Atlantic Bridge Project, Weymouth, Massachusetts
Public Involvement Plan (PIP) Meeting Comments/Responses
PIP Meeting- April 3, 2018
Comment Period Close: April 24, 2018
Comments Responses Date: May 22, 2018
RTN 4-0026230/4-0026243

TRC Environmental Corp. (TRC), on behalf of Algonquin Gas Transmission, LLC (Algonquin) has prepared the following responses to comments received in connection with a Public Involvement Plan (PIP) Meeting held on April 3, 2018. The PIP Meeting concerned a disposal site under the Massachusetts Contingency Plan (MCP), 310 CMR 40.0000, with the Release Tracking Numbers (RTNs) 4-0026230 and 4-0026243 and located at 6 & 50 Bridge Street in Weymouth, Massachusetts (the Disposal Site). The Disposal Site is an approximately 1-acre portion of a larger parcel (Property) where Algonquin has proposed to build and operate a natural gas compressor station (Weymouth Compressor Station).

The Final Public Involvement Plan (January 2018) provided a 20-day comment period after the PIP Meeting and the meeting notice provided notice of the comment deadline of April 24, 2018. No extension of the comment period was requested.

Responses to the comments are based on the information in the MCP reports filed to date. MCP response action reports uploaded to eDEP and filed at the PIP information repository to date include the following:

- Phase I Initial Site Investigation and Tier Classification (dated July 27, 2017)
- Immediate Response Action (IRA) Plan (dated September 15, 2017)
- IRA Status Reports #1 (dated November 22, 2017)
- IRA Status Report #2 (dated May 22, 2017)
- IRA Status Report #3 (dated November 16, 2017)
- Draft Public Involvement Plan (PIP) (dated November 13, 2017)
- Draft Immediate Response Action Completion Report (dated April 3, 2018)
- Draft Permanent Solution with Conditions Statement Report, Volumes I-IV (dated March 28, 2018; including the Draft Activity and Use Limitation)
- April 3, 2018 PIP Meeting slides (dated April 3, 2018)
- Misc BWSC filing information (see eDEP)

Section 1 of this document summarizes the comments, concerns, and questions raised during the April 3, 2018 PIP Meeting and the responses provided during the meeting. The comments (*in italics*) and corresponding responses (in regular font) are grouped into three categories numbered 1 to 3. Within each category, individual comments were assigned a letter. For example, in Category 2 (Concerns about Risk), the eight comments were labeled Comments 2a through 2h. The response at the PIP meeting to each comment is summarized directly following the

corresponding comment. Two TRC note takers were present in the audience and compiled the comments and responses.

Section II includes all written comments and quotes directly from the body of the email and/or comment attached to the email. Each comment received was assigned a number, and if multiple comments were contained within that email, the individual comments were assigned letters. For example, Commenter 4 provided three comments which are designated Comments 7a through 7c in Section II. The response to each comment is provided directly following the comment.

In cases of similar comments, a reference to an earlier comment response has been provided, where applicable. Comments not pertinent to the MCP process or regulations were included and noted.

TRC has not included the identity of the commenters because several attendees at the PIP Meeting did not wish to provide a name for the sign-in list. TRC has maintained a list of the commenters and contact information.

I. Concerns Posed During the April 3, 2018 PIP Meeting

1. Concerns about Conflict of Interest

1a. Several commenters expressed their opinion that TRC and TRC staff have a conflict of interest in working as the LSP for Algonquin under the Massachusetts privatized system. Commenters expressed a need for an "independent" LSP.

Response: By design of the Massachusetts Waste Site Cleanup Program under the MCP, and in keeping with the requirements of the Board of Registration of Hazardous Waste Site Cleanup Professionals, environmental consulting firms and LSPs are contracted by Potentially Responsible Parties (PRPs) to provide environmental assessments, remedial services and compliance opinions. Under that program, consulting firms, LSPs and other staff providing professional services to a PRP are not considered to have a conflict of interest due to the contractual relationship.

1b. Commenters questioned the ability of TRC staff to work with each other and produce independent conclusions on data.

Response: TRC's staff professionals are independently qualified to work on the project and make recommendations about future Property and Disposal Site use, based on their expertise, education, and experience.

2. Concerns about Risk

2a. The public asked TRC to clarify at what point arsenic leaching from coal becomes a risk concern.

Response: Arsenic readily adsorbs to soil and has low leachability. Because of this, arsenic does not readily migrate from soil into groundwater. The fill at the Property was placed decades ago, so most leaching into groundwater, if any, would have occurred long ago.

2b. One commenter expressed concern about risks to wildlife in the river and estuary.

Response: The groundwater data from the Property show chemicals of concern are at levels well below applicable standards that were developed to be protective of wildlife in surface water bodies. Adverse effects to aquatic wildlife are not expected.

2c. The public expressed concerns over the risk to Weymouth and adjacent towns if dust is not managed properly during construction activities. Commenters asked TRC to

describe typical types of dust management techniques at disposal sites with historic fill.

Response: Soil management is based on the types of construction activities proposed and potential receptors. Soil management could include perimeter monitoring, wetting of soil to prevent dust, management of soil leaving the property, and protecting stockpiles of excavated material (e.g., utilizing hay bales, installing plastic covers, staking of the base of soil piles and utilizing silt fences, etc.) from exposure to extreme weather conditions.

2d. *The public expressed concern about contamination on adjacent properties which were not included in the risk assessment.*

Response: TRC used soil borings and monitoring wells to delineate the boundary of the LNAPL/petroleum contamination at the Disposal Site. If contamination associated with the known release condition or a new release condition is identified on adjacent properties during future work, generally construction will stop until conditions at the Disposal Site can be assessed to determine if there is a relationship.

