

# **EXHIBIT 1**

## **Declaration of Ralph Dollhopf**

IN THE UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF OHIO  
EASTERN DIVISION

THE STATE OF OHIO, )  
 )  
and )  
 )  
UNITED STATES OF AMERICA, )  
 )  
Plaintiffs, ) Civil Case No. 4:23-cv-00517  
v. )  
 )  
NORFOLK SOUTHERN RAILWAY )  
COMPANY, )  
 )  
and )  
 )  
NORFOLK SOUTHERN CORPORATION, )  
 )  
Defendants. )

**DECLARATION OF RALPH DOLLHOPF**

I, Ralph Dollhopf, declare as follows:

1. I am employed by the United States Environmental Protection Agency (EPA). My current position is On-Scene Coordinator with the Superfund and Emergency Management Division (SEMD) in EPA Region 5, which serves Illinois, Indiana, Ohio, Michigan, Minnesota, and Wisconsin. I am based out of EPA Region 5's Ann Arbor, Michigan office.

2. I first began working for EPA Region 5 as an On-Scene Coordinator in 1985, after receiving my bachelor's degrees in environmental engineering and psychology. As an On-Scene Coordinator, I am responsible for assessing oil spills and releases of hazardous substances reported to the federal government, including assessing potential hazards, the resources needed to contain and clean up the release or spill, and the ability of the responsible party or local authorities to handle the incident, as well as taking actions to monitor the release or spill, including controlling and cleaning up the release or spill as appropriate. Where EPA assistance is

needed, my job is either to obtain and manage the necessary EPA resources and personnel or to require and direct responsible parties to respond to the incident.

3. I have been a member of EPA Region 5's Superfund and Emergency Management Division (the title of which has changed over the years) for nearly four decades. Within the Superfund and Emergency Management Division is a group of EPA On-Scene Coordinators and scientists who are specially trained to respond to emergency incidents. As a member of this group, I have completed the required Incident Command System (ICS) training prescribed by the National Incident Management System (NIMS) and have also taught the ICS training to dozens of EPA staff.

4. ICS is a response organization tool for the command, control, and coordination of an emergency response; it applies systematic management and organization principles to incident response by employing a common organizational structure—the Incident Command—that can be expanded or contracted based on the complexity of the incident. In 2004, I was EPA's representative in the development of NIMS, which is a comprehensive, national approach to incident management that relies on ICS.

5. I am trained to serve as the Incident Commander when EPA's incident management teams deploy to an incident, and I have provided training to other EPA staff on the roles and responsibilities of an Incident Commander. The Incident Commander is the senior position within the Incident Command. During an emergency response, the Incident Commander is responsible for organizing and directing the response activities to achieve the incident objectives. In a complex emergency incident, the Incident Commander may be responsible for supervising many subordinate management personnel (such as section chiefs, branch directors,

etc.) and other staff who implement planning, operations, logistics, financial, environmental science, and data functions within the Incident Command.

6. I have worked on and/or helped lead EPA's responses to a number of nationally significant and complex emergency incidents throughout my career, including EPA's cleanup of residential properties contaminated with methyl parathion in Ohio, Illinois, Michigan, and Mississippi in the 1990s, EPA's response to the September 11, 2001 terrorist attacks on the World Trade Center, EPA's response to the Washington D.C. anthrax attacks in 2001 and 2002, EPA's response to the Columbia Space Shuttle accident in 2003, and EPA's response to Hurricane Katrina in 2005. My expertise and experience in leading emergency responses as an Incident Commander include highly complex emergency incidents. For example, in 2010 to 2013, I served as the Incident Commander for a large oil spill that occurred when a pipeline owned by Enbridge Energy ruptured in Michigan and spilled over 1 million gallons of crude oil into the Talmadge Creek and Kalamazoo River. As part of that response, I helped form and lead a Unified Command made up of federal, state, and local agencies to manage the incident. Unified Command is a fundamental feature of ICS that helps multiple agencies work together to manage an emergency incident. Importantly, in addition to my multi-agency coordination role of Incident Commander in the Enbridge response, I also functioned as the Federal On-Scene Coordinator and directed the responsible party's response and cleanup work required by EPA's administrative orders.

7. I deployed to East Palestine in late February 2023 to assist with the emergency response efforts. Since then, I have served as the EPA Incident Commander for the East Palestine train derailment emergency response. One of my first acts as Incident Commander was to formalize a Unified Command response organization to establish and implement clear incident

objectives for continuing the response, and to begin to assert federal control over Norfolk Southern's cleanup of environmental contamination caused by the derailment. The formalized Unified Command also helped ensure that there was a whole-of-government approach to the response by allowing federal, state, and local governments to closely coordinate their efforts. On June 28, 2024, the Unified Command response organization transitioned to a Multi-Agency Coordination Group, which I continue to lead. Transitioning from a Unified Command organizational structure to a Multi-Agency Coordination Group allows local and state stakeholders continued opportunity for input and to receive situational awareness while lightening their resource burdens over extended project durations. In the case of the East Palestine response, EPA, Ohio EPA, and Norfolk Southern continue to interact in daily project management settings and to interact weekly with local stakeholder agencies in a Multi-Agency Coordination Group format.

