

November 10, 2106

To the New Hampshire DOT,

the Easton Selectboard received a letter from Melodie Esterberg on September 30<sup>th</sup> 2016 responding to Selectboard questions regarding Northern Pass geotechnical boring. I request a more thorough and detailed response to the Board's questions and pose more questions.

You state that staff members from DOT and DES observed the boring contractors as they worked. Please provide the numbers of all the bore holes at which contractors were observed by DOT staff, the days, times, and during which stages of the drilling they were observed.

You state that work was being done in compliance with the DOT permits issued. Since slurry was dumped at many borehole sites in Kinsman Notch, please confirm that you looked at these sites and



that dumping slurry, as was is shown above, and hosing it, are practices in compliance with DOT standards, or that DOT has no standards regarding dumping of geotechnical slurry.

Borehole #119 was not filled from the bottom using a tremie pipe, but drill cuttings were shoveled into the top of the hole (as the worker said, “fill it high because it will sink down.”) Please confirm that this is in compliance with DOT standards, or that DOT has no standards, specifically addressing the issue of mildly contaminated roadside soils coming into contact with groundwater in the boreholes.



Borehole # 20B was filled from the bottom using a tremie pipe, but the pipe was not raised as the mixture was poured in. At the end of the process there was still a hole. The workers attempted to fill it with a rock. Please confirm that DOT has no geotechnical boring standards, as you stated at our meeting yesterday. You mentioned industry standards. Please provide these and confirm that they are merely recommendations and not enforceable under law. At the same hole the tub was used to carry the used slurry away, in the back of a pick up truck, along with two five gallon buckets also filled with

slurry, all uncovered. Please confirm that this is in compliance with DOT standards.

At borehole # 19B a tub of slurry was left by the roadside overnight, as shown above. Please confirm that this is in compliance with DOT standards or that DOT has no standards regarding this.

Borehole #??, in Franconia, is one of several in this area that are collapsing. Is this condition of collapse in compliance with DOT standards?



Accu-vis, a boring additive, a sample of which I gave to you yesterday, (spilled in Kinsman Notch,) was also dumped very close to the Ham Branch, in the path of water flow (below.) Please confirm that dumping slurry with polymer on the roadside is in compliance with DOT standards.

Please confirm my understanding of your statement at yesterday's meeting that

1. The HDD practices manual referenced in the DOT Accommodation Manual contains recommendations only, and is not enforceable by law.



I await an answer to the following question:

1. What are the ingredients of the fluidizer NPT plans to add to the thermal backfill for the trenched sections of the proposed buried portions of the line?

I pose eight new questions:

1. New England Clean Power Link proposal for terrestrial burial is for the two cables to be installed in separate 10' conduits. NPT proposal is for one 24" conduit. Is DOT assessing the risks and "benefits" of this alternative?

NECPL diagrams were provided by Laney Drilling.

"Laney Directional Drilling is one of the leading large HDD contractors in North America. To date with its custom made large rigs Laney has installed more than 2625 HDDs and 975 miles of HDD crossings. Laney's fleet also includes Vermeer D100x140 rigs. Laney, known for its innovation and being a trenchless technology pioneer, is also one of a few North American companies experienced with Direct Pipe® trenchless technology. Direct Pipe® is a single pass process that uses a steerable tunnel boring machine-cutting head. The technology tunnels and pushes the pipe into place at the same time, filling the void as it progresses. **This technology greatly reduces the likelihood of hydraulic fracture and inadvertent returns and is ideal for crossing under levees and environmentally sensitive areas.**"

2. Does NPT propose to use Direct Pipe trenchless technology, and if not, why not? Will DOT perform any assessment of alternatives to the applicant's proposed underground construction methods? (my emphasis)

3. The SEC's acceptance of the application as complete assumed NPT was in possession of all properties/easements necessary for completing the route. Does DOT concur that NPT can bury the line in its proposed locations without acquiring additional property outside the road easement?

4. What has DOT's response been to the document New Hampshire Lives on Water: <http://www.nh.gov/water-sustainability/publications/documents/wsc-final-report.pdf> How does DOT's evaluation of NPT relate to the goals set out in this report?

Excerpt: "Our management of water resources is poorly integrated. For many practical and historical reasons, a "one resource at a time" approach has been the norm for environmental regulation. Resources such as air, water, wetlands, soil or groundwater are handled separately, and the programs that administer them are similarly segregated. Programs that address water are further segregated by resource types (rivers, lakes, wetlands, groundwater) and uses (water supply, alteration of terrain, wastewater). Today, water issues are complex and extend across one or more of these artificial divides. Managing water and watersheds as a single resource is more efficient and effective. While coordination across levels of government is often excellent, true watershed-based decision-making is rarely accomplished due to inflexibility in regulatory language and funding. "

5. What statute gives DOT the right to permit archaeological digging within the easement?

6. Does DOT permit use of coal fly ash, which is contaminated with several toxic metals, in concrete or other materials in road construction projects?