2e. *The public asked for clarification about why access to the property is currently restricted if there is no risk.*

Response: The Historic Fill-related contamination does not currently pose a risk because the fence around the property prevents people from entering the property and becoming exposed.

2f. *The public expressed concern over assumptions made in risk calculations, such as air quality data, historic soil, exposure levels and types of contaminants considered in the risk assessment. Commenters asked for a more holistic view of the risk assessment.*

Response: The risk assessment evaluated petroleum. Historic fill is assumed to pose a risk and will be managed under Conditions described in the Permanent Solution with Conditions Statement Report. Activities that disturb the Historic Fill, such as construction, will take into account the nearest receptors when considering management options.

2g. *One commenter inquired about where to find the actual numbers used in the risk assessment.*

Response: The risk assessment, including the numbers used in calculations, are in the Draft Permanent Solution with Conditions Statement Report.

2h. The public requested the land to remain undeveloped in order to prevent any potential contamination or human health risks in Weymouth or neighboring towns.

Response: The Draft Permanent Solution with Conditions Statement Report concludes that it is appropriate to continue industrial uses on the Disposal Site and at the Property as long as care is taken to prevent future exposure and work is performed under guidelines provided in the Soil and Groundwater/LNAPL Management Plans and the Activity and Use Limitation (AUL).

3. General Questions and Clarifications

3a. One commenter asked if TRC has filmed any work that's been done at the site.

Response: TRC has not filmed work, but there were many photographs taken. Some were included in the Draft Permanent Solution with Conditions Statement Report.

3b. The public asked TRC to clarify the boundaries of the proposed Activity and Use Limitation (AUL) boundary, and the amount of risk immediately outside of the AUL boundary.

Response: TRC clarified that the AUL is applicable to LNAPL 10 feet below ground within the green boundary shown on the April 3, 2018 PIP Meeting Slide 21, and does not include restrictions on the nearby King's Cove or Lovell's Grove Conservation Areas. Based on the investigation, LNAPL is not present outside of the AUL boundary.

3c. The public asked TRC to describe the dust management plan and the parties responsible for dust management.

Response: TRC clarified that dust management during construction is the responsibility of the construction company so as to address dust issues that may arise from job-specific construction tasks. TRC's role in dust management is to establish conditions for regulatory closure, which include preparation of a dust management plan before initiating work at the Disposal Site and Property.

3d. The public claimed to have observed flooding or full saturation of property, and questioned if the property would be filled in to raise the existing grade of the property.

Response: It is TRC's understanding that portions of the Property will be elevated, which will have the additional benefit of creating a larger barrier between the ground surface and the LNAPL and contaminated Historic Fill material.

3e. One commenter asked if TRC was responsible for Coastal Zone Management.

Response: TRC's role in the PIP process is to comply with the MCP requirements.

3f. The public was concerned about restricted access to adjacent properties, including the adjacent walk way, Lovell's Grove and the waterfront.

Response: Under current conditions with the fence present to prevent contact with the Historic Fill, the land around the Property is considered to be safe. In the future, only the Disposal Site boundary will have an Activity and Use Limitation (AUL). Access to nearby public recreational areas will not be restricted due to the AUL.

3g. A commenter asked for clarification about how TRC determines the fate and transport of contaminants at the property, including how TRC could determine if the source of contamination at the downgradient MWRA site was the Site.

Response: The borings and monitoring wells in between the Disposal Site and the area of the MWRA Utility Release Abatement Measure (URAM) do not indicate petroleum contamination in the area between the two properties.

3h. The public asked TRC to expand on the options listed in the cost-benefit evaluation portion of the Draft Permanent Solution with Conditions Report, and asked TRC to explore all possibilities for LNAPL removal before building on the property.

Response: Excavation and LNAPL removal would be excessively expensive and would expose the contamination that is deep below the ground surface. Oil removal from the wells was not considered to be feasible due to the area of LNAPL in the soil at depth and the significantly viscous nature of the oil. Further detailed information is included in the Draft PSCS report.

3i. One commenter asked for clarification about where the future pipeline would be located in relation to the AUL and Site boundaries.

Response: TRC has reviewed proposed plans for future piping. The planned piping runs are located above the depth of the LNAPL containing soil layer, which is 10 feet below current grade. The AUL boundary is where LNAPL contamination was identified.

3j. One commenter asked for clarification on what constitutes as historic fill.

Response: MassDEP's Historic Fill/Anthropogenic Background Technical Update and the Massachusetts Contingency Plan define Historic Fill. Some examples include dredging spoils, cinders, ash, clinkers, polycyclic aromatic hydrocarbons, and coal

ash. The use of the Historic Fill exemption has been in existence since 1993 when the Massachusetts Contingency Plan was re-written.

3k. *One commenter asked for clarification on the types of soil shown on Slide 20 of the April 3, 2018 PIP Meeting Presentation.*

Response: The pink color on the Slide identified Historic Fill containing more sand, while the grey color identified Historic Fill containing more ash. Essentially the subsurface soils all consist of Historic Fill.

3l. One commenter stated that land uses must be mutually agreeable by town and companies.

Response: Comment noted.

3m. One commenter could not find field notes for the soil borings performed by GZA in the Draft Permanent Solution with Conditions Report.

Response: Borings logs are located in the appendices to the Draft Permanent Solution with Conditions Statement Report.