8. As Incident Commander, I have been responsible for leading EPA's response to the train derailment incident, including leading the Unified Command. I have also served as the Federal On-Scene Coordinator for both the CERCLA and Clean Water Act removal actions in East Palestine. My responsibilities as the Federal On-Scene Coordinator have involved overseeing the review and approval of work plans submitted by Norfolk Southern pursuant to both of EPA's unilateral administrative orders, as well as directing and overseeing the cleanup activities to ensure Norfolk Southern is performing the work in accordance with the approved work plans and the federal government's National Contingency Plan. I am therefore very familiar with the cleanup work that has been conducted in East Palestine to date.

9. While I was not initially assigned to the East Palestine train derailment incident and was not Incident Commander immediately following the derailment, I am generally familiar

with initial response efforts that occurred before late February because I was briefed on events and issues as I transitioned to Incident Commander and Federal On-Scene Coordinator.

10. EPA initially deployed a team to East Palestine within hours of the train derailment to support state and local emergency response efforts, and EPA personnel have remained on site in East Palestine for the past 19 months.

11. Immediately after the derailment, EPA provided support to the State of Ohio and the East Palestine fire chief, who at the time was the Incident Commander in charge of the emergency response. Within the first 24 hours after the derailment, EPA On-Scene Coordinators arrived to assess the incident, and they deployed air monitoring instruments in multiple locations surrounding the train fire. Additional air monitoring technologies were deployed in and around East Palestine during the following days and weeks, and air monitoring continued to occur at the derailment area and in the community 24 hours per day, 7 days per week through the completion of the major soil excavation work in fall 2023. Since then, air sampling and monitoring have continued in targeted locations where invasive work (i.e., soil excavation or loading or sediment removal) is being performed.

12. In early February 2023, EPA assisted with initial environmental response efforts that were being conducted by Norfolk Southern and by the Ohio Environmental Protection Agency (Ohio EPA). For example, during the vent and burn operation on five rail cars containing vinyl chloride that was performed by Norfolk Southern on February 6, 2023, EPA conducted air monitoring both within and outside the one-mile by two-mile evacuation zone.

13. EPA's review of air monitoring data between approximately 5pm on February 6, 2023 (during the vent and burn) to approximately 2pm on February 7, 2023, showed that EPA's monitors immediately next to the site detected low levels of hydrogen chloride and phosgene

during the vent and burn event, but they were not sustained and did not continue after the fire was out. These monitors were located within the one-mile by two-mile evacuation zone. EPA's air monitors outside the evacuation zone did not detect any contaminants of concern (i.e., volatile organic compounds, hydrogen cyanide, benzene, hydrogen sulfide, hydrogen chloride, and phosgene) above screening levels. Screening levels are used by EPA to identify potential risks to human health and to determine if there is a need for further investigation. A sustained exceedance of a screening level refers to an exceedance of a screening level that continues over time and may show a trend. EPA's air monitors outside the evacuation zone showed periodic exceedances of particulate matter screening levels. These particulate matter exceedances continued after the vent and burn, though they were not as elevated and were less frequent after the vent and burn fire was extinguished.

14. Immediately after the derailment, there were acute impacts to aquatic life when spilled material discharged into the local streams. EPA is not aware of any evidence that links the derailment to deaths of non-aquatic species.

15. On February 21, 2023, EPA finalized an Action Memorandum setting forth its record of the selection and approval of a removal action in East Palestine under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) to address the imminent and substantial threat posed by hazardous substances released into the environment as result of the derailment.

16. The CERCLA removal action as set forth in the Action Memorandum was, and is, intended to address the release of hazardous substances, pollutants, or contaminants at the Site, and specifically, to eliminate and abate threats to humans and animals from exposure via

inhalation, dermal contact, and incidental ingestion. The Site generally consists of the areal extent of contamination resulting from the derailment and derailment related activities.

17. The derailment related contamination covered by the CERCLA removal action includes CERCLA hazardous substances, pollutants, and contaminants released from the train, as well as CERCLA hazardous substances, pollutants, and contaminants produced as a result of the mixing, burning, or degradation of substances released at the Site, including the February 6, 2023 vent and burn, as well as chemicals from firefighting suppressants. The derailment related contamination consists of dozens of chemicals—volatile organic compounds, such as vinyl chloride, and semi-volatile organic compounds including those associated with oil, as well as glycols and dioxins.

18. On February 21, 2023, EPA issued a CERCLA unilateral administrative order (UAO) directing Norfolk Southern to clean up the hazardous substances from the derailment. Upon issuance of the CERCLA UAO, direction and oversight of the response work transitioned to EPA.

