

August 17, 2016

Mr. Bisbee,

when I asked the boring team for their DOT permits some weeks ago, I increased the safety of the project by causing your subcontractors to have the permits at the site the next day, as required by DOT, thereby lessening encounters between the boring teams and irate residents.

By asking for the Material Safety Data Sheets, which the subcontractors did not have, I increased the safety of the project and workers, because you were forced to send to them (and everyone on the distribution list) the MSDS. The workers may have even have read the sheets, because two of them refused to touch the bag full of Accu-Vis mixed with soil that I brought from a finished and “cleaned” borehole site to show them. Easton, Franconia and Bethlehem now have the necessary information to more safely deal with an accident involving the drilling rigs or trucks carrying materials. NPT is fortunate that no accidents occurred with the drilling rigs that necessitated emergency services from local teams unaware of the nature of the substances on the trucks.

I, and others, increased the safety of the work sites by letting the boring teams know they were under scrutiny, thereby increasing their vigilance and perhaps cleanliness.

Given that it took you more than two months to respond to a letter from the Easton Conservation Commission about wildlife corridor creation on the existing ROW, it seemed unwise to try to discuss the issues directly with “the Project.” A document sent to all parties with regulatory oversight and those affected by the drilling was the most sensible, responsible and safe approach.

I had already contacted DOT, DES and WMNF with no apparent results, certainly not an order from anyone to stop the work until an assessment could be made.

I would be more familiar with standard drilling operations if NPT had communicated with me and other people along the proposed burial route. NPT did not have pre-boring informational meetings. NPT has not told anyone outside the project the depth of each hole, what chemicals in what amounts were used in each hole, and what subsurface conditions were encountered. We do not know the location of any accidental releases of chemical/slurry above ground and frac outs (below ground.) We do not have the drilling logs for each hole.

Despite my lack of knowledge of standard drilling procedures, I wonder why the contractors aren't using frac tanks. Why aren't they adhering to standard drilling procedures, specifically #1, #2 and #3 below, (Bison Pipeline 2009)?

NOTES:

1. ENSURE THAT ONLY BENTONITE BASED DRILLING MUD IS USE. DON NOT ALLOW THE USE OF ANY ADDITIVES TO THE DRILLING MUD WITHOUT PRIOR APPROVAL OF COMPANY'S INSPECTOR.
  2. INSTALL SUITABLE DRILLING MUD TANKS OR SUMPS TO PREVENT CONTAMINATION OF WATERCOURSE.
  3. DISPOSE OF DRILLING MUD IN ACCORDANCE WITH THE APPROPRIATE REGULATORY AUTHORITY REQUIREMENTS.
  4. DISTANCE BACK FROM EDGE OF WATERBODY VARIES WITH BENDING RADIUS OF PIPE. FOR 30" O.D. PIPE THE MINIMUM HDD LENGTH IS 1300' TO ACHIEVE 60' DEPTH BELOW NATURAL GRADE.
  5. REQUIRED DEPTH TO BE DETERMINED AFTER GEOTECHNICAL INVESTIGATION.
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It is for DES, DOT, WMNF and perhaps independent scientists, not NPT. to decide whether my assertions are based in fact. It is entirely appropriate to raise concerns when one has incomplete knowledge of a situation, in this case the composition of the boring fluid, depth of boring, water bearing strata intersected by the boring, sedimentation and toxicity of the at-the-time unidentified (no MSDS given to abutting towns or residents) polymer I contacted while doing due diligence at a boring site where hay was obviously spread to hide something.

I engaged in a peaceful act of passive resistance to your attempt to bore Hole 23B and dump your used drilling slurry at the site, possibly contaminating soils, wetlands, the watershed and the underlying aquifer. I did this by sitting on the bore-hole site near the Ham Branch river, preventing the drilling rig from being unloaded there. The crews moved to a hole on the other side of the road within sight. I napped for about an hour before you directed the crews to call in another officer to bring me to the local police station forcibly if I refused to leave, which I did. Officers Moorhead and Tyler were very polite and would probably support my assertion that I did not cause a risk of harm to the public, the drilling contractors or myself.



You state that the project is using “Standard practices and procedures” which we know from the past are repeatedly found harmful and changed. When PSNH sprayed Agent Orange on this section of the existing 115Kv line, that was standard practice. MBTE additive to gas was standard practice, etc. etc. Much more specific data supporting the safety of the drilling practices and chemicals is needed.

You state that “...no environmental violations or harm has been caused by these test borings” but again offer no data to support this statement. Pre-and post monitoring of local wells and streams and soil tests from around the bore holes would provide evidence of safety that might be convincing if undertaken by an independent contractor chosen by local towns and paid for by NPT.

You say more in the same paragraph about “standard materials” and “typical for drilling operations.” That really means nothing.

Paragraph one, page two; you **have** heard of issues and questions about the drilling. The Easton Selectboard sent a letter to DOT addressing just these concerns. The Bethlehem Conservation Commission and Selectboard sent two letters with similar concerns to DES and DOT. There are “No Northern Pass on 116” signs along the whole of Route 116 as well as “No Trespassing” signs at several

boreholes. People have painted over borehole markers and pulled out almost all of the marking stakes. This, to me, indicates concerns about the boring.

