



**DRAFT PUBLIC INVOLVEMENT PLAN**  
Barnstable County Fire Training Academy Site  
155 South Flint Rock Road  
Hyannis, Massachusetts  
DEP Release Tracking No. 4-26179

Prepared For:

Barnstable County  
Barnstable, Massachusetts  
3195 Main Street  
Barnstable, Massachusetts

Submitted To [Final]:

Massachusetts Department of Environmental Protection  
Bureau of Waste Site Cleanup  
Southeast Regional Office  
20 Riverside Drive  
Lakeville, MA 02347

May 2019

Table of Contents

<b>1.0</b>	<b>INTRODUCTION</b>	<b>4</b>
1.1	Releases at the Site	5
1.2	MCP Response Actions and Pubic Involvement	6
1.3	Site Contacts	6
<b>2.0</b>	<b>SITE BACKGROUND</b>	<b>7</b>
2.1	Property Description and History	7
2.2	Disposal Site Description	7
2.3	Vicinity Description	8
2.4	Natural Resources	8
2.5	MassDEP Method 1 Categories	9
2.5.1	Ground Water Category	9
2.5.2	Soil Category	9
2.6	RTN 4-26179 PFAS Release History and Regulatory Status	10
2.6.1	Groundwater Pump and Treat System	12
2.7	Previously Completed IRA Activities	12
2.8	Phase I Initial Site Investigation	13
2.9	IRA Plan Modification	14
2.11	Ground Water Analytical Results	15
2.11	Flintrock Pond Sampling Assessment	17
<b>3.0</b>	<b>ADDRESSING PUBLIC CONCERNS</b>	<b>18</b>
<b>4.0</b>	<b>PUBLIC INVOLVEMENT ACTIVITIES</b>	<b>19</b>
4.1	Highlights From Interviews with Petitioners, Town Officials and Public Groups	19
4.2	Informing The Public	20
4.3	Notification to Local Officials, the Public and Interested Parties of Major Milestones, Reports, and Activities	21
<b>5.0</b>	<b>SCHEDULE OF PUBLIC INVOLVEMENT ACTIVITIES</b>	<b>23</b>
<b>6.0</b>	<b>RESPONSIBILITY FOR IMPLEMENTING THE PUBLIC INVOLVEMENT PLAN</b>	<b>23</b>
<b>7.0</b>	<b>REVISIONS TO THIS PLAN</b>	<b>23</b>

**FIGURES**

Figure 1 - Site Location (U.S.G.S. Topographic Quadrangle)

Figure 2A - Site Plan

Figure 2B - Site Plan Detail - BCFRTA Facility

Figure 3 - MassDEP Priority Resource Map

**EXHIBIT 1 - GENERAL SCHEDULE FOR PUBLIC INVOLVMENT ACTIVITIES AT THE FTA SITE**

**APPENDICES:**

- A. Copies of Petition and Public Notice documents
- B. Copy of BWSC 126 Miscellaneous Document Transmittal Form [with final Plan]

DRAFT

## 1.0 INTRODUCTION

Nover-Armstrong, a Division of BETA Group Inc. (BETA) has prepared this Draft Public Involvement Plan (Draft Plan) on behalf of Barnstable County, the current owner of the property listed as 155 South Flint Rock Road, Hyannis, Massachusetts, the Barnstable County Fire-Rescue Training Academy (the Facility or FTA). The Facility has been designated a Disposal Site as defined by the Massachusetts Contingency Plan (MCP), 310 CMR 40.0000. The Massachusetts Department of Environmental Protection (MassDEP) Bureau of Waste Site Cleanup (BWSC) has assigned Release Tracking Number (RTN) 4-26179 to the historic release of per- and polyfluoroalkyl substances (PFAS), including perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA), which have been identified at the FTA. PFAS have been identified in soil and groundwater at the Facility and in adjacent areas, in particular in groundwater to the east, southeast of the Facility and in adjacent surface waters and sediment.

In January 2019, a petition from a group of residents of Barnstable and Hyannis, MA was received requesting that the Site be designated a Public Involvement Plan (PIP) Site. In response to the request from the local petitioners, Barnstable County designated the Site as a PIP site and has begun PIP activities in accordance with 310 CMR 40.01404. Notification of the Site Designation and the initial public meeting was provided to all petitioners and the Town of Barnstable officials in writing in February 2019 and April 2019, respectively, and notification of the public meeting was published in the Cape Cod Times on April 18, 2019. Copies of these notifications are included in Appendix A. This Draft Public Involvement Plan (PIP) has been prepared for presentation at the May 2, 2019 public meeting. In preparation of the Draft Plan, BETA has conducted interviews with several petitioners interested in the Site, with town officials and with other local organizations.

This Public Involvement Plan has been prepared in draft form for review by the public and revision, as appropriate, based on public comments submitted.

This Draft Plan is organized into 7 sections.

- Section 1 contains introductory material.
- Section 2 contains background information on the site, including site, environmental assessment, and public involvement histories.
- Section 3 explains how the remedial response action process will attempt to address community concerns.
- Section 4 explains the proposed public involvement activities.
- Section 5 outlines a schedule for public involvement activities.
- Section 6 outlines the roles and responsibilities of those involved in implementing the Public Involvement Plan. Section 7 describes how the Plan will be revised in the future.

This Draft Plan will be presented by Barnstable County and its representatives at a public meeting on May 2, 2019 in the Town Hall Hearing Room, Barnstable Town Hall, 367 Main St., Hyannis, MA. Comments will be received by the County on the Draft Plan for a minimum of 20 days after the distribution of this Draft Plan per 310 CMR 40.1405(5)(b). Public comments (as

they relate to the response actions implemented for the release of PFAS at the Site) will be incorporated into the final Plan. Written responses to the comments will be prepared; the comments and the written responses will be presented in a separate document following the public comment period, a copy of which will be placed in the public repository for the project.

### **1.1 Releases at the Site**

The FTA has historically been the subject of four MassDEP RTNs: 4-190, 4-11707, 4-20021, and 4-26179. This PIP is for RTN 4-26179 only. The other three RTNs are being managed separately or have achieved closure.

MassDEP assigned RTN 4-26179 in August 2016 to the Site in response to the detection of elevated concentrations of per- and polyfluoroalkyl substances (PFAS), including perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA), in soil and groundwater at the Facility and in adjacent areas, in particular to the east, southeast of the facility. The release of PFAS is related to the historic use of fire-fighting foams and attributed to training activities at the Barnstable County Fire and Rescue Training Academy (FTA). Response actions related to this release have been ongoing since 2013. On behalf of Barnstable County, an Immediate Response Action (IRA) Plan was submitted to MassDEP by the Cape Cod Commission in September 2016 to address the PFOS/PFOA impacts including the excavation and removal of 200 cubic yards of soils from the "Hot Spot." Subsequent monthly IRA Status and Remedial Monitoring Reports (RMRs) were submitted to MassDEP by the Cape Cod Commission until February 2018. The RMRs address the County's Groundwater Pump and Treat System.