[https://www.researchgate.net/profile/Mani\\_Singh13/publication/306088174\\_Physiochemical\\_and\\_leaching\\_characteristics\\_of\\_fly\\_and\\_bottom\\_ash/links/57ee76ae08ae91deaa50f459.pdf?origin=publication\\_detail](https://www.researchgate.net/profile/Mani_Singh13/publication/306088174_Physiochemical_and_leaching_characteristics_of_fly_and_bottom_ash/links/57ee76ae08ae91deaa50f459.pdf?origin=publication_detail)

7. New England Clean Power Link diagram of terrestrial HVDC cable shows a lead alloy sheath between the swelling tape and outer sheath. Please confirm if NPT cable would contain lead, and

provide information on any criteria DOT has for burial of toxic metals in roadway easements.

8. Eversource stated that their thermal fluid backfill acts as a French drain. This allows the flow of water and other materials to follow their trench, sometimes for miles. What is DOT's engineering response to this?

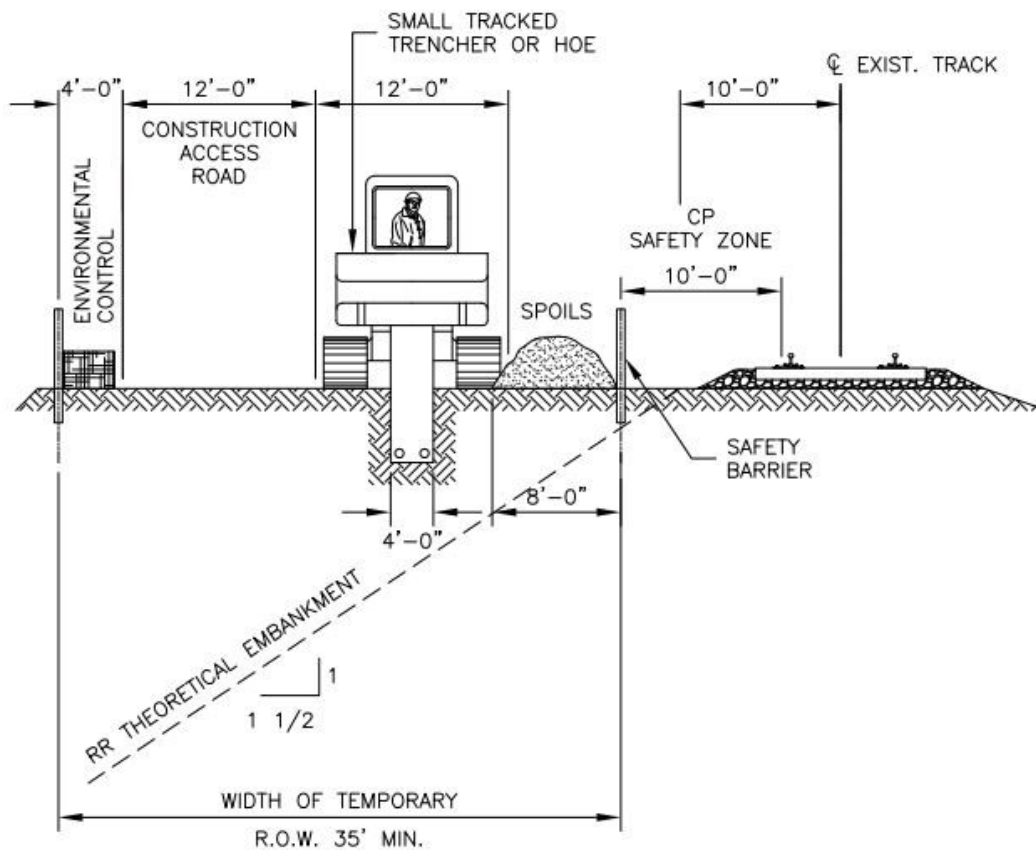
Please confirm that my understanding of the following issues is correct:

1. DOT considers its project area responsibility to end at the edge of the easement and that it is not responsible or liable for effects beyond this area, including groundwater, stream, soil and aquifer contamination by drilling fluids, drilling fluid losses, or frak-outs.

2. Complete road closures could be permitted under certain circumstances, for as yet undefined lengths of time.

3. There is no width of easement so narrow that construction would be denied outright, despite the DOE's Environmental Impact Statement on width requirements for HDD:

“The trenchless segments would require installation areas at the beginning and end for equipment and



NOTE:

1. EXCAVATION SHALL BE SHORED OR SLOPED AS REQUIRED FOR OSHA COMPLIANCE. SLOPED EXCAVATION WILL REQUIRE INCREASED ROW.
2. CONTRACT STAGING AREAS WILL BE REQUIRED APPROXIMATELY EVERY 5 MILES. STAGING AREA SIZE IS ESTIMATED TO BE APPROXIMATELY 5 ACRES EACH.