Your response to a photo of a bare hand touching a chemical dumped at a job site was not an assurance that all the “finished” boring locations would be cleaned up. Rather it was the statement “that a small amount of polymer remained on the surface of the roadway shoulder is not surprising, and it does not pose an environmental or safety problem”. Yet the Material Safety Data Sheet for Accu-Vis (2-propenoic acid, sodium salt, polymer with 2-propenamamide) states that contact with skin is harmful, as is inhalation and ingestion.

## 6. Accidental Release Measures

### Personal precautions

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. For personal protection, see section 8 of the MSDS. Material can be slippery when wet.

### Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.

You don't know what amount of polymer was dumped. I wouldn't call it a small amount and hope it is not an amount that is routinely dumped after drilling. You caused a risk of harm in failing to have your contractors post the MSDS at the site with the Accu-Vis.

You state that “the contractors do clean up the location of each drilling location when they are done.” The photos and conditions on the ground contradict this statement.

You state that bentonite and Portland cement pose no environmental risk, yet bentonite is harmful to aquatic life and the Portland cement MSDS states “May cause long-term adverse effects to the aquatic environment. Do not allow undiluted product or large quantities of it to reach ground water, water course of sewage system. Must not reach bodies of water or drainage ditch undiluted or un-neutralized.” In addition, the workers are being allowed to use the product without adequate protection, as seen below. A hardware store dust mask is not a respirator. Sunglasses are not safety glasses. The man holding the bag is not wearing gloves. Where is the eye-wash station? These are not homeowners doing a weekend job. They are handling these materials six days a week.



The Material Safety Data Sheet for the Portland cement being used above states:

### 7.1 Handling

**Precautions for safe handling:** Ensure good ventilation/exhaustion at the workplace. DO NOT BREATHE DUST. In dusty environments, the use of an OSHA, MSHA or NIOSH approved respirator and tight fitting goggles is recommended. Wear appropriate PPE (See section 8). Do not mix with other chemical products, except as indicated by the manufacturer. Do not get in eyes, on skin or clothing. Good housekeeping is important to prevent accumulation of dust.

Watching the operation without intervening is a clean Crux employee.

Your second to last paragraph: “the S.W. Cole personnel shown in the photographs are wearing appropriate Personal Protection Equipment.



Is a Trash Bag is appropriate Personal Protection Equipment when handling bentonite slurry mixed with Accus-Vis,? Bentonite MSDS advises “avoid contact with skin, eyes and clothing...Use appropriate protective clothing...wear safety goggles or glasses to prevent against exposure...Prevent from entering sewers, waterways or low areas.”

MSDS for Accu-Vis states that it is harmful by inhalation and contact with skin.

Paragraph four, page two, you state that the photograph of the unfilled bore hole #8, (which you were unable to identify as yours), indicate that “the conditions around the hole after the drilling operations are complete become normal.” The conditions around Bore hole #8 cannot be fully assessed without testing the soil for contamination. Nor can groundwater contamination be measured by looking at the soil surface. Nor the length of bore hole that may be unfilled. Did the drilling team that did the work leave the first round of (filled) drill holes only partly filled as well, in anticipation of construction? Was the boring method used the same wet-bore method that is being used now?

And we haven't even discussed HolePlug, which can cause silicosis, lung cancer and “become airborne without a visible cloud.”

HolePlug appears to be what is piled around a bore hole drilled recently in Easton. The data sheet for HolePlug states:

- The subsurface environment that the respective bentonite sealing material or grout is to be placed into should always be taken into consideration when selecting the appropriate material to compose the well seal. If the formation water chemistry has a total hardness of greater than or equal to 500 parts per million and/or a chloride content of greater than or equal to 1500 parts per million the use of a bentonite material may not be appropriate for this environment. In the event that questions regarding subsurface environments arise it is always best to consult your local Baroid IDP representative to determine if the Baroid product of choice is appropriate for the given conditions.

I request test results showing the water chemistry results for all sites where HolePlug was used. In addition, the product appears to have been piled at the top of the hole and covered with gravel and hay, rather than inserted in the hole.



“The contractors do clean up the location of each drilling location when they are done, but some material unavoidably remains on the surface.” Dana Bisbee 8/10/16

Below: One of several bore hole sites with dumped drilling slurry in the woods. This dump includes several other piles hidden beneath the undergrowth. (White Mountain National Forest)

NH RSA 147A-2:

III. "Disposal" means the discharge, deposit, incineration, injection, dumping, spilling, leaking or placing of any waste into or onto any land or water so that the waste or any constituent of the waste may enter the environment, be emitted into the air, or be discharged into any waters, including groundwaters.



I watched the team below collect almost all the bentonite slurry for removal after drilling. They seemed at a bit of a loss as to how to bring it back though. Below: Tub of boring slurry in back of truck along with two five gallons buckets of slurry. This appears to be a new method in response to surveillance. Removing all slurry from the site is BMP but I think the transportation method is not.

And where was the slurry disposed of? Truck headed through WMNF.



Mixing tub and five buckets of slurry above stream. No hay, inadequate containment measures. Easton Selectboard requested this location not be bored.

I lay responsibility at the door of management, engineers at the site, executives, lawyers.

The towns deserve better.

The workers deserve better.

Kris Pastoriza, Easton, NH  
August 17<sup>th</sup>, 2016