In April 2018, Nover-Armstrong Associates Inc. (now BETA) was contracted with Barnstable County to provide LSP and environmental consulting services at the FTA. In May 2018, a Phase I Initial Site Investigation (ISI) and Tier Classification was completed by Nover-Armstrong and submitted to MassDEP for the RTN 4-26179. The Phase I ISI documented the Site data showing that the primary contaminants of concern are PFOS and PFOA and that migration through groundwater in a southeasterly direction from the FTA Site to the Mary Dunn well field is occurring. The Cape Cod Commission previously identified a plume of the highest concentrations approximately 200 feet wide. The average PFOS concentration in groundwater beneath a broad portion of the Site downgradient of the Hot Spot area was reported in the IRA Plan to be approximately 3.0 µg/L.

Based on the completed Phase I Initial Site Investigation, Nover-Armstrong determined that continuation of the IRA activities and additional assessment and remedial Response Actions are warranted at the Disposal Site. A Phase II Conceptual Scope of Work (SOW) was submitted with the Phase I ISI outlining the scope, nature of investigation, and sample programs proposed to characterize the risk of harm posed to health, safety, public welfare, and the environment (for regulatory closure). The Phase II SOW proposes additional remedial and/or response actions such as continued monitoring of the Site groundwater conditions, potential soil removal or modifications to the existing groundwater treatment system to be implemented in the near future. A Tier Classification submittal was filed with MassDEP concurrently with the Phase I Report. The Site was classified as Tier I based on one or more IRA remedial actions being required to continue. As a result of the present Imminent Hazard condition, BETA continues to submit monthly IRA Status and RMRs reports (on behalf of Barnstable County) to MassDEP

which focus on the groundwater pumping and treatment system at the Site. In addition, each status report describes the ongoing response actions performed at the Site during the reporting period.

## **1.2 MCP Response Actions and Public Involvement**

As noted, the 155 South Flint Rock Road (FTA) Release Site has been classified as a Tier I site under the MCP. Under the MCP, DEP has assigned responsibility for conducting both technical and public involvement activities at Tier I sites to the owner of the Site and to a Licensed Site Professional (LSP) engaged by the owner to conduct and oversee response actions under the MCP. The LSP also provides LSP Opinions regarding the assessment, remediation and closure of disposal sites. Tier I sites are subject to all of the requirements in Massachusetts General Laws (M.G.L.) c. 21E and the MCP, including public involvement. DEP retains the authority to ensure that remedial response actions and public involvement activities are conducted in accordance with state law and regulations. Remedial response actions include determining the nature, source and extent of the contamination; risk posed by the site; whether cleanup actions are necessary, and if necessary, determining and implementing the most appropriate actions. In addition, the remedial response action process provides opportunities for public involvement throughout the process.

Public involvement during the remedial response action process is undertaken to ensure that the public is both informed of and involved in planning for remedial response actions. For disposal sites at which the public indicates interest in becoming involved in this process, the site is designated as a PIP site (following Tier Classification), and the MCP requires the preparation of a plan which identifies specific activities that will be undertaken to address public concerns to the extent possible. As noted, due to public petition, dated January 16, 2019, the Site has been designated a PIP site, pursuant to the MCP.

## **1.3 Site Contacts**

The Site owner (PRP) assuming responsibility for this release is Barnstable County, acting through the County Commissioners. The contact for the Site is:

Jack Yunits, County Administrator  
Barnstable County  
3195 Main Street  
Barnstable, MA 02630

Telephone: 508-375-6643  
Email: [jack.yunits@barnstablecounty.org](mailto:jack.yunits@barnstablecounty.org)

The Licensed Site Professional overseeing response actions for this release is:

Roger P. Thibault, L.S.P. #1443  
Nover-Armstrong, a Division of BETA Group, Inc.  
701 George Washington Highway  
Lincoln, Rhode Island 02865

Telephone: 401.333.2382  
Email: [rthibault@beta-inc.com](mailto:rthibault@beta-inc.com)

## 2.0 SITE BACKGROUND

### 2.1 Property Description and History

The Barnstable County Fire - Rescue Training Academy (FTA) facility is located on South Flint Rock Road in the Town of Barnstable. It appears on the United States Geological Survey (USGS) Topographic Quadrangle – Hyannis, Massachusetts. See **Figure 1** - USGS Topographic Quadrangle. The Site is currently zoned for industrial use.

The coordinates for the Site are shown below. For simplicity, these coordinates are for the southerly end of the FTA.

<u>Latitude/Longitude</u>	Latitude:	41° 40' 41.53"
	Longitude:	70° 17' 7.82"
<u>UTM Coordinates</u>	Easting:	393,002
	Northing:	4,614,847

The 6.2 acre FTA facility is improved by four primary buildings: an auxiliary fire station and training building (with two classrooms, administrative offices, and two apparatus bays), a classroom building, a smokehouse, and a burn building (for live fire suppression training), along with several sheds and outbuildings used for fire and rescue training activities and equipment storage. Refer to **Figure 2B**. The FTA facility is secured by chain link fencing and a locked gate.

### 2.2 Owner/Operator & Operations History

The FTA facility is listed on the Town of Barnstable Assessor's on-line records as Map 313, Lot 007. The current owner-of-record is the County of Barnstable, who acquired the facility from the Town of Barnstable in 1983 by deed recorded June 3, 1983, Barnstable Registry of Deeds, Book 3759, Page 39. Utilities servicing the FTA include municipal water, a private underground septic system, and aboveground electricity and telecommunications. The FTA was first constructed on land donated to the Town of Barnstable by the Cobb Trust in 1955. The FTA has been used for public safety training since the 1950's. The FTA has been used for public safety training by fire departments and fire districts from throughout Barnstable County, fire departments outside of Barnstable County, and other public and private institutions.

### 2.2 Disposal Site Description

At this time, the preliminary MCP Disposal Site (the Site) associated with RTN 4-26179 is considered to comprise approximately the majority of the FTA facility, the westerly adjacent Flintrock Pond, and a large woodland area to the southeast of the FTA facility, approaching Mary Dunn Pond. The overall Site and vicinity are shown on **Figure 2A**, attached.

### **2.3 Vicinity Description**

Land surrounding the facility is primarily undeveloped, wooded land within a public water supply protection area. Flintrock Pond occupies approximately 6 acres directly to the west of the facility. Several public water supply wells and their related facilities are located to the east, southeast, and west of the FTA, including the Town of Barnstable Mary Dunn wells 1, 2 and 3 located to the southeast and east. The southeastern portion of the Site includes land owned by the Town of Barnstable and NSTAR Electric. It is crossed by two electric power transmission lines running north to south. Private industrial properties and related structures are located approximately 500 to 1,000 feet south of the Site. The Barnstable Municipal Airport is located to the west (runway 15 – 33) and south of the Site and the FTA. The nearest residential properties are located approximately ¼ mile to the north of the Site. According to 2010 U.S. Census data, the residential population located within a ½ mile radius of the Site is less than 150 people. There are no known Institutions located within 500 feet of the Site. The facility currently has approximately 2 to 5 workers who may be considered full-time. During training activities, 20 to 30 fire fighters or rescue personnel and training personnel may temporarily use the facility. The municipal well pumping facilities are not staffed full-time.

