve spacing based on Class 3 locations, each point on the proposed line will be within four miles of a valve. The proposed mainline valves will be remote control valves (RCV); they are not automatic. VGS' Gas Control Department monitors the system 24/7 and has control of these valves from our location at our main office in South Burlington. The Gas Control department can remotely shut down a section of pipeline.

There are three valves planned in the vicinity of Monkton. A valve north of Monkton is planned for Hinesburg. A second valve is planned in Monkton on Pond Road just north of the Monkton Road intersection. A third valve south of Monkton is planned for in New Haven.

Federal Code CFR 49 Part 192 bases several requirements on class locations. By these definitions, Monkton preliminary looks to be classified as a Class 1 or 2 location; however VGS has decided to design the valve spacing based on Class 3 requirements, which is more stringent than required.

Q2. Will the New Haven station be manned? If so, is it 24/7? How long does it take to shut down the pipeline in the event of an emergency? Can it be done from there?

VGS' System is monitored 24/7 from our Gas Control. The stations themselves are not manned. The proposed transmission mainline is designed to include remote control valves (see answer to Q1). In an emergency situation and if appropriate, Vermont Gas can almost immediately shut down a valve and isolate the affected section of pipe.

Q3. What happens if there is a pressure drop in the line? What kind of transparency is there in regard to reporting requirements? Would residents along the line be informed?

Pressure drops occur daily throughout the transmission system. These pressure drops occur due to an increase in usage and an increase in flow rate. Generally, the transmission lines experience variations in pressure hourly over the course of a day (within normal limits). Daily fluctuations in operating pressures are normal and not subject to notification. If however, there is an unplanned or unexplained drop in pressure in the line, VGS is immediately aware of the situation due to pressure and flow monitoring by Gas Control. In these situations, VGS will investigate the reason for the abnormal pressure drop. If the pressure drop is due to an incident, VGS will immediately notify Emergency Response organizations, including the Department of Public Service (DPS). All reports to DPS are public information.

Q4. How is the pipeline inspected? How often? Will smart pigs be used?

VGS patrols the transmission pipeline using two methods. One method is to patrol the pipeline on the ground by foot or with a vehicle. The other is an aerial patrol using a fixed winged aircraft or helicopter.

VGS patrols the pipeline on the interval for Class 3 locations as described below in the Federal Code Part 192 Subpart M:

- (a) Each operator shall have a patrol program to observe surface conditions on and adjacent to the transmission line right-of-way for indications of leaks, construction activity, and other factors affecting safety and operation*
- (b) The frequency of patrols is determined by the size of the line, the operating pressures, the class location, terrain, weather, and other relevant factors, but intervals between patrols may not be longer than prescribed in the following table:*

| Maximum Interval between Patrols | | |
|---|---|---|
| Class Location of Line | At highway & Railroad Crossings | At all other places |
| <i>1,2</i> | <i>7 ½ months; but at least twice each calendar year</i> | <i>15 months; but at least once each calendar year</i> |
| <i>3</i> | <i>4 ½ months; but at least four times each calendar year</i> | <i>7 ½ months; but at least twice each calendar year</i> |
| <i>4</i> | <i>4 ½ months; but at least four times each calendar year</i> | <i>4 ½ months; but at least four times each calendar year</i> |

Each calendar year and at intervals not exceeding fifteen months, VGS is also required to conduct a leakage survey on all transmission lines. This survey is completed by a ground survey using gas detection equipment.

In addition to patrols and leak surveys, if there is an area identified as a High Consequence Area (HCA), additional assessments are required. CFR 49 Part 192 defines a High Consequence Area as the area where the Potential Impact Circle encompasses 20 or more homes or a single identified site. Each segment of pipeline containing an HCA must be assessed every 7 years using one of three inspections options, of which one is a “smart pig”, or Inline Inspection (ILI) Tool. VGS is committed to conducting an ILI of this new pipeline every 7 years.

Q5. Are there emergency evacuation plans currently in place in towns with pipelines in Chittenden and Franklin Counties? If so, who implements them?

Local Emergency Planning Committees and local fire departments prepare to address all types of emergencies that may occur within their operational areas and evacuations are part of that preparation. VGS is a member of Local Emergency Planning Committees within its operational area and reviews evacuation protocols during training with individual town fire departments. VGS will conduct training for the fire departments upon requests.

