# APPENDIX A1 CORRECTIVE ACTION WORK ITEMS AND SCHEDULE

## I. SAMPLING.

- 1. Any sampling required by this Consent Order shall be collected and analyzed in accordance with a workplan approved by the Secretary that addresses quality assurance and quality control, which may be included in a sampling and analysis plan or a quality assurance program plan.
- 2. All analytical results from sampling required by this Consent Order shall be provided to the Secretary within 10 days of Settling Defendant's receipt of the validated sampling results from the lab or 30 days from the date the sample was collected, whichever is sooner.

### II. CORRECTIVE ACTION AREA I – OPERABLE UNIT A.

3. Within 30 days of receiving notice from the State, Settling Defendant shall make an initial payment to the State in the amount of \$ 3,400,000, and thereafter shall fund, in accordance with the terms of Appendix E, all costs associated with the planning, design, oversight, and construction associated with the extension of municipal water lines, the connection of homes to the municipal water line, and proper closure of potable water supplies in the area designated as Corrective Action Area I—Operable Unit A in Appendix B. These costs shall include costs reasonably incurred by the State, the Town of Bennington, Village of North Bennington, and their contractors, sub-contractors, and agents. These costs shall not include costs associated with operation and maintenance of municipal water line extensions once construction is complete. This work shall be deemed to have been completed, and all Performance

Standards for this work in Paragraph II(3) shall have been met, upon completion of the Water Extension Work.

### III. CORRECTIVE ACTION AREA I – OPERABLE UNIT B.

- 4. Within 90 days of the Effective Date, Settling Defendant shall provide the ANR with a Corrective Action Plan that:
- a. Includes a plan for siting, drilling, and testing of new wells for homes that have POETs as of the Effective Date of this Order, where technically feasible.
- b. Includes provisions for testing of new wells and implementation of remedy, as follows:
  - i. The State shall notify Settling Defendant within 120 days of the permitting of any new well in Corrective Action Area I. This notice shall include the location of the new well. After the installation of any new well, Settling Defendant shall offer to test that well for PFOA at no cost to the homeowner
  - ii. If Settling Defendant or the Agency of Natural Resources is permitted to test the new well and the well test result is at or exceeds 20 parts per trillion, Settling Defendant shall: (1) immediately provide bottled water to the home owner; (2) immediately notify the State of the test results; and (3) within 30 days of receipt of the laboratory results, install a POET. The Secretary may, subject to prior consultation with Settling Defendant, require Settling Defendant to connect the home to a municipal water line, if reasonable and cost effective, or drill a new well for the home served by the impacted well if

technically feasible, in accordance with Paragraph 4.a, rather than install a POET. If the Parties cannot agree on an appropriate remedy, either Party may implement the dispute resolution procedures set forth in Section XII of the Consent Order.

- c. Settling Defendant must provide bottled water to a homeowner until:
  - i. Settling Defendant has completed the start-up testing under the approved POET operation and maintenance sampling plan and has demonstrated that the POET is operating effectively;
    - ii. The home is connected to a municipal water supply; or
  - iii. Settling Defendant has demonstrated that the concentration of PFOA in a newly installed well is below 20 ppt and establishes a stable or decreasing trend, meaning PFOA below 20 ppt for eight (8) consecutive rounds of quarterly sampling and the statistical trend analysis for eight quarters of sampling shows an overall downward trend in PFOA contaminant levels in the water supply or a flat trend if the contaminant levels are below the 20 ppt limit.
- d. Incorporates the Operation and Maintenance Manual Point of Entry Systems (POET) Private Water Supply Systems dated February 24, 2017, which provides for long-term monitoring, operation, and maintenance of POETs, whether installed before, after, or on the Effective Date of this Order.
- e. Performance Standard for POETs: Settling Defendant shall maintain any POET in Corrective Action Area I—Operable Unit B until the Settling Defendant has demonstrated that the concentration of PFOA in the applicable well is

below 20 ppt and establishes a stable or decreasing trend, meaning PFOA below 20 ppt for eight (8) consecutive rounds of quarterly sampling and the statistical trend analysis for eight quarters of sampling shows an overall downward trend in PFOA contaminant levels in the water supply or a flat trend if the contaminant levels are below the 20 ppt limit, after which time Settling Defendant will remove the POET or, if preferred by the homeowner, allow the owner of the well to retain the POET at the owner's expense.