3n. One commenter stated the opinion that oil contamination at the Site disqualifies the classification of historic fill.

Response: Based on the information presented at the PIP meeting and in the Draft PSCS, the Property and surrounding area were filled in 1910-1920 time period. The placement of the Historic Fill predates the oil release associated with the Disposal Site. The Historic Fill exemption applies to the portion of the Property where oil is not located.

II. Email Comments and Questions

4a. I am commenting on the following: Immediate Response Action Report, draft Action and use Limitation Report, Permanent solution with Condition Report. Why are you working on this project when you are also working for Algonquin? We need an independent LSP.

Response: Work on this Disposal Site by the LSP-of-Record does not present a conflict of interest. As you may be aware, on November 30, 2017 and January 2, 2018, the Board of Registration of Hazardous Waste Site Cleanup Professionals ("LSP Board") received three written complaints filed against the LSP-of-Record for this Disposal Site. On March 29, 2018, the Professional Conduct Committee of the

LSP Board reviewed redacted copies of the complaints. An Addendum to one of the complaints was reviewed on April 26, 2018. At those meetings, the Board voted that further investigation of these complaints is unnecessary. Accordingly, the Board voted to dismiss the cases without further investigation. The LSP-of-Record will continue to render opinions in matters pertaining to this Disposal Site.

4b. *Why would you allow workers and cars going over the Fore River Bridge to be exposed to contamination whether it is historic or not? Movement of the soil will blow it around and wetting it down will create run off which will also be hazardous.*

Response: A Soil Management Plan will be required when soil disturbance activities are performed at the Property. The Plan will detail the means and methods to prevent dust generation and overland transport (i.e., runoff) to the river, and will vary depending on the types of soil disturbance activities proposed. These soil management activities will protect workers and others in the vicinity of the soil disturbance.

4c. *Why not leave this side undisturbed? No Use - No Risk. Thank you for addressing my comments. I have lived 2 miles from the site for 68 years. I want our air, water and land safe for all humans, animals and plants.*

Response: One goal of the Massachusetts Contingency Plan is to return contaminated properties to beneficial use, following assessment and implementation of appropriate response actions. The investigation and evaluation of the contamination at the Property have indicated that the Property can be returned to beneficial use as long as the restrictions and controls detailed in the Activity and Use Limitation and Permanent Solution Statement with Conditions Report are followed. Adhering to the required restrictions and controls will maintain a Condition of No Significant Risk, as defined by the Massachusetts Contingency Plan, under future activities and uses.

5a. *MCP 310 CMR 40.0006(12) defines Historic fill as follows with an exception highlighted in yellow:*

Historic Fill means Fill Material that based on the weight of evidence and consistent with the Conceptual Site Model: (a) was emplaced before January 1, 1983 (the effective date of MGL c21E; (b) may contain, but is not primarily composed of, construction and demolition debris, reworked soils, dredge spoils, coal, coal ash, wood ash or other solid waste material; (c) was contaminated with metals, hydrocarbons, and/or polycyclic aromatic hydrocarbons prior to emplacement, at concentrations consistent with the pervasive use and release of such materials prior to 1983;(d) does not contain oil or hazardous materials originating from operations or activities at the location of emplacement; (e) is not and does not contain a generated hazardous waste, other than Oil or Waste Oil; (f) does not contain

chemical production waste, manufacturing waste, or waste from processing of metal or mineral ores, residues, slag or tailings; and (g) does not contain waste material disposed in a municipal solid waste dump, burning dump, landfill, waste lagoon or other waste disposal location.

Would this not negate your claim of the coal ash--and therefore the arsenic and heavy metal contamination--as being "historic fill?"

Response: The Property was primarily filled during the timeframe that the Edgar Station was constructed (approximately 1918 to 1925). The historic photographic record does not indicate that the Property underwent significant filling after the Edgar Station was in service, and the fill materials present at the Property are consistent with materials historically used to create upland (dredge spoils, construction debris, coal ash, wood ash, etc.). The area of petroleum impacts (the Disposal Site) was fully evaluated as required by the Massachusetts Contingency Plan.

5b. *From your Appendix H (Activities and Uses Inconsistent with Maintaining No Significant Risk Conditions):*

(iii) Any activity including, but not limited to, excavation, which is likely to disturb light non-aqueous phase liquid (LNAPL) in the smear zone greater than 10 feet below existing grade, unless such activities are conducted in accordance with the Obligations and Conditions in Paragraph 3 of this Notice of Activity and Use Limitation.

And, from Appendix H (Obligations and Conditions):

(i) A minimum depth of ten (10) feet to LNAPL beneath the Portion of the Property must be maintained;

How will you and your employer (Algonquin/Spectra/Enbridge) guarantee this level will be met when running multiple pipelines through this area as noted on our maps (superimposed over your contamination mapping; see attached), before any excavation has begun?

Response: Construction related activities will be conducted in accordance with the site-specific Soil and Groundwater/LNAPL Management Plan for the Property and as required in the AUL. Based on proposed construction and piping runs, the piping will be at depths above the LNAPL area, which is 10 feet below current grade.

5c. *How will you insure that no migration of the oil will happen due to excavation or vibration of an operating compressor? (Maps are scan02 and scan03. 02 is your original map.) Map Scan04 is a modelling using the actual REQUIRED distances*

between buildings from the Global Standards for insurability. In such a scenario, the buildings and pipelines cut deeply into the contaminated area and into the roadway. (fmglobal.com).

Response: See Comment Response #5b.