### **2.4 Natural Resources**

Massachusetts GIS Priority Resources (21E) mapping indicates that the Site is located within a Zone II Public Water Supply Protection Area and a Medium-Yield Sole Source Aquifer. The FTA is situated to the west and most likely upgradient of the Mary Dunn public water supply wells 1, 2, and 3 under pumping conditions. Mary Dunn Wells 1, 2, and 3 are located within the preliminary Disposal Site boundary at this time due to the detections of PFAS in the groundwater at those wells. There are no known private potable water wells located within 500 feet of the Site. See **Figure 3** – Phase I Site Assessment Map.

Mary Dunn Well 3 (MD-3), which is the nearest public water supply well to the facility, has been documented to pump at an average rate of 380 to 450 gallons per minute (gpm). MD-3 has a 10 foot screen, is 57 feet deep, and penetrates approximately 35 feet of the aquifer. Mary Dunn Wells 1 and 2 (MD-1 and MD-2) are located approximately 1600 feet and 1800 feet, respectively, southwest of the FTA. These wells have been reported to have been pumped at rates of 400 gpm, each. Airport Well 1 (status unknown) is located further to the southeast of the Site, south of Mary Dunn Pond. Two other public water supply wells, identified as Barnstable Fire District (BFD)-2 and BFD-5, are located to the west and most likely upgradient of the Site.

According to the USGS Topographic Quadrangle – Hyannis, Massachusetts, elevations at the Site are approximately 30 to 50 feet above mean sea level (MSL). Topography of the Site can be categorized as generally flat with slight to moderate slopes downward to the west and southeast, toward Flintrock Pond and Mary Dunn Pond, respectively.

The nearest surface water body to the Site is Flintrock Pond, located adjacent to the FTA. Flintrock Pond is located within the preliminary MCP Disposal Site Boundary based on the detection of PFAS in sediment and surface water. There are no streams or wetlands located at the Site. Please refer to Figures 2A and 2B.



## **2.5 MassDEP Method 1 Categories**

### **2.5.1 Ground Water Category**

As noted, the Site is located within a Zone II Public Water Supply Protection Area and a Medium-Yield Sole Source Aquifer. Therefore, MCP Method 1 Ground Water Category 1 (GW-1) applies to the Site. Groundwater at the Site is categorized as Method 1 GW-2 because groundwater that has been impacted may be located within 30 feet of an occupied building and groundwater has been measured at depths less than 15 feet below grade. All ground waters within the Commonwealth are considered a potential source of discharge to surface waters and shall be categorized, at a minimum, as Method 1 GW-3. Therefore, the applicable Method 1 Ground Water Categories for the Site are GW-1, GW-2 and GW-3.

### **2.5.2 Soil Category**

Soil categorization is based upon the type of human receptor and three potential exposure criteria: frequency of use, intensity of use, and accessibility of soil. The FTA portion of the Site is occupied by a fire and rescue training facility. Based on the nature of the facility, children are assumed to be “not present.” Adults who work at the site as staff members are assumed to be present at “high frequency.” Fire service personnel who periodically use the facility for training would be considered to have a “low frequency” use.

Impacted soils have been identified to date in unpaved areas at depths ranging from approximately 0 to 12 feet below the ground surface. However, due to the reported sampling intervals, it is not clear if elevated PFAS concentrations were detected in soils within the upper 3 feet (or a shallower interval.) Impacted soils in unpaved areas at depths of 0 to 3 feet bgs at the FTA would be considered to be “accessible.” Impacted soils at greater depths are considered “potentially accessible.”

Only groundwater impacts at significant depths below the ground surface have been identified at the remainder of the Site (outside of the FTA), which consists of undeveloped, industrially-zoned land, a portion of a utility easement, and three unmanned public water supply well stations. Intensity of use in regards to soil disturbance in the release area for adults at the Site is considered “high” because the area of impact at the FTA could potentially be disturbed during firefighting / rescue training activities; however, on-Site training activities involve a relatively short duration of high intensity use. Therefore, for current Site uses, if soils at the Site are considered to be “potentially accessible” they would be categorized as Soil Category S-2, if “accessible, then they would be categorized as S-1. The applicable Soil Categories for current Site uses have been identified as S-1/S-2/GW-1, S-1/S-2/GW-2 and S-1/S-2/GW-3.

The applicable Soil Categories for unrestricted future Site uses are S-1/GW-1, S-1/GW-2 and S-1/GW-3. However, there, no MassDEP or US EPA regulatory standards or guidelines available for PFAS for comparison.

## **2.6 RTN 4-26179 PFAS Release History and Regulatory Status**

In May 2012, USEPA issued their final rule “Revisions to the Unregulated Contaminant Monitoring Rule (UCMR3) for Public Water Systems,” which was a national sampling mandate for “emerging contaminants” in public water supplies. The required sampling list included PFAS (PFOS and PFOA). In November 2013, samples were collected from Mary Dunn supply wells MD-1, MD-2 and MD-3 and analyzed for PFAS. At the time of the testing, the US EPA Provisional Health Advisory (HA) was 0.20 micrograms per liter ( $\mu\text{g/L}$ ) for PFOS (which is equivalent to 200 nanograms per liter ( $\text{ng/L}$ )). Analytical results revealed evidence of PFOS contamination in all three wells sampled. MD-1 and MD-2 were temporarily removed from service. MD-3 was apparently not in use at that time. A treatment system that utilizes granular activated carbon (GAC) was later implemented for MD-1 and MD-2 [July 2015] by the Hyannis Water Department. In 2016, GAC treatment was also implemented for MD-3. [See below].

In November 2013, Barnstable County personnel also collected soil and groundwater samples from the FTA property, located approximately 1,000 to 1,800 feet west of the Mary Dunn wells, and submitted them for laboratory analysis of PFAS. Groundwater analytical results revealed that FTA groundwater was impacted by PFOS; MassDEP was subsequently notified. PFOS was also detected in soil at the FTA and in surface water and sediment within the adjacent Flintrock Pond. As summarized in the Notice of Responsibility (NOR) issued by MassDEP on August 4, 2016, based on the detected PFAS concentrations in soil and groundwater at the FTA and the inferred groundwater flow direction being to the southeast (toward the Mary Dunn wells), MassDEP determined that releases of PFAS from the use of fire-fighting foams at the FTA is a source of PFAS detected in the groundwater supply of the Mary Dunn wells.