19. The CERCLA UAO required Norfolk Southern to submit a series of work plans for EPA review and approval to guide the cleanup. These included, for example, plans for site security, cleaning up the Site, and for management, transportation, and off-site disposal of waste associated with the derailment, and plans for testing soil, surface water, sediments, groundwater, drinking water, and air. This process of submitting work plans for EPA review and approval is consistent with EPA's standard practice for response orders where a responsible party is performing the cleanup work. EPA has found this process to be effective because it integrates the responsible party into the planning process and facilitates smooth implementation of the work, while retaining review and revision authority for EPA. While the responsible party will generate



the initial drafts, EPA will provide comments and revisions and will not approve plans that are deficient. Here, Norfolk Southern has hired environmental experts to produce the work plans it has submitted to EPA for review and approval.

20. As the cleanup has progressed, additional work plans have been submitted by Norfolk Southern and reviewed and approved by EPA under the CERCLA UAO. All necessary work plans have either been completed or are currently being implemented.

21. EPA's engineers, scientists, and On-Scene Coordinators have engaged in rigorous direction and oversight of Norfolk Southern's activities under the CERCLA UAO. As discussed above, Norfolk Southern is required to submit detailed work plans for EPA review and approval. The approved work plans that involve the collection, production, evaluation, and use of environmental information have associated Quality Assurance Project Plans so that the data generated and used under the work plans are of known and documented quality and acceptable for their intended purpose, i.e., decision-making by EPA. The CERCLA UAO also required Norfolk Southern to provide a Quality Management Plan for EPA review and approval in order to further reinforce the importance of accountability for data quality. EPA has been ensuring that its scientists review and check data generated under the work plans, and EPA has collected its own subset of environmental samples at the same times and locations as Norfolk Southern to verify the accuracy of Norfolk Southern's methods and data. When work has been done incorrectly, EPA has instructed Norfolk Southern to redo it. When data have been unusable as presented, EPA has required Norfolk Southern to repeat the data collection or re-report the data. And when data have indicated that more cleanup activities are necessary, EPA has made Norfolk Southern complete that work.

22. While EPA has been overseeing the cleanup and directing the work, it has done so with continuous coordination with, and input and assistance from, all the other members of the Unified Command, including Ohio EPA, Columbiana County, and the Village of East Palestine. The Unified Command has also helped to ensure transparency and information sharing throughout the response. As discussed below, much of the CERCLA cleanup work is now done. As a result, on June 28, 2024, the Unified Command decided to transition to a Multi-Agency Coordination Group, which no longer coordinates daily but continues to meet on a weekly basis.

23. Under the CERCLA UAO, Norfolk Southern has removed contaminated soil at the derailment area in accordance with the *Main Line Interim Soil Removal Plan*. EPA originally approved this work plan on March 2, 2023, and the work plan has been updated several times since then. Work under this plan has involved excavation of contaminated soil throughout the derailment area (including underneath and adjacent to the rail lines, ditches running through the derailment area, and the areas where derailed rail cars were located), and analyses of soil samples to confirm derailment related contamination is being removed, after which restoration with clean backfill material is completed.

24. EPA has required Norfolk Southern to conduct a comprehensive removal of derailment related contaminants in accordance with conservative criteria to ensure the contamination no longer poses a threat to human health and the environment and so that it will not be necessary for either the state or federal government to require Norfolk Southern to take additional actions that will disrupt the community again.

25. Under the *Main Line Interim Soil Removal Plan* as well as the *Waste Management Plan* (which detailed how waste would be managed, characterized, and transported off-site for proper disposal), Norfolk Southern under EPA and Ohio EPA oversight has removed,

transported, and disposed of more than 193,000 tons of contaminated soil and more than 73 million gallons of wastewater. In October 2023, the majority of removal work under the *Main Line Interim Soil Removal Plan* was completed, and Norfolk Southern is currently implementing the *Characterization Work Plan for Derailment-Area Soil*, discussed in more detail below.

26. Norfolk Southern offered temporary relocation assistance to local residents who chose to relocate while the soil excavation work described above was being conducted. This temporary relocation assistance ended on February 9, 2024, after major soil excavation and CERCLA removal activities were done.

27. Norfolk Southern, under EPA oversight, also offered to conduct home and office cleanings to anyone living either in the Village of East Palestine or within the one-mile by two-mile Ohio-Pennsylvania evacuation area.

28. During the excavation and removal work, EPA required Norfolk Southern to sample and monitor air in the community to ensure that residents were safe and not harmed by contaminants released by the cleanup work. EPA itself also conducted extensive air monitoring and sampling in the community during this period of time.

29. Norfolk Southern is currently implementing the *Characterization Work Plan for Derailment-Area Soil*, which EPA approved under the CERCLA UAO on September 7, 2023. Work under this plan involves, among other things, collecting thousands of soil, sediment, subsurface vapor, and air samples, in order to assess the extent of any remaining contamination at the derailment area. The sampling effort under this plan is now more than 85% complete, and review of the data to date indicates that a comprehensive and effective removal of hazardous substances is being achieved. EPA may require additional removal actions based on its ongoing review of the results of the sampling and analysis being done under this work plan.

30. In addition to excavating acres of contaminated soil, the CERCLA cleanup has involved a robust environmental monitoring and sampling program for soil, water, and air throughout the community.