Q6. How are evacuation plans managed in towns without police departments? In towns with all volunteer fire departments and no hydrants? Is there regional emergency planning in place in case an event renders a local town's first responders unable to respond?

Vermont Gas doesn't determine how towns manage their emergency response plans. A common practice is that local fire departments utilize neighboring "mutual aid" departments when an emergency occurs which exceeds the departments capabilities. VGS will conduct training for the mutual aid departments upon request - even if gas pipelines are not located in the municipality. Fire departments within our existing service territory often invite mutual aid departments to their own VGS training sessions.

Q7. Do you ever conduct emergency drills? Who pays for all of that?

VGS conducts internal drills and participates in local and regional drills. VGS does not charge for training.

Q8. Do local fire fighters receive any extra training or equipment regarding potential pipeline issues? Who pays for that?

VGS offers natural gas emergency response training to all emergency responders within our service territory at no charge. VGS also sends out letters to fire and police departments on an annual basis, which provide natural gas safety information and reminds them that VGS offers training.

VGS does not provide fire departments with "extra equipment". Gas detection equipment is not provided because we do not want volunteer fire department personnel attempting to quantify the severity of a leak and in doing so potentially underestimating the severity of the leak. Instead, when a fire department suspects a natural gas leak, we want them to always err on the side of caution, evacuate the area and contact VGS immediately.

VGS encourages Monkton to contact any fire department in our service territory for their experiences.

Q9. How will the line be marked? How big are the markers and how far apart are they spaced? How effective are pipeline markers when they are covered with snow several months of the year? Who maintains them and reinstalls them after the snow plow knocks them over?

VGS currently uses plastic yellow posts that stand approximately 5' high as pipeline markers; these are placed at road crossings and railroad crossings within line of site distance. They are labeled with VGS contact information. VGS maintains all markers and will replace them as needed. We monitor facilities during the course of normal operation and routine inspections; this includes verifying that lines are clearly marked. Additionally the pipelines will have a yellow warning tape buried over the pipeline to alert anyone digging over the line of its presence.

Q10. In a town that without gas service, how aware do you expect residents to be regarding the presence of a gas line, especially several years in the future?

VGS has in place and will utilize on an ongoing basis a Public Awareness Program. The program provides natural gas safety information to the general public, emergency responders, public officials, and excavators as to the presence of the natural gas facilities in their community.

The Public Awareness Program is a continuing program to educate the public on:

- Use of a one-call notification system (Dig Safe) prior to excavation and other damage prevention activities;
- Possible hazards associated with unintended releases from the pipeline facility;
- Physical indications that such a release may have occurred;
- Steps that should be taken for public safety in the event of a pipeline release; and
- Procedures to report such an event.

Q11. Can you elaborate on Dig Safe rules? How far from the pipeline will a homeowner have to be to not have to call Dig Safe? How deep?

It is important to note that Dig Safe laws pertain to all people, not just utilities. The residents of Monkton are already required by law to call Dig Safe before conducting any excavation activities. The existence of a new pipeline within the Monkton area will not change Dig Safe notification requirements.

Dig Safe notification is required when performing "excavating activities" within 100 feet of a buried utility facility. A copy of complete statute can be found at: <http://www.digsafe.com>

By being a member of Dig Safe, VGS is notified when any excavation activity is being performed in the area of a VGS pipeline or facility.

Q12. Do you expect to maintain a no new tree, no new fence, no new well, and no new septic policy within 25' of the pipeline? If not, isn't this unsafe, given current industry standards?

Where VGS has a 50-foot right-of-way (generally, 25' on either side of the pipe) on private property, limited work is permitted within right-of-way. However, no structures should be erected and no sizeable trees should be planted.

Q13. How do you reconcile the fact that if the pipeline was there first, you would not allow a house to be built within the pipeline right-of-way, with the fact that you are planning to place homes within the pipeline right-of-way?

VGS only places restrictions on private easements it holds. VGS does not hold an easement interest in public right of ways. Where it is not permitted to place the pipeline in a private easement, VGS tries to utilize the public right-of-way, generally the area extending beyond the edge of the road into the road shoulder or greenbelt.