In August 2015, Barnstable County funded a more detailed hydrogeological assessment, continued implementation of a groundwater pump and treat system to capture PFOS upgradient of the Mary Dunn wells, and additional assessment and immediate response actions. The Cape Cod Commission evaluated subsurface soil and groundwater conditions at the FTA facility as part of the assessment activities. The soil results indicated a broad area of PFOS contamination throughout the subsurface. The highest PFOS concentrations were detected near the southwestern corner of the FTA, a location subsequently referred to as the Hot Spot.

As a voluntary measure, Barnstable County refurbished the former perchlorate pump and treat system to help remediate and contain the PFOS apparently migrating from the FTA facility. The groundwater pumping and treatment system (GWP&TS) was re-started using GAC for treatment in July 2015. The system utilizes a groundwater recovery well, PRW-4, located approximately 800 feet southeast of the FTA. The groundwater treatment system (GWTS) itself is located in a structure on the FTA grounds.

Groundwater analytical results from the 2015 assessment revealed PFOS contamination ranging from less than 0.070  $\mu\text{g/L}$  (the current US EPA HA) to greater than 70  $\mu\text{g/L}$ . The groundwater samples were collected from monitoring wells across the Site, located between the FTA and the Mary Dunn wells. Similar to the soil results, the highest PFOS concentrations were detected near the southwestern corner of the FTA.

In May 2016, US EPA revised/lowered its HA for PFAS from 0.20 µg/L of PFOS and PFOA to 0.070 µg/L (70 ng/L) for either compound or the total of the two. EPA noted that the HA was for drinking water exposures only. In response to the lowered HA PFAS concentrations, on August 4, 2016, MassDEP issued a Notice of Responsibility (NOR) to Barnstable County and required submittal of an Immediate Response Action (IRA) Plan no later than September 15, 2016. MassDEP requested that the Site owner evaluate potential Imminent Hazards relative to downgradient public and private water supply wells. MassDEP indicated that this evaluation should include identification of all nearby public and private water supply wells, review of any existing analytical data for those wells, and sampling and analysis of any nearby wells that have not been sampled for PFAS. MassDEP also stated that the IRA Plan should include measures to prevent, eliminate, and/or abate any hazards associated with the consumption of drinking water impacted by PFAS above the HA level of 0.070 µg/L. MassDEP also required as part of the IRA, activities to reduce the mass of PFAS at the FTA and the concentrations of PFAS in groundwater migrating from the FTA facility, such as excavating the soil hot spot and expanding the existing groundwater treatment system to decrease the mass of PFAS in groundwater.

On September 27, 2016, on behalf of Barnstable County, the Cape Cod Commission submitted an IRA Plan to MassDEP to address the PFOS/PFOA impacts. The IRA Plan included an evaluation of imminent hazards to downgradient public and private water supplies, specific plans for the Hot Spot removal action, and plans for an interim expansion of the existing groundwater pump and treatment system. The IRA Plan also contained an evaluation of water supply alternatives.

The IRA proposed to address the soil Hot Spot was the excavation of up to 200 cubic yards from a 400 square foot area for off-Site disposal. The Hot Spot soil was removed in January 2017, reducing the primary source of PFAS contamination leaching into groundwater.

Between December 2016 and March 2019 Barnstable County has submitted 28 IRA Status and Remedial Monitoring Reports (RMRs) to MassDEP for the PFAS release. The RMRs address the County's GWP&TS, which recovers and treats approximately 50,000 gallons per day (gpd) of groundwater from well PRW-4. The Site groundwater pump and treat system is also working to reduce PFAS concentrations in the aquifer before it reaches the Mary Dunn treatment system.

The GAC treatment of the Mary Dunn wells is actively preventing a potential Imminent Hazard to the Hyannis community by removing the PFAS compounds from the water supply. A Settlement Agreement is in place between the Town of Barnstable and Barnstable County that requires the County to fund a portion of the costs associated with operating the treatment system. Timely exchange of pumping and performance data related to the treatment of the Mary Dunn well water supplies to verify effectiveness of the IRA is noted in the settlement agreement between the parties.

As detailed in the February 2019 Reporting Period IRA Status report, which reported on the current and historic groundwater monitoring at locations across the Site, elevated PFAS concentrations are still present in Site groundwater.

### **2.6.1 Groundwater Pump and Treat System**

MCP response actions to address the early 1990s petroleum releases and the later detection of perchlorate included extensive subsurface assessment including installation of a significant network of monitoring wells. In addition, to help remediate and control migration from the petroleum and perchlorate releases, in 1998 and 2007, respectively, response actions included the installation/upgrade and/or renovation of a groundwater pumping and treat system (GWP&TS). As noted above, the former GWP&TS was refurbished in July 2015 to help remediate and contain the PFAS migration from the FTA. The GWP&TS was later included in the NOR issued by MassDEP in August 2016. The NOR also requested that Barnstable County install additional recovery wells or increase the groundwater recovery rate to increase PFAS removal.

In July 2015, the primary influent/recovery well pump installed in recovery well PRW-4 was repaired, a new variable frequency drive (VFD) unit pump was installed in the treatment system, and all accompanying electrical components were evaluated and repaired. The system was restarted in July 2015 upon the installation of 1500 pounds (lbs.) of aqueous phase GAC (Filtrisorb 400 virgin GAC) into each of the two, existing Siemens treatment vessels. The "capture zone" of PRW-4 was reportedly estimated to be 200 ft. at 40 gallons per minute (gpm). Groundwater is pumped from recovery well PRW-4 through an eight-hundred-foot force main to the treatment building on the FTA; see Figure 2A for the location of PRW-4 and Figure 2B for the location of the treatment system building.

The groundwater is discharged to an equalization tank, then filtered through a 5-10 micron size bag filter and pumped through the two (in series) GAC vessels (containing 1500 pounds of activated carbon) and discharged to the several large recharge chambers located in the northern third of the FTA, upgradient of the recovery well and approximately cross-gradient of the highest levels of PFAS contamination detected at the FTA property.

Barnstable County contracts with appropriate firms to provide operation oversight and maintenance of the groundwater pump and treat system.

## **2.7 Previously Completed IRA Activities**

The Cape Cod Commission oversaw and documented the GWP&TS performance on behalf of Barnstable County; the Cape Cod Commission also conducted groundwater monitoring and operation of the recovery well, PRW-4. After system startup, monitoring samples were collected from the influent (PRW-4), midpoint, and effluent sample locations, biweekly and were submitted for the laboratory analysis of PFAS to aid in determining performance efficiency and monitor breakthrough of the PFAS. The Cape Cod Commission submitted monthly IRA Status and RMR Reports between December 2016 and February 2018 documenting the performance of the GWP&TS at the FTA. On average, the GWP&TS reportedly recovered and treated groundwater at approximately 50 gpm (high average - continuous) or approximately 2.2 million gallons monthly, removing approximately 0.015 pounds of PFOS a month. Constant monitoring

of the system is required to maintain operation of the VFD and recovery well pump including carbon exchanges, regular backwashing of the carbon vessels, force mains cleanouts, and replacement of the recovery well pumps.