31. On March 7, 2023, EPA approved Norfolk Southern's *Phase I—Preliminary Residential/Commercial/Agricultural Soil Sampling Plan (Phase I Soil Sampling Plan)*, which involved collecting off-site soil samples at various properties in and around East Palestine for dioxins and semi-volatile organic compounds to determine whether there was evidence of impact by these chemical compounds as a result of soot and ash from the derailment fires and the February 6, 2023, vent and burn.<sup>1</sup> EPA oversaw all soil sampling efforts under this plan and collected independent samples at certain locations to verify Norfolk Southern's work.

32. Under the *Phase I Soil Sampling Plan*, in March and April 2023, Norfolk Southern and EPA collected and analyzed soil samples at 121 locations within the one-mile by two-mile evacuation area, as well as an extended one-mile area to the southeast in Pennsylvania. Twenty-five additional locations were sampled to determine the range of normal “background levels” of contamination for soils in the area—background levels are concentrations of chemicals that approximate what already exists in an area due to natural soil conditions and/or preexisting human activities. A map showing the locations of the properties sampled under the *Phase I Soil Sampling Plan* is attached as Exhibit A. The types of properties sampled were homes, parks, schools, farms, and commercial/industrial properties, and included a home garden just across from the derailment area as well as the farm closest to the derailment area. The sampling area was larger than the area originally proposed by Norfolk Southern and was informed by an event reconstruction plume map made at EPA's request by the Interagency Modeling and Atmospheric

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<sup>1</sup> EPA approved a revised version of this plan, with an expanded sampling area, on April 6, 2023.

Assessment Center, a federal interagency partnership led by the Federal Emergency Management Agency, which used meteorological and other modeling inputs to estimate the vent and burn smoke plume area and the estimated concentrations of soot that may have deposited in the plume area.

33. Two samples were collected at each location: one from the top inch of soil (to test for more recent contamination) and the other from 1 to 6 inches below the surface (to test for older contamination). For nearly all locations, including the home garden and farm closest to the derailment area, results of the *Phase I Soil Sampling Plan* showed levels of dioxins and semi-volatile organic compounds within typical background ranges for the area. The only exceptions were a handful of outlier data points associated with commercial and industrial properties as well as properties next to roadways, which are expected to have increased concentrations of these chemicals because the combustion of fuel (like oil, diesel, leaded gas) is a source of dioxin production. Based on their review of this soil sampling data, EPA's scientists concluded that there was no discernable soil contamination caused by the derailment at the 121 locations tested.

34. EPA's findings were consistent with similar findings made by Ohio and Pennsylvania after they tested crops in the area for derailment related contamination. In the spring of 2023, the Ohio Department of Agriculture and the Ohio State University College of Food, Agriculture, and Environmental Sciences collected 31 plant tissue samples from agricultural areas within a 5-mile radius of the derailment area and analyzed them for 26 different semi-volatile organic compounds (SVOCs) associated with the derailment. According to the State of Ohio, the Ohio State University's analysis of samples "did not find reportable levels of SVOCs in the inner [within 1-3 miles of the derailment area] or background radius [within 3-5 miles of the derailment area] zones attributable to the train derailment." Ohio

Emergency Management Authority, *East Palestine Train Derailment: Testing & Results*, <https://ema.ohio.gov/media-publications/east-palestine-derailment-info/testing-results>. The State of Ohio stated that this analysis “shows plant materials from agricultural sites in the East Palestine area are not contaminated with semi-volatile organic compounds (SVOCs) associated with the train derailment.” *Id.*

35. According to the State of Pennsylvania, similar testing done by the Pennsylvania Department of Agriculture, which took tissue samples from triticale, grass, hay, spelts, garlic, and blueberry bushes in Beaver and Washington counties to determine levels of 26 SVOCs present, “found no compounds present above reportable limits for that substance.” *See Shapiro Administration Releases Results of Crop Samples Showing No Contamination on PA Farms Near Norfolk Southern Train Derailment* (June 27, 2023), [https://www.media.pa.gov/Pages/Agriculture\\_details.aspx?newsid=1324](https://www.media.pa.gov/Pages/Agriculture_details.aspx?newsid=1324). Pennsylvania Agriculture Secretary Russel Redding stated that these samples “give additional reassurance that contamination from the derailment has not spread into crops grown in the region.” *Id.*

36. Norfolk Southern’s *Potable Water Sampling Work Plan*, approved by EPA on April 28, 2023, and *Sentinel Monitoring Well Installation and Groundwater Sampling Work Plan* (*Sentinel Well Work Plan*) and *Groundwater Characterization Work Plan*, both approved by EPA on June 29, 2023, have focused on monitoring for and analyzing potential impacts of the derailment on drinking water and groundwater.