5d. *From your IRAC:*

LNAPL with micro-scale mobility is predominantly observed in borings located in the area directly beneath or in the immediate vicinity of the approximate location of the former Fuel Oil AST at a depth generally between approximately 10 and 17 feet at seven borings (B-404, B-406, B-407, B-411, B-412, B-413, and B-414) within this depth range.

The results of the LNAPL skimming test at monitoring well MW-414 indicated LNAPL transmissivity of 0.0027 ft2 /day, which is well below the ASTM 2856 criterion for hydraulic or pneumatic recovery of 0.8 ft2/day. LNAPL transmissivity measurements at the Disposal Site supports it is infeasible to initiate LNAPL removal operations, as indicated in the MassDEP LNAPL Policy #WSC-16-450 (MassDEP, 2016). These results, while approximate, along with sock retrieval observation/oil recovery and attempts to pump and bail the LNAPL clearly support the conclusion that LNAPL recovery at the Disposal Site is not feasible.

At six foot depths over approximately one acre of land and with your conclusion that recovery of said LNAPL is not feasible, again, how will you insure that the oil will not travel due to construction excavation and vibration? The usual "we assume" is not good enough.

Response: At this time, the maximum depth of soil excavation is anticipated to be 7 feet below the current grade. Thus, excavation is not anticipated to impact the existing LNAPL footprint.

Vibrations generated during construction activities are expected to be limited to movement of heavy equipment and materials around the Property during construction and a limited amount of compaction around footings. By its nature, the impact of possible vibrations will be temporary (i.e., they will only occur during construction) and would not have a long-term impact on LNAPL mobility. Testing of the LNAPL present at the Disposal Site indicates that the LNAPL is very viscous and sticky. In addition, mobility testing at the Disposal Site, as documented in the Permanent Solution with Conditions Statement report, indicates that the LNAPL is very immobile. Thus, the impact of vibrations during construction on the mobility of LNAPL would be very limited (due to the low mobility of the LNAPL) and temporary.

5e. *Your risk assessment presentation clearly states that if the contaminated area is left alone--fenced in with no pedestrian traffic--that it will pose no health threats. You downplayed the threat of airborne arsenic that will clearly be present with any disruption of the surface soil. The inane suggestion in the Atlantic Bridge EA that arsenic dust will be kept down with the use of sprinklers also does not address the run-off of said sprinklers into the Fore River.*

How will you insure the capture of ALL arsenic that becomes airborne due to your presumed construction?

Response: See Response to Comment #4b.

5f. *As my dad used to say, "Why can't you leave well enough alone?"*

Response: See Response to Comment #5e.

6a. *Throughout the cleanup process of the proposed compressor site, it has been assumed by TRC that this land is owned legally by Algonquin Gas Transmission LLC and legally it is not. A recent Land Court decision has sided with the Town of Weymouth that the land was illegally subdivided by Calpine and then sold to Algonquin. This court decision is important as it questions the entire legality of an MCP process on contested land. ("Calpine and Algonquin are hereby ORDERED to respond promptly to any reasonable request or inquiry of the Chief Examiner of the Land Court in connection with Algonquin Gas Transmission Co., LLC, 18 SBQ 07785 03-001." SO ORDERED. Parties notified Judge: Vhay, Hon. Michael D)*

Question: How can the MCP process go forward when the deed to the land is contested?

Response: TRC and Algonquin do not comment on pending legal matters.

6b. *At the recent PIP meeting on April 3, 2018, you said that it is not feasible for the oil contamination to be removed. This statement is verified/documented by the Weymouth TV cable recording.*

Question: If it is not feasible for the oil to be removed, how is it possible for Alternative 11 on Table 15 (Feasibility Evaluation Alternatives Screening) to list under the Advantages column "Complete removal of LNAPL in a relatively short time period?"

Alternative 11 contradicts your oral statement given on April 3. Is it removable or not? You made the case of whether the oil was removable based on the characteristics of the oil. You described the viscosity as peanut butter-like and claimed this oil does not move. These qualities of the oil were the reasons for your selecting Alternative 12:"does not remediate LNAPL and contaminated soil. This do nothing option is not satisfactory!

The cost of the removal was not emphasized, only the characteristics of the oil. The high cost ($4 million) does not establish Alternative 11 as "not feasible." Enbridge/Algonquin is a multi-billion dollar corporation. No land owner in Massachusetts can get away with leaving oil contamination in the ground and do nothing to remove it! Enbridge should not either.

Response: Section 4.2 of MassDEP's Guidance Document entitled *Light Nonaqueous Phase Liquids (LNAPL) and the MCP: Guidance for Site Assessment and Closure Policy #WSC-16-450* (the LNAPL Guidance) provides the applicable protocol to evaluate the feasibility of removal of micro-scale mobile LNAPL. The feasibility evaluation includes an assessment of both benefits and costs of LNAPL removal. Based on the results of the investigations conducted at the Disposal Site, the only technically practicable approach to removing the LNAPL at the Disposal Site is to excavate the footprint of the LNAPL at the Disposal Site to a depth of approximately 19 feet (Table 10). The cost of this alternative is evaluated in detail in Appendix G.

The benefit of this removal action is very limited because investigations at the Disposal Site indicate that the LNAPL is not macroscale mobile (i.e., the LNAPL footprint is not expanding), dissolved petroleum concentrations in groundwater are below regulatory thresholds that are protective of the environment, and no pathway to potential vapor emissions from the LNAPL is present. Thus, the significant cost does not result in any significant benefit to human health, safety and/or public welfare.