- f. Includes a long-term monitoring plan for all wells in Corrective Action Area I—Operable Unit B without POETs, including existing wells that have not been tested as of the Effective Date, new wells that have been drilled after the Effective Date, and wells that had a POET as of the Effective Date but the POET has either been removed or is no longer required because the performance standards in Paragraph 4.e. have been met. If in the course of this sampling program, a well test is 20 parts per trillion or greater, Settling Defendant shall respond in the same manner as provided in Paragraphs 4.b.ii and 4.c. Settling Defendant shall perform this monitoring until the Performance Standards identified in Paragraph 4.h have been achieved.
- g. A long-term monitoring plan to evaluate the effectiveness of natural attenuation of PFOA in the soils and groundwater in Corrective Action Area I.
- h. Performance Standards for Soil and Groundwater: Monitoring in accordance with the long-term monitoring plan shall be required until: (a) PFOA concentrations are below 20 parts per trillion at groundwater compliance points established by the Secretary for Corrective Action Area I and Settling Defendant has established that there is a stable or decreasing trend, meaning PFOA below 20 ppt for eight (8) consecutive rounds of quarterly sampling and the statistical trend analysis for

eight quarters of sampling shows an overall downward trend in PFOA contaminant levels in the water supply or a flat trend if the contaminant levels are below the 20 ppt limit; (b) PFOA concentrations are below 300 parts per billion at soil compliance points established by the Secretary for Corrective Action Area I or appropriate institutional controls are in place; (c) PFOA is not present in any drinking water supply wells at concentrations at or above 20 ppt and Settling Defendant establishes a stable or decreasing trend, meaning PFOA below 20 ppt for eight (8) consecutive rounds of quarterly sampling and the statistical trend analysis for eight quarters of sampling shows an overall downward trend in PFOA contaminant levels in the water supply or a flat trend if the contaminant levels are below the 20 ppt limit; (d) Vermont water quality standards have been achieved at any surface water compliance point established for Corrective Action Area I; (e) all required institutional controls, engineered controls, and inspection plans are in place; (f) all groundwater monitoring wells have been properly closed unless such wells are required for any required institutional controls, engineered controls, or inspection plans, or otherwise approved by the State to remain open; (g) all site remedial infrastructure or monitoring points have been properly closed, unless such equipment is required for any required institutional controls, engineered controls, or inspection plans, or otherwise approved by the State to remain open; and (h) any outstanding or overdue balances owed to the State have been paid.

i. Corrective Action Area I Institutional Control Plan.

- 5. The Corrective Action Plan required by this Section III is subject to review and approval of the Secretary in accordance with the IROCPR.
- 6. Upon entry of this Consent Order, Settling Defendant shall commence implementation of the above-described plans and provisions.

### IV. FIVE YEAR REVIEW.

- 7. Five Year Review of Corrective Action Approach and Monitoring Data.

  Five years following the commencement of the corrective actions, and every five years thereafter, the Settling Defendant shall provide the Secretary with a review of the Site and make recommendations as to whether any further investigation or corrective action is required. At a minimum, the Five-Year Review shall include:
- a. A summary of any environmental sampling results, including those collected from implementing the long-term monitoring plan, well testing, and monitoring of POETs;
- b. A review of the conceptual site model in light of monitoring results collected as a part of the corrective action.
- c. If revisions to the conceptual site model indicate that additional sampling is necessary, Settling Defendant shall submit a site investigation work plan concurrent with the five-year review.
- d. A brief discussion of any new or innovative remedial technologies that are or may be reasonable, feasible, cost-effective, and accelerate Site compliance with the Performance Standards.
  - e. Any recommendations for additional corrective action at the Site.

8. Within 60 days of receiving questions or comments on the Five-Year Review, Settling Defendant shall respond to those questions or comments by the Secretary.

## V. CORRECTIVE ACTION AREA II.

- 9. In the area designated as Corrective Action Area II in Appendix B, Settling Defendant shall undertake a site investigation in accordance with the document titled "CSM Site Investigation: Bennington, Vermont" prepared by Barr Engineering, dated May, 2017, subject to the comments provided by the Agency of Natural Resources, dated May 30, 2017 and the U.S. EPA Region 1 Comments dated June 28, 2017, and as follows:
  - a. Field investigation.
  - Subject to Settling Defendant being provided timely access to the properties to be sampled, Settling Defendant shall begin the field investigation in July 2017.
  - ii. Subject to Settling Defendant being provided timely access to all of the properties to be sampled, Settling Defendant shall complete the field investigation no later than October 30, 2017.
- b. Draft Site Investigation Report: Subject to Settling Defendant being provided timely access to all of the properties to be sampled, Settling Defendant shall submit a draft site investigation report to the Secretary no later than December 15, 2017.
- c. Final Site Investigation Report: Settling Defendant shall respond to any questions or comments received from the Secretary and provide the Secretary with

a Final Site Investigation Report no later than February 15, 2018, provided that Settling Defendant is provided timely access to all properties to be sampled so that the deadlines set forth above may be met.