37. Under the *Potable Water Sampling Work Plan*, Norfolk Southern has collected samples from over 200 private drinking water wells in Ohio and Pennsylvania. Columbiana County (for wells in Ohio) and the Pennsylvania Department of Environmental Protection (for wells in Pennsylvania) have overseen these private well sampling efforts, in coordination with

EPA. Households were selected for inclusion in the private well sampling program based on an initial well testing program established in coordination with EPA, Ohio EPA, the Ohio Department of Health, Columbiana County, and the Pennsylvania Department of Environmental Protection in February 2023, which was then later expanded to include additional private well sampling as more information about surface water and groundwater was collected and analyzed under the CERCLA UAO. Under the *Potable Water Sampling Work Plan*, households were able to sign up to get their private wells sampled if they were located in one of the four “priority zones.” Some households located outside of the priority zones that requested sampling were also included in the private well sampling program. These priority zones were defined in part on the regional inferred groundwater flow direction, surface water flow, and the watershed basin, but the work plan notes that additional properties outside the priority zones may be added to the sampling program depending on the sampling results. To date, more than 1,600 private drinking water well samples have been collected through multiple rounds of sampling, and analyses of these samples have not detected contamination attributable to the derailment. In light of these results, it has not been necessary to expand the priority zones under the work plan.

38. Under the proposed Consent Decree in this case, Norfolk Southern would be required to continue the private well sampling program for all households currently participating in the program under the CERCLA UAO for an additional 10 years. EPA must approve the Private Drinking Water Well Monitoring Work Plan under the proposed Consent Decree, and it is EPA’s intent to ensure that any household that previously had its private well sampled under the private well sampling program (at any point in time) remains eligible for the program.

39. Ohio EPA has been overseeing Norfolk Southern’s monitoring and testing of East Palestine’s municipal drinking water supply. Under the *Potable Water Sampling Work Plan*,

Norfolk Southern has completed over 65 rounds of sampling of the public municipal wells, and similar to the private drinking water wells, no contamination attributable to the derailment has been detected in treated water. To discover any potential contamination before it reaches drinking water wells, under the *Sentinel Well Work Plan*, EPA instructed Norfolk Southern to install and analyze samples collected from several sentinel wells placed in strategic locations, and installed at different depths, between the derailment area and private and public drinking water wells. Ohio EPA has been overseeing the sentinel well program, in coordination with EPA. The sentinel wells continue to be sampled regularly, and EPA and Ohio EPA are continuing to evaluate sentinel well data to look for any potential impacts to the public's drinking water supplies.

40. In addition to the sentinel wells, under the *Groundwater Characterization Work Plan*, Norfolk Southern has installed and collected samples at 48 monitoring wells. These groundwater monitoring wells have been installed at different depths in the derailment area and immediate vicinity to monitor groundwater in the local aquifers under and around the industrial site where the derailment occurred. The groundwater monitoring wells are also being sampled regularly, and data continue to be evaluated by EPA and Ohio EPA.

41. EPA and Norfolk Southern have been testing for contaminants in the air at the derailment area and in and around East Palestine since February 4, 2023. This comprehensive air monitoring/sampling effort began immediately after the derailment and continued throughout the soil excavation and removal work in March 2023 and thereafter under Norfolk Southern's *Air Sampling and Analysis Plan*, approved by EPA on April 25, 2023. The air monitoring network has included stationary and mobile air monitoring instruments that provide continuous real-time measurements of air contamination. Deployments of air canisters, sorbent tubes, and adsorbent badges to collect air samples, which are then sent to a laboratory for analysis, have also been



important cornerstones of the rigorous air science program EPA has required to ensure protection of public health and worker safety throughout this response and cleanup.

42. Air monitoring and/or sampling equipment have operated at the derailment area and in the community since very early in the response. A map of the roaming air monitoring occurring in and around East Palestine in early February 2023 is attached as Exhibit B, and maps of the air monitoring and sampling locations that were operating in East Palestine as of April 2023 are attached as Exhibit C. The over 115 million air measurements taken to date demonstrate that there is no ongoing exposure to the community from contaminants released by the derailment, vent and burn, and subsequent cleanup. Since the evacuation order was lifted on February 8, 2023, there have not been any sustained exceedances in community air above established screening levels for the derailment contaminants of concern, vinyl chloride and butyl acrylate.

43. To the extent people are concerned about indoor air quality because of the derailment's releases to outdoor air, the air monitoring and sampling data, as mentioned above, show that there are no ongoing exposures to contamination released from the derailment, vent and burn, or cleanup work in outdoor air. With respect to concerns from community members regarding the possible migration of volatile organic compounds from soil/groundwater at the derailment area into the air inside homes—something known as vapor intrusion—over 193,000 tons of contaminated soil have been removed from the Site, which has mitigated the source of volatile organic compounds. This source removal significantly decreases the possibility of volatile organic compounds migrating from the soil or groundwater into people's homes. EPA also continues to evaluate potential vapor intrusion pathways within industrial areas closest to the derailment area as part of its final confirmation sampling program and will continue to ensure

that all necessary cleanup activities are done to eliminate threats to human health and the environment from the derailment contamination.