IRA activities performed and completed during the earlier reporting periods were described in detail in previously completed IRA Status Reports submitted to MassDEP. Refer to those submittals for complete information. The previously submitted documents are available in MassDEP Sites Database; refer to the follow link to access these reports.

<https://eeaonline.eea.state.ma.us/portal#!/wastesite/4-0026179>.

As previously noted, IRA and other assessment activities performed prior to the issuance of the NOR were described in the IRA Plan submitted to MassDEP in September 2016 and IRA Plan Mod submitted to MassDEP in June 2018.

BETA recently submitted the 26<sup>th</sup> IRA monthly remedial monitoring report and status report on February 11, 2019 summarizing the pump and treat system operations for the month of January 2019; reporting an average pump rate of 14.5 gallons per minute (gpm) and treating approximately 0.011 kilograms of PFOS. The system was operable for 31 days. System sampling and IRA Status and RMR submittals are continuing on a monthly basis.

During the last few reporting periods, a significant decrease in the influent flow rate was observed. Such decreases in flow rate have historically been attributed to iron sediment fouling within the system's recovery well, PRW-4, and the force main piping from the well to the treatment system. Descaling of recovery well PRW-4 and the force main piping was conducted in November 2018 and complete replacement of the submersible pump and riser piping was performed in February 2019.

In March 2019, lower flow rates were observed from the effluent transfer pump within the system. Barnstable County replaced and installed a new VFD. Following the installation of the new VFD, pressure readings indicated excessive iron fouling of the filters with significant iron oxide sediment accumulating at the bottom of the equalization tank. These conditions required a temporary shutdown of the system. In late March, 3,000 gallons of water and iron sediment from within the main tank of the system, and from stored wastes from carbon vessel backwashes and descaling of the force mains were transported off-Site for proper disposal. Additionally, during the system's shutdown, all accessible system piping was dismantled and cleaned and electrical repairs were made to the system's control panel.

## **2.8 Phase I Initial Site Investigation**

In May 2018, a Phase I Initial Site Investigation (ISI) and Tier Classification was completed and submitted to MassDEP for the RTN 4-26179. The Phase I ISI documented the Site data showing that the primary contaminants of concern are PFOS and PFOA and that migration through groundwater in a southeasterly direction from the FTA Site to the Mary Dunn well field is occurring. The Cape Cod Commission previously identified a plume of the highest concentrations approximately 200 feet wide. The average PFOS concentration in groundwater beneath a broad portion of the Site downgradient of the Hot Spot area was reported in the IRA Plan to be approximately 3.0 µg/L.

Based on the completed Phase I Initial Site Investigation, Nover-Armstrong determined that continuation of the IRA activities and additional assessment and, potentially, additional remedial Response Actions are warranted at the Disposal Site. A Phase II Conceptual Scope of Work (SOW) was submitted with the Phase I ISI outlining the scope, nature of investigation, and sample programs proposed to characterize the risk of harm posed to health, safety, public welfare, and the environment (for regulatory closure). The Phase II SOW proposes additional remedial and/or response actions such as continued monitoring of the Site groundwater conditions, potential soil removal or modifications to the existing groundwater treatment system to be implemented in the near future.

A Tier Classification was submitted to MassDEP concurrently with the Phase I Report. The Site was classified as Tier I based on one or more IRA remedial actions being required to continue.

## **2.9 IRA Plan Modification**

MassDEP issued a *Notice of Audit Findings - Immediate Response Action Field Inspection and Request For IRA Modification/Interim Deadline* on June 1, 2018 (NOAF/Request For IRA Modification). In the NOAF/Request For IRA Modification, MassDEP indicated that the IRAs currently being conducted at the Site were in compliance with the relevant regulations and the IRA Plan previously submitted. However, the NOAF/Request For IRA Modification indicated that MassDEP had determined that additional IRA response actions are necessary at the Site to minimize continued mobilization of contaminants. MassDEP required the submittal of an IRA Plan Modification that incorporates the installation of drainage controls and/or construction of berms, dikes or impoundments at the Site to prevent stormwater and/or water from fire training activities from entering the Hot Spot area.

On June 28, 2018, Nover-Armstrong submitted an IRA Plan Modification to MassDEP with a plan to control and improve the flow of stormwater and fire training water at the Site. The functional objectives were to redirect the runoff from fire training events, which use water, and normal precipitation away from the former Hot Spot area of the Site and Flintrock Pond; and limit direct infiltration of stormwater into the soils in the southwest corner of the FTA facility, including the former Hot Spot area and the surrounding soils. The IRA Plan Modification received Conditional Approval from MassDEP via email dated July 19, 2018.

As noted in the IRA Plan Modification, it was determined that the Town of Barnstable Conservation Commission (the Commission) has jurisdiction over some of the proposed IRA activities. On behalf of the County, Nover-Armstrong submitted a Request For Determination of Applicability (RDA) to the Commission on July 11, 2018. In the RDA Nover-Armstrong opined that the proposed work was suitable for an RDA under the provisions of the Wetlands Protection Act and regulations. The Commission indicated that the RDA would be rejected, so it was withdrawn. In August 2018, Nover-Armstrong submitted a Notice of Intent (NOI) filing for proposed Phase I Stormwater Management Improvements to improve the surface water quality of Flint Rock Pond and groundwater quality within the Disposal Site. The NOI was based on the engineering plan entitled "*IRA Plan Modification RTN 4-26179, Phase I Stormwater Management Improvements*" dated September 21, 2018 by Nover-Armstrong Associates and incorporated the work proposed in the IRA Plan Modification (dated June 28, 2018) with additional details,

engineering information, and revisions requested by the Commission. The revisions increased the diversion of runoff away from the former Hot Spot area; therefore, they were consistent with the intent of the IRA Plan Modification. The Commission approved the proposed work per the *Order of Conditions: Special Conditions of Approval (SE3-5606)* (Order of Conditions) of the Town of Barnstable Conservation Commission. Section 5.4 of this report summarizes the implementation of the proposed IRA Plan Modification.

Barnstable County implemented the proposed Phase 1 Stormwater Management Improvement Plan. The Phase I improvements were substantially completed in January 2019. Detailed final tasks continued into March 2019. An application for a Certificate of Compliance will be submitted to the Commission shortly.

Item 17 of the Order of Conditions required the collection of "new testing results for PFAS in Flintrock Pond." In November 2018 and March 2019, BETA conducted surface water and sediment sampling at Flintrock Pond.

Subsequent to the implementation of these Phase I stormwater management improvements, Barnstable County and BETA evaluated additional stormwater improvements for the BCFRTA to address MassDEP's mandate to "evaluate the feasibility of a robust cap over the fire training area at the site." The evaluations were presented in section 7.5 of the IRA Status Report (No. 27) for the February 2019 reporting period, which is attached herein. It is the intent of Barnstable County to continue to evaluate, the feasibility of capping portions of the Fire Training Academy and/or collecting and controlling runoff from portions of the Fire Training Academy, which are affected most by stormwater runoff and / or live fire training activities. The evaluation will include conducting additional assessment, continuing engineering of concepts, and pursuing funding for feasible improvements that result from the continuing evaluation.