Easements and right-of-way locations are negotiated with the appropriate landowners prior to installation of any gas transmission pipelines. The agreements detail the appropriate or allowed uses within the right-of-way.

Q14. What is the nearest that new homes have been built to the existing Chittenden and Franklin County pipeline? Is this a Vt. Gas policy, a state policy, or a matter of local zoning? There are homes and buildings have been planned and constructed up to the edge of the easement or right-of-way boundary lines. VGS does not control construction adjacent to the public road right of way.

Q15. Can you point to other towns in Vermont where homes are in such close proximity to a pipeline? Where a pipeline is run through a residential area when there is another Right-of-way available so close by?

There are homes within an estimated 15 feet of VGS' existing transmission pipeline. If there is an existing, viable and practicable alternative corridor, the pipeline would be located adjacent to it.

Q16. Can you produce any pipeline construction photos from anywhere in the Northeast from the past decade showing installations in progress with homes within the construction Right-of-way?

VGS does not maintain a photo library of Northeast pipeline construction.

Q17. How do you reconcile the proximity of this pipeline to homes, with widely circulated pipeline experts' estimates that the Potential Impact Radius of a 12" pipe starts at 200' and goes up from there with pressure increases?

The estimate of Potential Impact Radius is accurate. The pipeline safety codes account for this in specifying the design and operating criteria pipeline operators must adhere to.

Q18. Isn't it true that most pipelines are operating within normal parameters right up until the moment that they suddenly aren't? How do you protect against that?

No. VGS uses a routine inspection and maintenance program designed to detect and prevent incidents before they occur. Our operating practices and DOT Code requirements are in place to insure safe on-going operation of the pipeline.

Q19. How do you protect against the possibility that one single backhoe operator's willful disregard for safety can endanger a whole community?

See answers above. Steps are taken to inform every one of the existence of the pipeline but it is very difficult to protect against someone's "willful disregard for safety."

Q20. Is the 75' construction ROW centered on the road ROW, (12.5 feet extra per side) or is it only (all 25') on the side of the road that the pipeline is on?

The 75-foot right-of-way only applies to private land. Where a VGS pipeline is within a road shoulder right-of-way, VGS does not obtain an easement. VGS may acquire a temporary construction easement from the adjacent landowner or may confine its construction to the road and utilize appropriate traffic controls during construction.

Q21. Can you be more specific as to reasons for your site selection of using the roadside? Which wetlands are at issue? There are no wetlands north of the Barnumtown area. What about the horizontal directional drilling technique you presented at a previous meeting? Don't you have to cross the wetland either way, whether at the road or on the VELCO ROW?

The specifics as to locating the pipeline will be fully discussed in the 248 Application. There are many factors that determine the location of the pipeline including environmental, archeological, landowner issues, and previously existing utility constraints. Vermont Gas intends to hold an additional public meeting in Monkton and will have project maps available for review. We refer you to the 248 document for the requested information when it is filed with the Public Service Board (PSB).

Q22. Why is VELCO saying it's not ok to use the VELCO ROW here, when it is being used elsewhere? Isn't most of VELCO, (GMP and CVPS) now owned by Gaz Metro, which also owns Vt. Gas?

VGS will utilize the VELCO right of way where deemed appropriate by the permitting agencies. The ownership of Velco is explained on the Velco website. Gaz Metro owns both GMP and VGS.

Q23. Where are the archeological site concerns? How many are there? How large are they?

The archeology results will be contained the 248 filing and will be available on VGS website shortly after filing. We intend to file the 248 on December 20.

Q24. How deep is it to the top of the pipe? Is it below the frost line? How deep and wide is the trench you need to dig? What is it made of, steel or plastic? If it is plastic, does it have electric current running through it? If so, how much? If there is a culvert by the side of the road and a utility pole, will you move the pole further away from the road or put the pipe further away from the road?

VGS' practice is to bury the gas pipeline a minimum of 3 feet deep.

It is not necessary to bury it below the frost line.

The trench for the 12-inch pipeline is generally expected to be 3 to 4 feet wide and 4 and one-half feet deep.

The Transmission line is high strength steel.

As to the scenario presented, specific site locations and obstacles will determine where and how the pipe is ultimately located.

Q25. Why can't there be a distribution line in the same trench as the transmission line that runs back from New Haven so people on the line can have gas service? If you can't do that, does that mean that there can never be gas because now the first pipe is in the way of installing a distribution line?