44. Norfolk Southern has collected samples of surface water and stream sediment under the *Surface Water Sampling and Analysis Plan*, approved by EPA on June 29, 2023, the *Sulphur Run Characterization Work Plan*, approved by EPA on July 12, 2023, and the *Leslie Run and Downstream Creeks Characterization Work Plan*, approved by EPA on August 5, 2023. The purpose of these plans was to evaluate the extent of contamination in Sulphur Run and Leslie Run—two waterbodies that run through East Palestine which were contaminated as a result of the derailment. EPA’s and Ohio EPA’s review of the surface water samples collected under the *Surface Water Sampling and Analysis Plan* indicated that earlier stream cleanup work was effective at removing CERCLA hazardous substances. However, visual observation of surface water, as well as sampling conducted under the two characterization work plans, indicated that there was contamination in the sediment caused by the derailment, which became visible as oil sheen on the surface of the streams when sediments were disturbed.

45. After persistent oil sheen was observed in the local streams as part of the initial assessments described above, on October 18, 2023, EPA issued a unilateral administrative order under the Clean Water Act requiring Norfolk Southern to conduct a more comprehensive assessment and to remove derailment related oil and Clean Water Act hazardous substances in Sulphur Run and Leslie Run. Norfolk Southern completed this comprehensive assessment, under EPA oversight, in November 2023.

46. The cleanup work under the Clean Water Act Order has involved disturbing sediment and cleaning areas where oil sheens were generated in the streambeds and banks in 17 areas in Sulphur Run and four areas in Leslie Run where oil sheens were observed.

47. The Clean Water Act Order also involved cleaning the culverted portions of Sulphur Run. Specifically, the Clean Water Act cleanup addressed five culverts ranging from a length of 150 feet to approximately 800 feet long. Each culvert was initially investigated remotely utilizing drone and robotic technologies to access hard to reach areas and identify potential health and safety hazards and to evaluate the integrity of the culverts. Culverts then were cleaned by removal of sediments or removal of oil sheen produced from sediment agitation.

48. Initial cleanup work in the streams, including the culverts, was completed on June 21, 2024.

49. Norfolk Southern has completed a subsequent reassessment of both streams as required by the Clean Water Act Order, and the results indicate that the efforts described above were effective in the sediment areas that were targeted for cleanup work. However, EPA is requiring Norfolk Southern to conduct additional reassessments in 2024 and 2025 to ensure that all areas needing cleanup are addressed. EPA will continue to evaluate response activity and data relating to previous assessments and reassessments, and will require Norfolk Southern to continue cleanup work in the stream channels and bank areas along the impacted streams until the Clean Water Act removal action is complete.

50. EPA will determine that the Clean Water Act removal action is complete when it determines that the discharges of oil and Clean Water Act hazardous substances from the derailment no longer present a threat to the public health or welfare. This process will include consultation with Ohio EPA and verification that: 1) designated State water quality standards have been met, 2) there is no more persistent oil sheen from the derailment (i.e., sheen that will not naturally attenuate), and 3) Norfolk Southern otherwise complies with all requirements in the approved work plan.

51. The CERCLA and Clean Water Act cleanups are both ongoing. They are driven by science and EPA's review of tens of thousands of environmental sample collections and analytical data reports. The cleanups are robust, using conservative cleanup criteria to reduce the possible need for additional, subsequent cleanup actions that will disrupt the community again at a future date. As the cleanup work proceeds towards its conclusion, EPA will continue to verify that these CERCLA and Clean Water Act cleanup targets are achieved and supported by sound science.

52. Given the costs spent to date by EPA directing and overseeing the CERCLA and Clean Water Act administrative orders as well as responding to the incident, I estimate that EPA is likely to spend approximately \$100 million on response costs. This estimate is based on the rate at which EPA had been spending money as of this spring and projecting those costs through the estimated completion date. EPA's total responses costs could be higher or lower than \$100 million depending on the remaining work that needs to be done.

53. Under the proposed Consent Decree, EPA will not issue Notices of Completion of the CERCLA Removal Action and Clean Water Act Removal Action until it determines that all work related to the CERCLA and Clean Water Act cleanups has been fully performed and no further removal action is needed. EPA has been requiring Norfolk Southern to conduct monitoring as part of the removal actions. Decisions about the duration of that monitoring will be made following completion of the final site characterization described previously in Paragraph 29. As stated above, EPA's intent is to require that Norfolk Southern remove and mitigate derailment related contamination that poses a threat to human health and the environment so that long-term monitoring will not be required as part of the removal actions.

54. In my experience, which includes working on dozens of removal actions, it is atypical to have long-term environmental monitoring following a removal action that addresses the source of the contamination, which is the intent of EPA's removal actions in East Palestine. However, the proposed Consent Decree in this case requires Norfolk Southern to conduct surface water, groundwater, and drinking water monitoring for an additional 10 years after removal actions are complete to provide additional assurance to the community, and in the unlikely event additional derailment contamination is found, Norfolk Southern will be required to address it.