- d. Draft Evaluation of Corrective Action Alternatives and Corrective Action Plan: Within 90 days of receiving approval from the Secretary of the final Site Investigation Report, Settling Defendant may provide the Secretary with a corrective action feasibility investigation report. However, nothing herein requires Settling Defendant to submit such a report or conduct any corrective action in Corrective Action Area II. If Settling Defendant elects to submit a draft corrective action feasibility investigation report, the report shall contain: (1) an executive summary of the corrective action alternatives considered, including a recommended alternative based on the criteria in 40 C.F.R. § 300.430(e)(9)(iii); (2) a detailed evaluation of the criteria established under 40 C.F.R. § 300.430(e)(9)(iii) for each remedial option evaluated under this paragraph; and (3) a detailed justification for the recommended remedy. At a minimum, the corrective action feasibility investigation shall examine the following alternatives:
  - i. An alternative that reduces the toxicity, mobility, or volume of the hazardous materials released to the extent feasible. Settling Defendant shall review innovative and alternative treatment techniques for PFOA. In addition to evaluating whether a treatment technique will meet standards at compliance points established for Corrective Action Area II, the Settling Defendant shall evaluate the effectiveness of the treatment technique for plume containment and for reducing the concentration of PFOA throughout the plume.

This alternative shall minimize the need for long-term management at Corrective Action Area II.

- ii. An alternative that involves little or no treatment but controls impacts to sensitive receptors through engineered controls, containment, long-term monitoring, and institutional controls.
- e. Corrective Action Area II Remedy Selection. Provided that Settling
  Defendant has agreed to conduct an Evaluation of Cleanup Alternatives under
  Paragraph 9(d):
  - i. The Secretary shall provide a written response to the SettlingDefendant that:
    - A. Approves the corrective action alternative recommended in the report;
    - B. Approves an alternative that was considered but not recommended based on the Secretary's written assessment of the factors established pursuant to 40 C.F.R. § 300.430(e)(9)(iii);
      - C. Requests additional alternatives be evaluated; or
    - D. Requests additional analysis of one of the alternatives reviewed as a part of the report.
  - ii. Within 60 days of the Secretary's response, the Settling

    Defendant may provide the Secretary with a revised corrective action feasibility

    investigation or a corrective action plan for the selected alternative.

#### VI. NORTHSIDE DRIVE AND WATER STREET SITE INVESTIGATION.

#### 10. For Northside Drive:

- a. Subject to Settling Defendant's ability to gain access to the property, within 60 days of the Effective Date of this Order or the time access is obtained, Settling Defendant shall provide the Secretary with a draft Site Investigation Work Plan to gather data to fill any data gaps identified in the conceptual site model.
- b. Within 30 days of receiving comments from the Secretary on the draft Site Investigation Work Plan, Settling Defendant shall respond to any questions or comments received from the Secretary. Within 30 days of the resolution of the Secretary's comments, Settling Defendant shall provide the Secretary with a final Site Investigation Work Plan.

#### 11. For Water Street:

- a. Subject to Settling Defendant's ability to gain access to the property, within 60 days of the Effective Date of this Order or the date access is obtained, Settling Defendant shall provide the ANR with a draft supplemental Site Investigation Work Plan to investigate the inside of the Water Street facility.
- b. Within 30 days of receiving comments from the Secretary on the draft Site Investigation Work Plan, Settling Defendant shall respond to any questions or comments from the Secretary. Within 30 days of the resolution of the Secretary's comments, Settling Defendant shall provide the Secretary with a final Site Investigation Work Plan.

#### 12. For the Northside Drive and Water Street Facilities:

a. In accordance with the timelines in the final Site Investigation

Work Plans approved by the Secretary for the Water Street and Northside Drive

facilities, Settling Defendant shall submit a final Site Investigation Report for both Northside Drive and Water Street detailing the results of the approved site investigation.