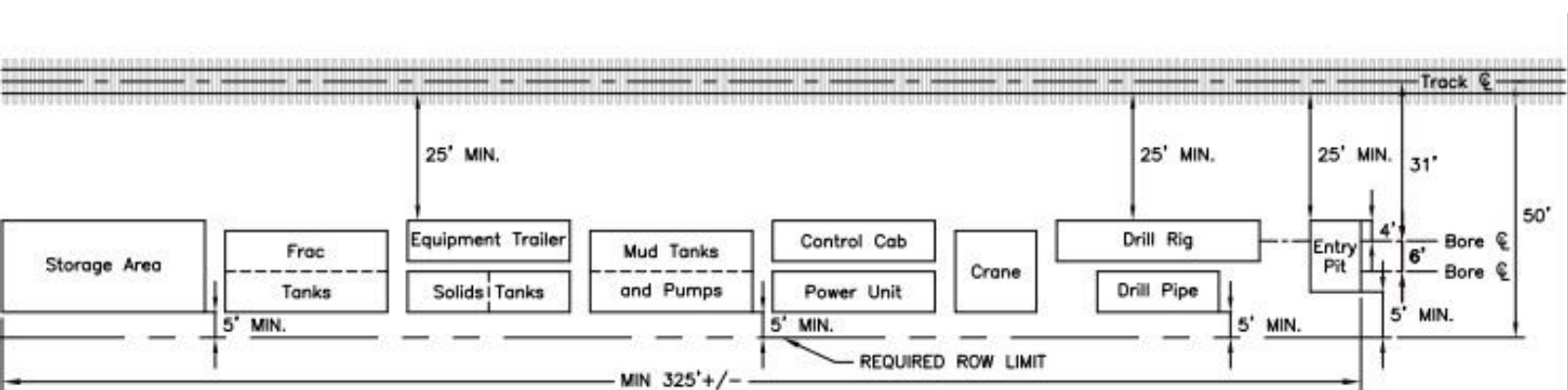
materials storage. It is likely that previously disturbed areas would be utilized to the maximum extent possible, for the purposes of analysis it was assumed that an area 100 feet by 200 feet (30 m by 61 m) would be cleared of vegetation and soil would be disturbed at each end of every trenchless segment. A trenchless excavation pit approximately 20 feet wide, 20 feet deep, and 60 feet long...would be required paralleling the alignment at the start and end of each trenchless segment.”

“Short term disturbance for the trench and construction activities is assumed to be 10 feet (3 m ) wide, with the majority of disturbance limited to the road surface (approximately 30 feet ( 9m ) wide) and adjacent, previously disturbed areas.” In Easton large areas of the road surface are 12' wide, with an additional 8' of often undisturbed area.

And DOT's statement at the March1, 2016 DOT/NPT meeting “...(HDD) will need to be reviewed to evaluated potential impacts to abuttors”

(Diagram above from Champlain Hudson EIS Supplement:  
[http://www.chpexpress.com/docs/regulatory/USACE/CHPE\\_USACE\\_Application\\_H.pdf](http://www.chpexpress.com/docs/regulatory/USACE/CHPE_USACE_Application_H.pdf))

And Champlain Hudson EIS: “A minimum construction corridor of 25 feet will be required along the edge of Routes 22 and 9W for installation of the two HVDC cables, although a wider width may be employed to allow for more efficient construction and quicker completion of the work in these areas.



TYPICAL HDD LAYOUT ON CSX ROW  
BI-POLE (2 CABLES) ONE SIDE OF TRACK

Above: HDD Longitudinal layout for buried line, from Champlain Hudson EIS

4. DOT has no definition for disturbed areas, and cannot now tell us what portions of the burial route are disturbed or not disturbed.
5. The limitations on development of Scenic Roads do not apply to underground lines.
6. The EIS, referring to burial in non-road easements states “Future vegetation growth would need to be limited in this 40-foot-wide corridor to prevent disturbance of the cable by roots.” Please confirm that the same width (part of which would presumably be the pavement of one lane) would need to be kept clear of vegetation for the proposed roadside burials.

You stated that DOT is still in the early assessment phase for the proposed burial. Understand that for the majority of us (a group that includes Canadians and Native Canadians) this project has been threatening our terrain for six years. It is now before the SEC and their decision perhaps only a year away. The majority of us have been slowed in our responses and research by “stakeholders” and regulatory agencies who have had long-running conversations with the applicant which excluded the public (the real stakeholders). DOT has also pre-empted local control, ignored local requests and failed to hold the applicant to any standards during the geotechnical boring. Given that Mark Hodgdon, NPT's liason with DOT, was formerly legal counsel for DOT, given that your HDD standards are optional, given that the applicant has dissembled throughout the process and exploited every loophole created by a lax and fragmented regulatory system, you can perhaps understand our concerns and determination not to be exploited.

HDD. Is there room for either of these methods on 302, 18, 116, 112, Route 3, through Plymouth Main Street, or on a 40' wide easement?



<http://www.laneydrilling.com/gallery/index.php?level=picture&id=63>

Kris Pastoriza, not speaking on behalf of any particular group  
Easton