55. Significant progress has been made since February 2023. The ongoing removal actions represent a whole of government approach to a complex, nationally significant and high-profile incident. EPA along with other federal, state, and local governments have deployed hundreds of highly skilled scientists, public health experts, and staff from across the nation to ensure a comprehensive and coordinated response. EPA has directed Norfolk Southern to engage in a robust, data-driven response, evaluation, and cleanup of the Site, underpinned by science. The cleanups taken under the CERCLA and Clean Water Act administrative orders have utilized conservative standards to help ensure that there will not be a need for future cleanups and further disruption to the community. EPA's timeline for final completion of the CERCLA and Clean Water Act cleanups will be determined by conditions on the ground, including the continued extensive sampling and evaluation of soil, groundwater, sediment, surface water, drinking water, and air. EPA remains committed to protecting the public health and welfare of the affected community.

Pursuant to 28 U.S.C. § 1746, I declare under the penalty of perjury that the foregoing is true and correct.

DATE: October 10, 2024

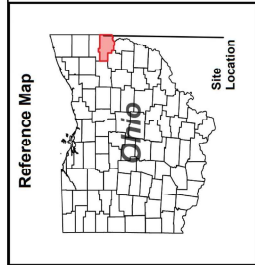
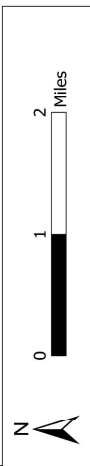
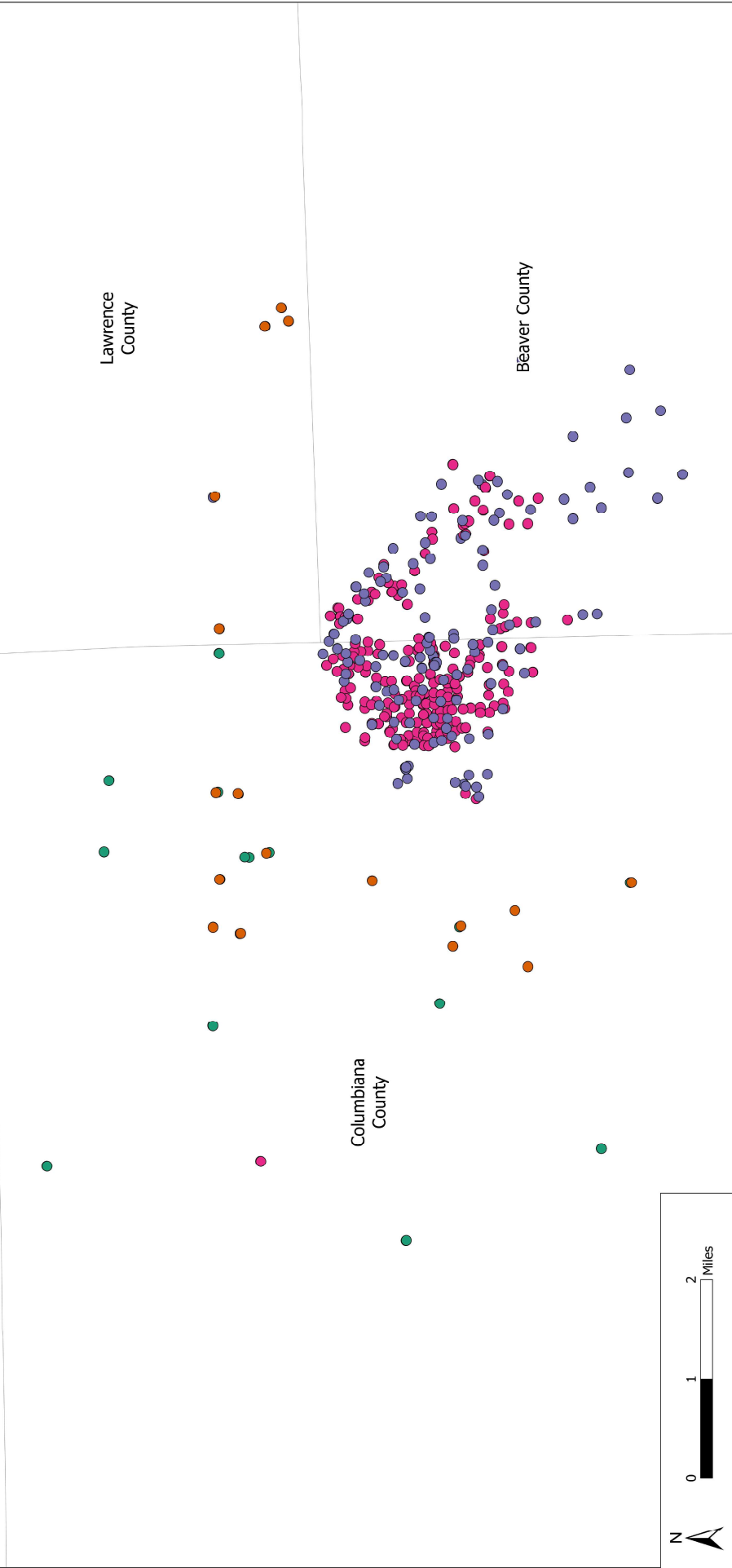
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Ralph Dollhopf