A distribution line co-located with the transmission line is likely not the most cost-effective way to serve Monkton. Whenever co-locating infrastructure in the same trench due consideration must be given to the need for any future maintenance. Sufficient clearances must be maintained between the structures to allow for maintenance.

Q26. Is there gas odorant in the pipe? Or does that get added at the New Haven station?

Yes. The gas is odorized by VGS at the VGS Border Station in Highgate. Thus, all natural gas in VGS pipelines is odorized.

Q27. Do natural gas pipes make any noise? If so, how much?

No.

Q28. Are there any other chemicals in the pipe with the natural gas, such as oil? If so, are there any PCBs in the oil?

No. There may be minute traces of oil from the compressor stations upstream of Vermont but these do not contain PCBs and are virtually undetectable.

Q29. Will you have to close down a lane of Monkton Rd. for the construction? Will it be entirely closed at any time? If so, for how long? How many linear feet of pipe do you install per week, in areas with no unusual obstacles? Do you work on more than one point on the line at a time? How do you keep people, especially kids, away from the trench, especially on weekends? Is there ever an open trench when there are no workers there? Or do you close it up every night?

Yes, a lane of Monkton Road will need to be closed for construction. One lane is expected to remain open at all times. Traffic control will be in place during construction. Emergency vehicles will be able to pass through the construction site.

Construction variables will affect weekly production. It is anticipated that there will be several pipeline crews working throughout the project's 43 mile length at the same time.

Road side trenches will be backfilled or covered when construction is suspended for the day.

Also, roadside access will be restricted by the use of temporary fencing and/or barricades.

Q30. What are your crew's work hours? Work days? Do you work weekends?

Work is expected to occur from 7:00 am to 7:00 pm, Monday thru Saturday.

Q31. What do you plan to do about homeowners whose wells are in their front yards and in the construction ROW? Or underground electrical? Or the house itself? If a problem shows up after you have completed the project, what is a homeowner's recourse? How long would they have to report a problem?

Pipeline construction in the public right of way should not impact water wells on private property. The company will protect wells that exist within the pipeline easement.

All utilities will be marked prior to construction. Our contractor will need to avoid damaging marked utilities. Should any damage due to the installation of the pipeline occur to a utility or private property it will be addressed, repaired, or compensated by VGS.

Q32. What do you do when you dig and hit ledge? Do you blast, or drill? How do you safeguard property if this is near a house?

Rock may be removed through mechanical means or blasting. If not able to remove mechanically then blasting may be required. Blasting information will be included in the VGS 248 filing.

Q33. Can you be more specific about tree removal in the construction ROW? What about fences? If a fence needs to be moved, do you put it back when you are done? If not, can the homeowner put it back? Do you compensate homeowners for anything that is removed from their yard? If so, how do you compensate for the loss of a large tree? What are the rules about replanting? Is it true that you can't replant something that will grow large within 25' of the pipe? What about fences within 25' of the pipe? How close can a fence be to the pipe?

Construction will require the removal of some trees. Details are addressed in the 248.

Existing fences that are obstacles during construction will be removed and replaced after construction is completed as part of the restoration efforts.

The negotiations with a landowner for an easement will address appropriate compensation. VGS does not allow large trees or structures on its easements.

Fences may be installed across the easement with notification to VGS with due caution to placement of the posts. If the fence crosses the right of way, VGS would require a gate be installed in order for it to have access to the easement.

Q34. What is the planned pressure in the pipe? Do you need PSB approval to increase the pressure?

The pipeline is to be designed, permitted, built, and tested to have an MAOP of 1,440 psi.

Initially the pipeline will operate at a maximum operating pressure of 605 psi. Because the pipe will have been permitted at 1,440, Vermont Gas will not need additional approval to increase the pressure above 605 psi.

Q35. What is your notification process? When can abutters expect to hear from you? Are you planning to contact abutters on both sides of the road or just the side the pipeline is on?

VGS will notify adjoining landowners in accordance with PSB rules.

Q36. Do you know about the proposed quarry that is trying to get a permit just 1/2 mile from the pipeline? What are the rules and regulations about blasting near a pipe like this?

The existence of a quarry 1/2 mile from the pipeline will not impact pipeline operations.