Under these conditions, the LNAPL Guidance indicates that a Permanent Solution with Conditions (which includes an Activity and Use Limitation) are appropriate to close MCP response actions at the Disposal Site without removing LNAPL. This type of regulatory closure is used at sites across the Commonwealth to allow Disposal Site closure without the removal of microscale mobile LNAPL.

6c. *At the April 3 meeting, risk assessment information was presented by Diane Silverman. None of her data included the risk to the drivers of the 36,000 cars a day that cross the Fore River Bridge. When this was brought to her attention, it was stated that Finalized Documents will add those "receptors" into the modelling. This statement is recorded by the Weymouth TV Cable.*

Question: will this be done?

Response: The risk assessment evaluated petroleum-related contamination. The drivers and passengers in the vehicles crossing the bridge were not evaluated in the risk assessment because there is no current exposure to the petroleum located greater than 10 feet below the surface, and more highly exposed future receptors were evaluated for potential petroleum impacts (e.g., workers present at the Disposal Site 5 days per week, 8 hours per day for 27 years). The Soil Management Plan for both the Disposal Site area and the Historic Fill, required for any future soil disturbance activities, will detail the means and methods to be used to protect off-property receptors (including drivers and passengers crossing the bridge) to the petroleum and Historic Fill-related contamination.

6d. *Question: Why does the SCHEMATIC CROSS SECTION (number 19) on the handout label the soil as "Historic Fill" when it is contaminated with LNAPL? The regulation MCP 310 CMR 40.0006 (12) clearly defines soil as historic fill only if it is not contain oil. Clearly this is NOT "historic fill."*

Why is the soil incorrectly labeled "Historic Fill" throughout the handout? Why was this distinction not made to change a previous "historic fill" category when the soil later becomes contaminated with oil? This is an important distinction and should have been stated. As you well know, the state regulations governing these different categories differ greatly.

Response: The oil was released into Historic Fill. The contaminants associated with the Historic Fill were largely excluded from the risk assessment, while those that could be associated with the petroleum release (e.g., PAHs within the Disposal Site boundary) were retained and evaluated in the risk assessment. Because the release was of oil, only the oil-related contamination is required to be evaluated in the risk assessment while the Historic Fill-related contaminants were excluded as anthropogenic background.

6e. *This same omission was made by Kelley Race at the Weymouth Conservation Commission hearing in 2016.*

Question: Why?

Response: See Comment Response #6d.

7a. *TRC concludes that the old fuel oil on the contaminated site is safe as long as it is not disturbed. And yet, the very construction of the methane compressor will dig down into and disturb the area of the fuel oil contamination and historic fill contamination. How do you explain this contradiction and resolve this problem?*

Response: At this time, the maximum depth of soil excavation is anticipated to be 7 feet below the current grade. Thus, excavation is not anticipated to impact the existing LNAPL within the Disposal Site. A Soil Management Plan will be required any time soil disturbance activities are performed at the Property. The Plan will detail the means and methods to be used when work is performed at the Property, and will vary depending on the types of soil disturbance activities proposed. These soil management activities will protect workers and others in the area of the soil disturbance.

7b. *The historic fill that lies above the oil is also contaminated with arsenic and other toxic metals, and yet TRC says this is exempted under the Massachusetts Contingency Plan. How is this so? If the historic fill contains oil, which it must certainly do, it may no longer be considered historic fill, per DEP regulations, and may not be exempted from the MCP. How then can TRC claim that the historic fill is exempt from the MCP?*

Response: The Historic Fill exemption does not apply to the petroleum-related contamination within the Disposal Site boundary.

7c. *TRC says that recreational usage of the area will be prohibited in the future. I am concerned that TRC and the Activity and Usage Limitation boundary that TRC proposed by TRC could be extended to the point where it rules out future use of the existing recreational pathway and park area just outside the methane compressor site and adjacent to the MWRA pumping station. Restrictions on or elimination of the walkway and park, or access to it, would violate the conditions of access stipulated by Coastal Zone Management when the walkway and park were constructed.*

Response: The Activity and Use Limitation will only apply to the land within the Disposal Site boundary and only to the LNAPL-impacted layer located greater than 10 feet below existing ground surface. The extent of the LNAPL has been defined. Therefore, the Activity and Use Limitation boundary will not expand.

8a. *Upon reviewing the documents I have 4 comments for your review.*

1) On page 31 and 37 in Appendix F-3 Trench Air there is a category titled "Henry's Law Constant" Please define this.

Response: Put simply, a Henry's Law Constant is a numerical value that describes how easily a specific chemical will migrate to air from water. The higher the Henry's Law Constant, the more likely it is that a chemical will be found in air rather than water. Volatile chemicals tend to have the highest Henry's Law Constants, and

therefore, would tend to impact the air within a construction trench to the greatest degree.

8b. *2) In the presentation on April 3, Diane Silverman stated that if there is no use of the land there is no risk. How then can TRC logically conclude there would be no risk to this project which would disturb the area?*

Response: Under current conditions, there is no exposure (the Disposal Site and Property are fenced, vegetated, not in active use, and the petroleum contamination is located greater than 10 feet below the surface) and therefore, the risk is acceptable. Under future conditions, assuming the Disposal Site is used for commercial purposes, the risk is also acceptable. LNAPL and Historic Fill-related contamination were not evaluated in the risk assessment, however, there will be an Activity and Use Limitation and Conditions attached to the Disposal Site and Property to maintain a Condition of No Significant Risk, as defined by the Massachusetts Contingency Plan, during any future development activities.