- b. Within 30 days of receiving comments from the Secretary on the Site Investigation Report, Settling Defendant shall respond to any questions or comments received from the Secretary. Within 30 days of resolution of the Secretary's comments, Settling Defendant shall provide the Secretary with a revised Site Investigation Report and a revised CSM.
- c. Within 90 days of receiving approval from the Secretary of the final Site Investigation Report and revised CSM, Settling Defendant shall provide the Secretary with a corrective action feasibility investigation. The corrective action feasibility investigation shall contain: (1) an executive summary of the corrective action alternatives considered, including a recommended alternative based on the criteria in 40 C.F.R. § 300.430(e)(9)(iii); (2) a detailed evaluation of the criteria established under 40 C.F.R. § 300.430(e)(9)(iii) for each remedial option evaluated under this paragraph; and (3) a detailed justification for the recommended remedy. At a minimum, the corrective action feasibility investigation shall examine the following alternatives:
  - i. An alternative that reduces the toxicity, mobility, or volume of the hazardous materials released to the extent feasible. Settling Defendant shall review innovative and alternative treatment techniques for PFOA. In addition to evaluating whether a treatment technique will meet standards at compliance points established for the Facility, the Settling Defendant shall evaluate the effectiveness of the treatment technique for plume containment and

for reducing the concentration of PFOA throughout the plume. This alternative shall minimize the need for long-term management at the Facility.

- ii. An alternative that involves little or no treatment but controls impacts to sensitive receptors through engineered controls, containment, long-term monitoring, and institutional controls. To the extent that the corrective action alternative selected for the Northside Drive or Water Street Facility requires the use of any Institutional Controls, including any Proprietary Controls, Settling Defendant shall comply with all applicable regulations or requirements to obtain such controls.
- 13. Performance Standards for Northside Drive and Water Street Facilities. The corrective action alternative selected for the Northside Drive and Water Street Facilities shall ensure that: (a) any source area or areas are removed, remediated or adequately controlled using one or more or more methods consistent with the IROCPR; (b) PFOA levels do not exceed 300 ppb in soil at compliance points, or, if soil standards have not been met, then approved engineering and institutional controls have been implemented to prevent contact to such soils; (c) vapor intrusion has been evaluated and addressed, as necessary, in accordance with the IROCPR; (d) all groundwater monitoring wells have been properly closed unless such wells are required for the ongoing monitoring of approved engineering and institutional controls or otherwise permitted by the State to remain open; (e) all site remedial infrastructure or monitoring points are required for the on-going monitoring of approved engineering and institutional controls or otherwise permitted by the State to remain open; (f) any

remediation wastes have been properly treated or disposed; and (g) all required institutional controls, engineered controls, and inspection plans are in place.

- 14. The Secretary shall provide a written response to the Settling Defendant that:
  - a. Approves the corrective action alternative recommended in the report;
- b. Approves an alternative that was considered but not recommended based on the Secretary's written assessment of the factors established pursuant to 40 C.F.R. § 300.430(e)(9)(iii);
  - c. Requires additional alternatives be evaluated; or
- d. Requires additional analysis of one of the alternatives reviewed as a part of the report.
- 15. Within 60 days of the Secretary's response, the Settling Defendant shall provide the Secretary with a revised corrective action feasibility investigation or a corrective action plan for the selected alternative.
- 16. Within the timeline in the corrective action plan approved by the Secretary, Settling Defendant shall implement the approved corrective action plan.
- 17. Within 60 days of completion of the approved corrective action plan,
  Settling Defendant shall provide a report to the Secretary that documents that the
  corrective action was completed in accordance with the requirements of the approved
  corrective action plan.
- 18. Within 30 days of receiving questions or comments on the report required by Paragraph 17, Settling Defendant shall respond to those questions or comments by the Secretary.

## VII. CERTIFICATION OF CORRECTIVE ACTION COMPLETION.

- 19. The Settling Defendant shall comply with all provisions contained within this Appendix A and the Corrective Action Plan until the Secretary has granted a Certification of Corrective Action Completion under this Section.
- 20. The Settling Defendant may petition the Secretary to issue a Certification of Corrective Action Completion for Corrective Action Area I or an Operable Unit within Corrective Action Area I, the Northside Drive facility, or the Water Street facility. Any petition shall demonstrate how the specific area has achieved the Performance Standards. Upon submitting a petition, Settling Defendant shall provide notice to the public in the same manner as required for a corrective action plan.
- 21. Within 30 days of receiving questions or comments on the Petition,
  Settling Defendant shall respond to those questions or comments. The Secretary shall
  only grant a Certification of Corrective Action Completion upon the Secretary's
  determination that the Corrective Action has satisfied the Performance Standards for
  the relevant area as specified above.