#### **2.10 Soil Testing at the Site**

In 2015, the Cape Cod Commission conducted subsurface investigations to evaluate the extent of PFOS soil contamination at the FTA. See the Phase I ISI report for details of the work and results. March 2015 assessment activities included the advancement of 11 soil borings, installation of 6 shallow monitoring wells, and collection of 27 soil samples for laboratory analysis. As reported in the September 2016 IRA Plan, PFOS was detected in every soil and sediment sample, with concentrations ranging from 0.002 mg/kg to 4.9 mg/kg. The highest concentrations were detected in southwest corner of the BCFRTA, in an area formerly used to train firefighters in extinguishing propane fires. Due to the elevated concentrations, this area was designated as the Hot Spot in the IRA Plan and later removed.

#### **2.11 Ground Water Analytical Results**

Multiple rounds of groundwater sampling have been performed using monitoring wells across the FTA and the Site. The results of the June 2018 groundwater sampling event were discussed and interpreted in the IRA Status Report dated August 15, 2018 for the June 2018 reporting period. Individual concentrations of one or more of the five PFAS compounds and Total Concentrations of PFAS documented from the sampled wells during the June 26, 2018 sampling event were above the MassDEP ORS Guideline.

Recent IRA activities included updated groundwater quality monitoring via a round of Site-wide groundwater sampling and analyses in January 2019. In November 2018, BETA proposed a long-term monitoring sampling plan to sample and analyze select groundwater monitoring wells on a quarterly and annual basis. The annual groundwater monitoring component of the plan was implemented during the January 2019 sampling event.

On January 9 to January 11, 2019, groundwater samples were collected from selected monitoring wells within the Site identified as HS-1a, HS-2a, PFW-1, PFW-2, PFW-5, PFW-6, PC-1, PC-6a, PC-9, PC-11, PC-16d, PC-18, PC-28, PC-30, PC-36S, MW-12, MW-22, MW-35i, and OW-8a, for the laboratory analysis of total PFAS and gauged all wells located on the Academy property prior to sampling. Refer to Figure 2A and Figure 2B for sampling locations.

Monitoring wells HS-1a, HS-2a, PFW-1, PFW-2, PFW-5, PFW-6, and OW-8a are located on the Academy property: HS-1a, HS-2a, and PFW-2 are located within or near the Hot Spot remediation area; PFW-1 is located approximately 130 feet downgradient; PFW-5, PFW-6, and OW-8a are located in the central or northern portions of the Academy property. The additional wells sampled during this reporting period are located on the adjacent property that is owned by the Town of Barnstable and/or by Commonwealth Electric. These wells were chosen based on historic and relevant groundwater PFAS concentrations identified within the source area, and inferred upgradient and downgradient locations within the Disposal Site Boundary. HS-1a, HS-2a, PFW-1 and PFW-2 were selected to represent groundwater in the immediate area of the January 2017 Hot Spot soil removal and immediately downgradient of that area. The additional, (further downgradient) monitoring wells were selected to evaluate current conditions within the main PFAS plume based on historic data. Monitoring wells PC-9, PC-16d, PC-18, PC-28, PC-30, and HW-1D are located in the probable downgradient location from the recovery well, PRW-4. Monitoring well HW-1D is the furthest inferred downgradient location and is located adjacent to Mary Dunn Pond.

Refer to Table 3 included in the February 2019 IRA Status Report No. 27 for a summary of the PFAS analytical data for the January 2019 sampling event as well as historic data for the monitoring wells within the Disposal Site Boundary.

PFOS and PFOA concentrations documented in the January 2019 monitoring round are similar to historic ranges, including the June 2018 values. The sum of the five PFAS compounds (included in the ORA Guideline) documented in groundwater within the Disposal Site is above the applicable MassDEP ORS Guideline at most monitored locations. PFAS concentrations have trended towards a significant decrease since PFAS assessment activities started at the Site in 2015 at many sampling locations. In the southeast corner of the FTA, PFAS concentrations were significantly higher in June 2018 than previously measured, and the levels decreased in January 2019. However, PFAS concentrations remain elevated as indicated by the results for the PFW-1 sampling location. Additionally, a potential trend of increases in PFAS concentrations with increased rainfall and higher water tables was observed.



## 2.11 Flintrock Pond Sampling Assessment

On March 27, 2019, BETA conducted surface water and sediment sampling at Flintrock Pond, per the semi-annual Flintrock Pond sampling requirement of the October 2018 *Order of Conditions*. One water sample (SW-301) was collected from Flintrock Pond approximately 6 inches below the water surface and approximately 50 feet from shore (using a dingy) and submitted to Maxxam for the laboratory analysis of Total PFAs via USEPA Method 537.2. Refer to Figure 2B for the approximate surface water sample locations. BETA observed an approximate 3+ foot higher elevation of the Pond's water surface on March 27, 2019 as compared to November 2018, which is assumed to reflect relatively typically seasonal variation.

Five sediment samples (SED-101, SED-201, SED-301, SED-401, and SED-501) and a field duplicate were collected from two partial transects off the east side of the Pond. The transects selected for sampling were intended to provide information from areas with a higher likelihood of impacts to the pond from overland flow from the active areas of the FTA. Samples were submitted to Maxxam for the laboratory analysis of Total PFAs via USEPA Method 537.2 modified for soil analysis. According to Maxxam, the same laboratory methodology was used as for previous sampling of sediment from Flintrock Pond. The five sediment sample locations were collected along the same November 2018 sampling assessment transect locations (approximately). For example, SED-101 was collected from approximately the same location as SED-1, collected on November 16, 2018, and SED-201 was collected from approximately the same location as SED-2, and so on and so forth. A sediment sample from the approximate location of SED-6 (which would have been designated SED-601) could not be retrieved due to repeated fouling of the sampling equipment by submerged aquatic vegetation.

On the day of sampling, conditions at the Site were fair (temperatures varying from the low 50s (degrees Fahrenheit) to the low 40s with light winds with some gusts later in the afternoon.

### Analytical Results

As noted, pond sediments were collected from two transects extending approximately 50 feet westward into the pond. Samples were collected utilizing a small box dredge and submitted to Maxxam for the laboratory analysis of Total PFAs via USEPA Method 537.2 modified for soil analysis. The tabulated analytical results for the Flintrock Pond sediment PFAs analytical data will be included in the next IRA Status Report.