8c. *3) In the presentation it was stated that the "fill material must be managed" Who exactly would do this? and who would be paying for this service?*

Response: It is the responsibility of the property owner to abide by the Conditions for Historic Fill management, as detailed in the Permanent Solution with Conditions Statement Report.

8d. *4) This entire process displays multiple conflicts of interest. The PTS laboratories which were used provide" core analysis for domestic and international energy companies since 1965" according to the company's web site. Spectra hires TRC which consults with PTS. Where is the independence of this?*

Response: PTS Laboratories is an independent laboratory which provides analytical services to many different entities. They were selected to provide the specific analysis requested based on their technical expertise associated with LNAPL. In addition, see Response Comment #4a.

9a. Over the years I have spent a considerable amount of time in and around the Fore River Basin and continue to cross the Fore River Bridge several times a week. I am familiar with the industries in the basin and have concerns for the people who live and work in that densely populated area who are exposed to high levels of contaminants in their environment from those industries present and past. For that reason I attended the Public Involvement Plan hearing on April 3 at the Abigail Adams Middle School. While your presentation was comprehensive and easy to understand given the complexity of information, I am left with several questions concerning the following:

After speaking with a facilities engineer who worked in the 70'S at all Boston Edison power stations, including the Edgar Station in North Weymouth, this engineer questioned the likelihood that there would be #2 oil leaked from the all ***steel*** *tank. Further, he attested to the fact that the oil in the tank in question was #6 oil, which was the typical oil used in electrical power plants, and was the fuel used at the Edgar Station. This #6 oil is known as "heavy, black, residual oil" and is otherwise known in the business as "dirty oil." This #6 oil is considerably more toxic than is #2 oil. No. 6 oil is known to have a high sulfur content. Its only requirement is that it meets the BTU requirements to be sold as fuel. This #6 oil is what's left-over from the refining process and can contain any number of chemical contaminants, but is utilized as long as that oil has heat value No. 6 oil is the consistency of "peanut butter"; # 2 oil, which is home heating oil, is definitely and absolutely NOT the consistency of peanut butter. From this historic, first-hand information recently provided, the oil in question is very likely a deposit of # 6 oil as opposed to # 2 oil as you have reported.*

Further, I am told that over time when the power plant burned coal that ash was dumped in the area in question and beyond.

-- How was your determination made as to the type of oil?

--Where can I see your documentation on the type of oil in question?

--What would be done to mitigate/remove the ash?

Response: The type of oil was determined by means of a petroleum fingerprint analysis that was performed by Alpha Analytical Laboratories of Westborough, MA, a state-certified analytical laboratory. The analysis performed was a Total Petroleum Hydrocarbon Fingerprint analysis using EPA Method SW-846. The results of this analysis were provided to the MassDEP in TRC's Immediate Response Action Plan dated September 15, 2016, which is available online at https://eeaonline.eea.state.ma.us/EEA/FileViewer/Rtn.aspx?rtn=4-0026243. The laboratory result indicated: "Based on the data generated, L1627080-01 contains a mixture of material eluting in the low, mid and high molecular weight ranges of the chromatogram. The mixture is a combination of Diesel Fuel/Fuel Oil #2 and material which is similar to a lubricating, motor or waste oil type product." Analysis of soil and groundwater in and around the Disposal Site was performed for Herbicides, metals, extractable petroleum hydrocarbons and volatile petroleum hydrocarbons. These sampling results were considered in the development of the risk assessment and closure strategy at the Disposal Site.

Mitigation steps to address construction in the Historic Fill are identified in Section 6.0 of the Draft Permanent Solution with Conditions Statement Report.

9b. As the climate warms the oceans also warm causing expansion, thus causing sea levels to rise. Adding to that is melting land ice also causing sea level rise. According to a study released in the proceedings of the National Academy of Sciences in March of 2018, between 2002 and 2006, the Greenland glacier lost 60 cubic miles of ice. Scientific observations continue to show that the Greenland glacier ice- melt is accelerating. According to the latest International Panel on Climate Change Report, sea level rise is expected to be between 52 to 98 centimeters by 2100. With Greenland ice- melt accelerating, outcomes of melt could be even worse. The East Coast will bear the brunt of that melt causing an accelerated rise in sea level to affect the eastern seacoast, thus, the North Weymouth site in question.

--What effect could the potential rise in ground water have on the #6 oil deposit at the North Weymouth site in terms of the environmental and health effects to both humans and sea life?

Response: Based on the planned construction, the portions of the Property will be elevated. Because LNAPL is already in contact with the groundwater and groundwater concentrations are below applicable regulatory standards (i.e., the LNAPL is not impacting the groundwater), a rise in the groundwater will not have any effect on human health or the environment.

9c. Please provide a more complete iteration of the "Remedy for the Disposal Site" other than the few which were mentioned at the hearing?

Response: The requested information is presented in the Permanent Solution with Conditions Statement Report.

9d. Should construction go forward in the area of the leaked, oil did you consider the impact of vibration from either construction equipment or Enbridge's compressor, should it be installed?

Specifically, what would be the effect of these construction disturbances on the contaminated soil and the leaked oil in question?

Response: See Response to Comment #5d.

10a. My name is [redacted] *and I am an abutter to the proposed compressor station construction site. I believe the Disposal Site Risk Assessment Process is significantly flawed! The soil at this site is known to be contaminated by oil, PCB's, heavy metals, volatile organic compounds and arsenic. TRC and Kelly Race worked for Spectra/Enbridge when they downplayed the extent of toxic pollution at the site while attempting to obtain permits from the Weymouth Conservation Commission. They are*

still representing Spectra/Enbridge's interests in the court system against the Weymouth Conservation Commission!! Pretending our environment and the public health and safety are priorities for TRC, Kelly Race or Spectra/Enbridge is laughable! This particular parcel of land should have been designated a Tier 1 vs Tier 2 site and MA DEP should certainly not have awarded the contract of managing the cleanup of this toxic site to the very people working with Spectra/Enbridge and trying to make this project happen come hell or high water!! MA DEP has abdicated it's responsibility to protect the citizens of the commonwealth and our environment by 'privatizing the process' aka not doing their job!! The oil, arsenic, heavy metals and volatile organic compounds were not measured or included in the formula used to determine whether we or our environment will be at risk during construction on this site!!

SERIOUSLY????

This is outrageous that in this day and age... knowing what we know about the serious health risk from toxic contamination being handled improperly...that the citizens are left completely on our own demanding to be protected from corporate greed and arrogant disregard for our safety!! This site should be left undisturbed and evaluated by a company that is not employed by the applicant! Also MA DEP should be on site and at all public meetings!

No Use = No Risk!!

Response: See Responses to Comments #4a and #8b.

11a. *Please find my comments for TRC Project Number 140143 concerning the parcel located at 6 & 50 Bridge Street in Weymouth attached. This is also known as the proposed Weymouth Compressor Station location. I have also included my comments from January. I continue to have even more dire concerns about disturbing the pollution found in the soil at this parcel and adding to the already over-saturated burden happening in the Fore River Basin.*

I have dire concerns about the recommendations in the DRAFT Permanent Solution with Conditions Statement Report and other documents associated with the oil contamination found at 6 & 50 Bridge Street in Weymouth, Massachusetts. l just want to point out that residents who are highly concerned about this land and proposed project had only 21 days to try to digest over 2,100 pages of documents as well as a 900 page Massachusetts Contingency Plan which regulates how this should be done. No average concerned citizen can do this.

Response: The Comment Period provided complied with MassDEP requirements for PIP Sites. As identified in the Draft PIP dated November 2017 and the Final PIP dated January 2018, public comment periods can be extended if requested. No

extension of the Comment Period for the documents discussed at the April 3, 2018 meetings was requested by the public.

11b. The ownership of this parcel is in question as the recent seller, Calpine, sold and illegally subdivided lot to Enbridge. This land court case is currently pending as the Town of Weymouth has filed a petition due to the illegal sale. Even if Enbridge disagrees, contamination was found when Calpine outright owned the land. The transfer should never have even happened before Calpine disclosed the discovery and went through this process.

Response: See Response Comment #6a.

11c. It is recommended that the Activity and Use Limitation (AUL) is preferred remedy for this parcel. This is highly insulting and not what the Town of Weymouth nor it's residents deserve. This is the cheapest alternative that restricts the public's use to a public way. The Town of Weymouth has no report of exactly how much oil was dumped at this location. It is estimated that 1 acre out of only 4 acres is contaminated. 25% of this parcel is contaminated with oil underground with additional contaminates of coal ash, arsenic and others which were not analyzed in these reports.

Response: See Response Comment #4c.

11d. 11d.When the Town of Weymouth working with then Sithe Energy (the power plant), now Calpine, in the late 1990s, the town was awarded certain guarantees for the land in question. For one, the Town was awarded conservation land that directly abuts the property that TRC is recommending to put an AUL on. Secondly, it was decided by the Massachusetts Energy Facilities Siting Board (EFSB) and through a Memorandum of Agreement with Sithe at the time that any future development on the North Parcel MUST by mutually agreeable with the Town of Weymouth. The current proposed use is not mutually agreeable with Weymouth.

Response: The Activity and Use Limitation will only apply to the land within the Disposal Site boundary and only to the LNAPL-impacted layer located greater than 10 feet below existing ground surface. An Activity and Use Limitation will not be placed on land that abuts the Disposal Site. The MCP activities discussed at the meeting and within the MCP documents presented for public comment are associated with the applicable MCP regulations. Other documents (e.g., MOA with another agency or entity) are not applicable to closure of the MCP Disposal Site.

11e. Given the found contamination, as a Town Councilor, representing the people of the surrounding area making the area just limited use isn't a proper solution. This property should not be touched. I also find it extremely frustrating that this contamination was found in Spring of 2016 and was not disclosed to the Weymouth Conservation Commission while they were determining the Wetlands Permit for the

proposed compressor station. This most certainly should have been brought to their attention while this issue was before them. The illegal property transfer between Calpine and Enbridge occurred in December 2016—without any disclosure of the property be contaminated. This never should have happened without full disclosure to the public about the contaminated land.

Response: See Response Comment #4c and #6a.

11f. Lastly, I want to know why no one is being held accountable for the contamination under MGL Chapter 21E. If the property owner is not willing to spend the money to properly dispose of all of the contamination, clean the parcel and mitigate with the Town of Weymouth, there should be no development on the land. This area has more of its fair share of pollution industries and the town and its people have worked with them. But it has gotten to the point where we are being taken advantage of.

Response: See Response Comment #4c.

11g. I am not in support of the recommendation of the AUL and request a further study to show all environmental impacts of the Fore River Basin. At the very least, there should be no recommendation by TRC to the land use until Governor Baker's ordered Health Impact Assessment (HIA) for the area is completed.

Response: See Response Comment #4c.