Elevated concentrations of the total sum of the five PFAs chemicals (PFOS, PFOA, PFNA, PFHxS, and PFHpA) were documented in the pond sediments and are consistent with the November 2018 results; no significant concentration fluctuations are noted. The sediment analytical results from 2015 could be considered similar to the more recent results, although the sum of the six PFAS concentrations ranges from significantly lower to significantly higher than the November 2018 and the March 2019 results. However, it should be noted that the 2015 results are from various locations across the pond, different from those of the 2018/2019 sampling. Therefore, direct comparisons are difficult. There are currently no MassDEP or US EPA regulatory standards or guidelines for sediments available for comparison. Concentrations of PFAS documented within Pond sediments remain dominated by the PFOS fraction and increase with distance from the Pond's bank.

Concentrations of five of the six PFAs chemicals (PFOS, PFOA, PFNA, PFHxS, PFHpA and PFDA) that are of concern, based on recent draft MassDEP documents, were documented in the March 27, 2019 pond surface water sample, SW-301. The concentrations are lower than the November 2018 surface water data. The tabulated analytical results will be included in the next IRA Status Report. Both the November 2018 and the March 2019 results are significantly lower than the results obtained from sampling in June 2015. As noted, BETA observed significantly higher water elevation in the pond on March 27, 2019 as compared to November 2018. It is not known at this time if the increased water volume in the pond in March of 2019 may have affected the PFAS concentrations.

No MassDEP ORS Guideline or surface water risk standards for PFAS are available to which to compare the surface water analytical results. However, on April 5, 2019, MassDEP unofficially released the Public Comment Draft of proposed revisions to the MCP, which include proposed surface water “target values” for PFOA and PFOS only. MassDEP noted that the technical literature is “insufficient to establish chemical-specific surface water concentrations” (target values) for other PFAS compounds. The detected concentrations of PFOS and PFOA in the surface water samples are far below the proposed MassDEP target values.

### **3.0 ADDRESSING PUBLIC CONCERNS**

The process for assessing and cleaning up disposal sites as set forth in the Massachusetts Contingency Plan (310 CMR 40.0000), is designed to address the effects of the site on health, safety, public welfare, and the environment. Once a release of oil or hazardous materials has been confirmed at a disposal site, the remedial response action process proceeds to:

- Initial Site Investigation (Phase I);
- Comprehensive assessment of the nature and extent of the release, and an evaluation of any risks posed to the public and the environment from the site (Phase II - CSA);
- Identification and evaluation of remedial response action alternatives and selection of feasible measures that will achieve a permanent cleanup at the site (Phase III – RAP); and
- Implementation of the selected remedial response actions (Phase IV - RIP).

The Barnstable County FTA RTN 4-26179 Site is in Phase II CSA.

Physical work at a disposal site includes sampling and other environmental field testing, and the implementation of the selected response actions. It may also include the implementation of measures designed to stabilize conditions at the site to prevent the continued migration of contaminants or eliminate an imminent threat to public health, safety, welfare or the environment until planning for remedial response is underway (i.e., Release Abatement or Immediate Response Actions).

At each step of the remedial response action process, plans for work may be developed, the

work is conducted, and MCP reports describing results and recommendations for the next step are prepared. The documents which describe each of these steps are the cornerstone of the remedial response action planning process, since they provide the information necessary to make decisions about how a site should be cleaned up.

As noted above, the Site has been designated a Public Involvement Site due to concerns about the Site raised by the public. See section 4.0 for the preliminary list of concerns raised during the development of this Draft Plan.

The response action planning process going forward will be designed to address the concerns about the nature and extent of contamination; risks posed by the site to health, safety, public welfare, and the environment; and the adequacy of proposed cleanup measures. These concerns will primarily be addressed in Phases II and III of this process. For example, the assessment of the extent of contamination is considered in Phase II, as is the impact of the Disposal Site on public health and the environment. Phase III will address the adequacy of proposed remedial response actions to provide permanent solutions for the contamination problems at this Site.

#### **4.0 PUBLIC INVOLVEMENT ACTIVITIES**

In accordance with the MCP (40.1400), activities undertaken to involve the public in response actions serve two purposes:

- to inform the public about the risks posed by the disposal site, the status of response actions, the availability of Technical Assistance Grants, and the opportunities for public involvement; and
- for Public Involvement Plan Sites, to solicit the concerns of the public about the Disposal Site and response actions, and consider, address, and, where relevant and material to the response actions, incorporate these concerns into planning response actions.

To meet each of these objectives, Barnstable County proposes to undertake specific activities described in sections 4.2 through 5.6 below.

#### **4.1 Highlights From Interviews with Petitioners, Town Officials and Public Groups**

In accordance with the MCP, BETA conducted interviews with interested petitioners, town officials and local public organizations, such as the chambers of commerce. In addition, written comments were received during the Draft Plan development process from several officials and organizations. Comments and concerns and suggestions for public involvement activities will be compiled in a separate document for submittal to MassDEP, in accordance with the MCP. In brief, general comments received (prior to the May 2, 2019 public meeting) are listed below.

Environmental Concerns:

- Protect the groundwater supply.
- Stop use of water at FTA.
- Evaluate pond water & sediment.

Close the FTA.  
Cleanup the Site as fast as possible.  
Do not cause unnecessary public concerns.

Public Involvement suggestions: Provide more links to County webpage set up for the FTA Site.  
Establish additional repositories.  
Provide periodic updates and meetings.  
Consider language translations.  
Improve the County webpage.

## 4.2 Informing The Public

Barnstable County, working with BETA, will provide site-specific information to the public by establishing information repositories; developing and maintaining a site mailing list to distribute information about the site; and providing advance notification to local officials and residents about site activities.

### 4.2.1 Information Repositories

Publicly Available Site Files: Files on the FTA Disposal Site are maintained electronically by MassDEP. They may be viewed electronically at the Southeast Regional DEP Office (SERO) located at 20 Riverside Drive, Lakeville, MA and are readily available at MassDEP's website using Release Tracking Number (RTN) 4-26179 at <https://eeaonline.eea.state.ma.us/portal#!/search/wastesite/results?RTN=4-0026179>

The file will contain all documents pertaining to the Site with the exception of any enforcement-sensitive material.

Local Information Repository: Barnstable County, working with local officials, has established and will maintain a local information repository to provide residents with easy access to information about the site cleanup process and results of site investigations. The site information repository will contain copies of all relevant materials in the DEP site file including: work plans; sampling and field testing plans; technical reports and documents summarizing results and recommendations; relevant correspondence; public information materials; the Public Involvement Plan; public meeting summaries; summaries of responses to comments received; and copies of public notices about the Site. In addition, it will contain a copy of MassDEP's Public Involvement Plan Interim Guidance for Waiver Sites. Information will be sent to the repository as it is developed.

The information repository for the Site has been established at:

Hyannis Public Library  
400 Main Street  
Hyannis, MA

Reference Section  
Hours: 10:00 AM to 5:00 PM

Barnstable County Website – FTA Webpage: Electronic copies of all relevant reports and documents on the Site will be continue to be maintained on, and will be added as they are generated, to the County webpage for the Site: <https://www.barnstablecounty.org/bcfta-history/>. In response to comments already received, the County will work with the Town of Barnstable and local organizations to provide links on hose organizations websites to the County Site webpage.