12a. I am writing to share my continuing concerns about the proposed Atlantic Bridge Project site, RTN 4-26230/4-26243. The PIP process has done nothing to alleviate those concerns, and in fact, has made me even more alarmed. The results of ground borings confirmed significant contamination of the site, of which residents were already aware. Carinogens and neurotoxins are present in the soil in large quantities, and disturbing the soil with construction, regardless of precautions taken, is likely to release these into both air and water, endangering the health and safety of people in the surrounding community and our wildlife. Based on what we now know about contaminants at this parcel, this site should be Superfund site, not a construction site.

Response: See Response to Comment #4b.

12b. I am also concerned by the attempt to dismiss these pollutants as not requiring remediation because they are "historical," left from the coal facility at the location decades ago. They are no less toxic for having been there a long time. Even if a legal loophole allows ignoring the coal ash and arsenic, the oil leaked from a storage tank on the site is more recent, and should not technically fall under the "historical" designation.

Response: The petroleum-related contamination has been fully investigated and evaluated per Massachusetts Contingency Plan regulations. The Historic Fill has not been dismissed, but will be appropriately managed through the use of Conditions established for the Property, as required by the Massachusetts Contingency Plan.

12c. In spite of finding oil in the groundwater, you assure us that our water isn't contaminated because oil and water don't mix well. With all due respect, we know that oil and water don't mix, but when there is oil floating on the water, that water is contaminated, and toxic to both humans, pets, and wildlife, such as the alewives who migrate up the Fore River. Disturbing the site also clearly risks the migration of that oil into the harbor if it is floating on water now. Your assurances that the location of the oil is stable are unconvincing by your own description.

Response: The site assessment evaluated mobility of the LNAPL and found it is immobile and will not migrate to the river. In addition, the LNAPL will not be disturbed during construction. The concentrations of dissolved contaminants in groundwater are below standards developed by MassDEP for the protection of wildlife. Although the groundwater may migrate to the river, it will not pose a risk to humans or wildlife using that natural resource.

12d. Finally, as you are aware, the assumption in your report that Algonquin owns the parcel in question has been successfully challenged in court because the lot was illegally subdivided by Calpine.

Response: See Response Comment #6a

13a. As part of the PIP process I have a comment regarding the Final Draft PSCS dated 3/28/18. My comment is below.

On page 53 you state that "The LNAPL with micro-scale mobility was observed in a limited number of monitoring wells, fluctuates in thickness, and has not been observed in nearby monitoring wells located beyond the limit of LNAPL product observed in borings, which provides a strong line of evidence that LNAPL exhibits micro-scale mobility but not macroscale mobility."

I have underlined the part of the sentence I have an issue with. Looking at Figure 1, monitoring wells MW-406, MW-407, MW-14, and boring B-319 all contained LNAPL. In particular, MW-407 was found to contain LNAPL on numerous occasions with the greatest amount (0.24 ft) noted on the last gauging event on 10/6/17. This well is located approximately 15' from the edge of the Disposal Site Boundary and there are no other borings or wells between MW-407 and the boundary. Therefore, it is not possible for TRC to claim that LNAPL "has not been observed in nearby monitoring wells located beyond the limit of LNAPL product observed in borings"

since you did not look beyond (west of) MW-407. You also state on page 26 that "LNAPL is not observed in the outer perimeter monitoring wells, which is consistent with LNAPL that does not exhibit macro-scale mobility." This is disproved by the presence of LNAPL in perimeter well MW--407.

While these statements could be corrected in the text to avoid the contradiction there are bigger issues that come to light. 1) Because you did not investigate beyond MW-407 and because groundwater flow potentially flows to the west (pg 18), the Disposal Site Boundary that you identify in Figure 1 is incomplete as you have not proven that LNAPL and contamination does not exist beyond MW-407. 2) LNAPL with micro-scale mobility is defined in the MCP as a NAPL with a footprint that is not expanding. You cannot conclude this from your investigation as you have not fully delineated the LNAPL in the vicinity of MW-407. 3) The MCP states that a Risk Characterization can be completed once the extent of the release has been identified. Since this has not been identified a Risk Characterization cannot be completed. 4) How can you accurately restrict an area of a site as part of an AUL if you do not know the extents of the contamination? The LNAPL very well could extend beyond the AUL boundary shown in Figure 8.

I hope it is clear from my comments above that I strongly feel that TRC did not investigate the area around MW-407 enough and therefore cannot submit an AUL at this time as it plans on doing. Please note that my comments above are regarding the Final Draft PSCS. There are many similar statements made by TRC about the LNAPL in the Draft IRAC dated 4/3/18 that are not accurate based on the lack of data around MW-407.

Response: Measurable LNAPL has been observed on the southwest edge of the Disposal Site at monitoring wells MW-406 and MW-407. Boring logs for these two wells indicate that the LNAPL in these wells is in the same formation (i.e., fine to medium sand). Depths to product, depths to water and groundwater gradients are very similar for both wells. A monitoring well is located outside of LNAPL extent at MW-406 (i.e., MW-417). No LNAPL has been observed in that well. Thus, although no monitoring well or soil boring is present further to the west of MW-407, the observations made in the MW-406/MW-417 well pair, in addition to the fact that measurements of LNAPL transport parameters indicate that LNAPL at the Disposal Site is highly immobile, indicate that it is highly unlikely that LNAPL extends a significant distance beyond MW-407. As discussed in the PSCS, at the PIP Meeting on April 3, 2018 and in this response to comments, the LNAPL was identified as highly viscous oil with microscale mobility characteristics (per MassDEP Guidelines, as cited above in Response Comment #6b). The LNAPL was further analyzed and evaluated by a laboratory that specializes in LNAPL parameters and characteristics.