#### **4.2.2 Site Mailing List**

Barnstable County, working with BETA, will establish a mailing list for the Site. At this time, the preliminary Site mailing list will include: petitioners, local civic organizations, site abutters, local news media, municipal officials (specifically Town Council, Town Manager, the Board of Health/Health Department, and the Hyannis Water Supply Division), state legislators, and DEP Site personnel. Anyone else indicating an interest in receiving information about the site will be added to the list. The mailing list will be used to announce upcoming public meetings, distribute notices of public comment periods on, and the availability of documents in the information repositories, and other relevant information about the Site. Barnstable County will maintain the mailing list and update it as necessary. DEP will be provided with a copy of the site mailing list.

Anyone wishing to be added to the mailing list can call or write to:

Owen Fletcher  
Barnstable County Commissioner's Office  
3195Main St., Barnstable, MA 02630  
508/375-6648

#### **4.3 Notification to Local Officials, the Public and Interested Parties of Major Milestones, Reports, and Activities**

The Massachusetts Contingency Plan requires community notification of major planning and implementation milestones at disposal sites. Major milestones include:

1. Field work involving:
  - a. The implementation of any Immediate Response Actions (IRAs) for imminent hazards,
  - b. The implementation of any Release Abatement Measures (RAMs),
  - c. The use of respirators or level A, B, or C protective clothing,
  - d. Residential sampling, and
  - e. Phase IV remedial actions.
2. The completion of each phase of the remediation and response process, including:

- a. IRA Completion Statements for imminent hazards,
- b. Any proposed IRA Plan Modifications,
- c. Each MCP phase of response work,
- d. A Permanent or Temporary Solution Statement,
- e. Implementation of an Activity and Use Limitation.

Notification of relevant field work will include information on the type of work and its approximate duration. Notification will be made by Barnstable County or BETA to the people on the Notification List by telephone the day before activity is scheduled to begin.

In addition to the standard notification, Barnstable County will prepare quarterly updates on Site activities and progress for distribution.

#### **4.4 Soliciting Public Input**

Barnstable County and BETA will provide opportunities for public input regarding site cleanup decisions by holding public comment periods following the availability of all major reports and remedial plan modifications. These public comments periods will commence after notice that the draft documents are available and notices have been distributed. Public comments periods will be a minimum of 20 days to provide opportunities for oral and written comments regarding Site information and Site cleanup plans and decisions. Summaries of all comments received during the public comment period and the responses to them will be prepared.

#### **4.5 Public Meetings**

Barnstable County and BETA will inform the public about the status of the FTA PFAS release Site during the MCP assessment and remedial action process. Meetings are proposed to take place at the following milestones:

- Prior to conducting a major IRA Plan Modification.
- Completion of Phase II CSA as indicated by distribution of the Draft Phase II Report.
- Completion of Phase III Remedial Action Plan (RAP) as indicated by distribution of the Draft Phase III Report.
- Completion of Phase IV Remedial Implementation Plan (RIP) as indicated by distribution of the Draft Phase IV Report

The public meetings will serve two purposes: 1) to provide community officials and the general public with a progress report regarding response actions at the site, and 2) to provide an opportunity for the public to question and comment on remedial action plans for the site.

Notices announcing public meetings will be issued as described in section 4.3.

#### **4.5 Public Comment Periods**

Specific opportunities for the public to submit comments about documents concerning the site will be provided. When key documents are available in draft form, they will be provided to the information repositories, and a notice of their availability will be sent to the site mailing list. The

notice will include the title of the document, where it is available for review, information about how to submit comments to the PRP, and the length of the public comment period. The comment period will normally be 20 calendar days, but may be longer if warranted by the complexity of a particular document or if requested by the public.

Documents available for public comment will include the following, if they are applicable to MCP response actions conducted for the Site:

- The Draft Comprehensive Site Assessment - Phase II.
- The Draft Remedial Action Plan (RAP) - Phase III.
- The Draft Remedial Implementation Plan (RIP) - Phase IV.
- major plans concerning the operation and maintenance of Response actions-Phase V.
- Draft Major IRA Plan Modifications.
- Completion reports for Immediate Response Actions.
- Permanent or Temporary Solution Statements.

#### **4.6 Response to Comments**

Barnstable County and BETA will prepare a summary of all comments received on each document available for public comment, and PRP responses to these comments. A copy of this response summary will be sent to all those who submitted comments and will be placed in the information repository and the DEP site file. A notice of availability of the response summary will be mailed to the mailing list.

#### **5.0 SCHEDULE OF PUBLIC INVOLVEMENT ACTIVITIES**

Exhibit I provides a general schedule of the public involvement activities listed in Section 4.0. A more specific schedule of response actions will be developed and distributed. The schedule specifies the milestones during the response actions when public involvement activities will be conducted.

#### **6.0 RESPONSIBILITY FOR IMPLEMENTING THE PUBLIC INVOLVEMENT PLAN**

The PRP is assigned responsibility for conducting both remedial and public involvement activities at this site. BETA, on behalf of the Barnstable County has developed this Draft Public Involvement Plan. The County and BETA will collectively carry out the activities listed in this Plan during the site cleanup process.

#### **7.0 REVISIONS TO THIS PLAN**

This Public Involvement Plan may be revised as necessary during the course of the remedial response action process. The MCP also describes a mechanism for discontinuing of the Public

Involvement Plan process. If revisions or discontinuance are proposed, the owner will place copies of any proposed changes in the local information repository, and will send a notice of the availability of recommended changes to the mailing list. The owner will hold a twenty-day public comment period on the proposed revised Plan. Comments received will be reviewed and the Plan will be revised or discontinued, as appropriate. The final revised Plan or a notice of discontinuance will be placed in the information repository.

DRAFT



## EXHIBIT I

### GENERAL SCHEDULE FOR PUBLIC INVOLVMENT ACTIVITIES AT THE FTA SITE

The specific schedule of PI activities will primarily be dictated by the MCP schedule for the phases of assessment and remediation work.

- A. Public meetings are proposed to take place at the following milestones:
- Prior to implementation of a major IRA Plan Modification (schedule may vary)
  - Completion of the draft Phase II Comprehensive Site Assessment report – August 2020
  - Completion of the draft Phase III Remedial Action Plan (RAP) – December 2020
  - Completion of the draft Phase IV Remedial Implementation Plan (RIP) – August 2021
  - Completion of a Permanent or Temporary Solution Statement (not known at this time.)
- B. Notifications by mailing regarding the availability of documents for public comment will be conducted at the completion of:
- Major IRA Plan Modifications
  - The Draft Comprehensive Site Assessment - Phase II
  - The Draft Remedial Action Plan (RAP) - Phase III
  - The Draft Remedial Implementation Plan (RIP) - Phase IV
  - Major plans concerning the operation and maintenance of response actions-Phase V
  - A Draft Permanent or Temporary Solution Statement Response Action Outcome Statement.