**Exhibit A**  
**to Ralph Dollhopf Declaration**

**Phase I - Preliminary Residential/Commercial/Agricultural Soil Sampling Plan**  
 Inspection and Soil Sample Locations



- Inspected and Sampled
- Inspected
- Background - Inspected and Sampled
- Additional Background – Inspected and Sampled
- Counties (USCB)

Data Sources: US EPA & Norfolk Southern

East Palestine, Ohio Train Derailment Response

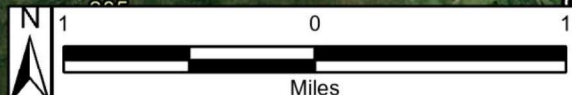
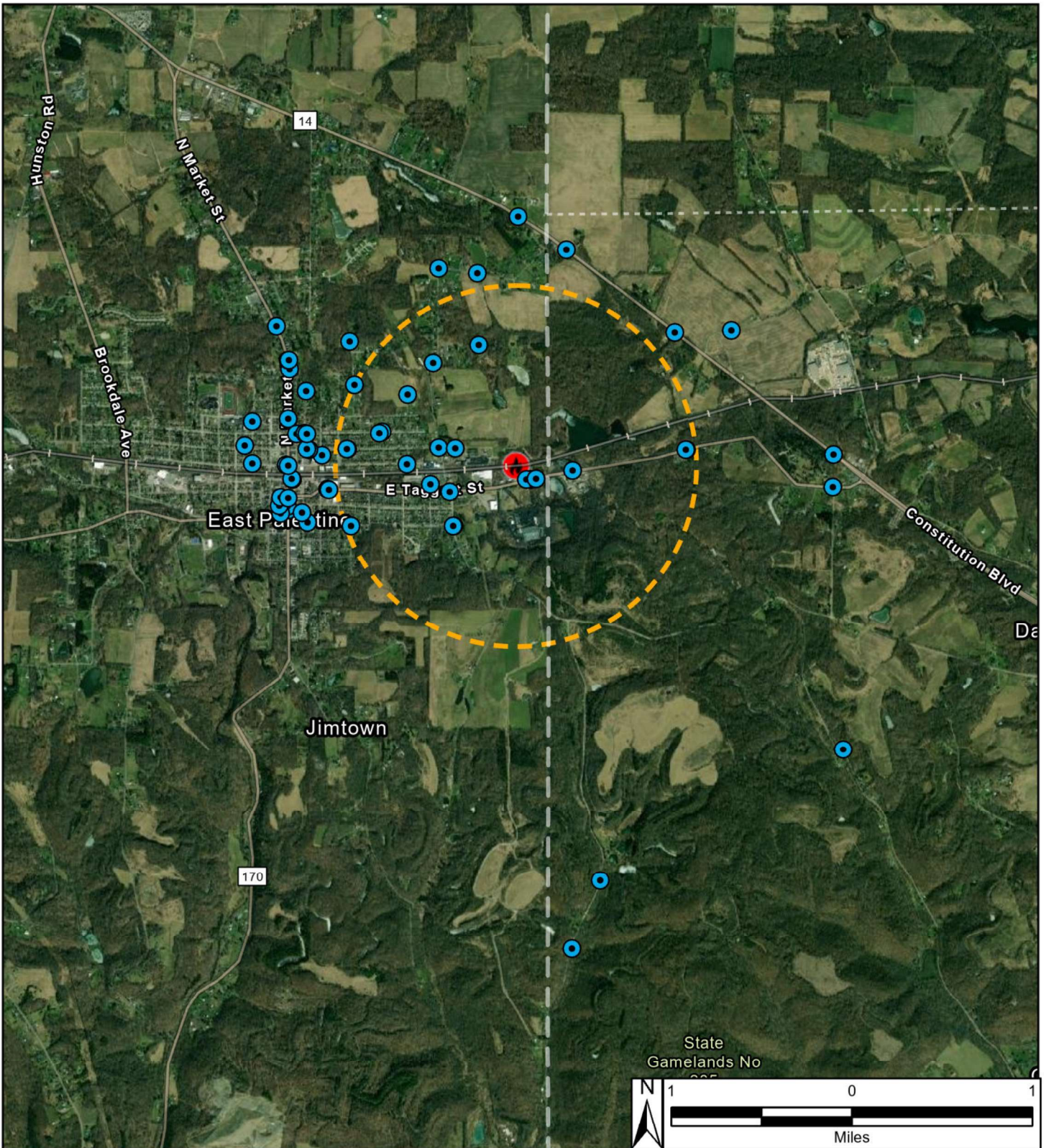
**Soil Inspection and Sample Locations through April 18, 2023**

Prepared By: U.S. EPA GIS Unit  
 Prepared For: U.S. EPA  
 Date Prepared: 5/6/2023 2:24 PM





**Exhibit B**  
**to Ralph Dollhopf Declaration**



**Reference Map**



Site Location

**Legend**

- Derailment Location
- One Mile Radius
- Roaming Air Monitoring Locations

East Palestine Derailment ER Site  
75 E Main St  
East Palestine, Columbiana County, OH 44413

**Figure 1**  
**Roaming Air Monitoring Locations**



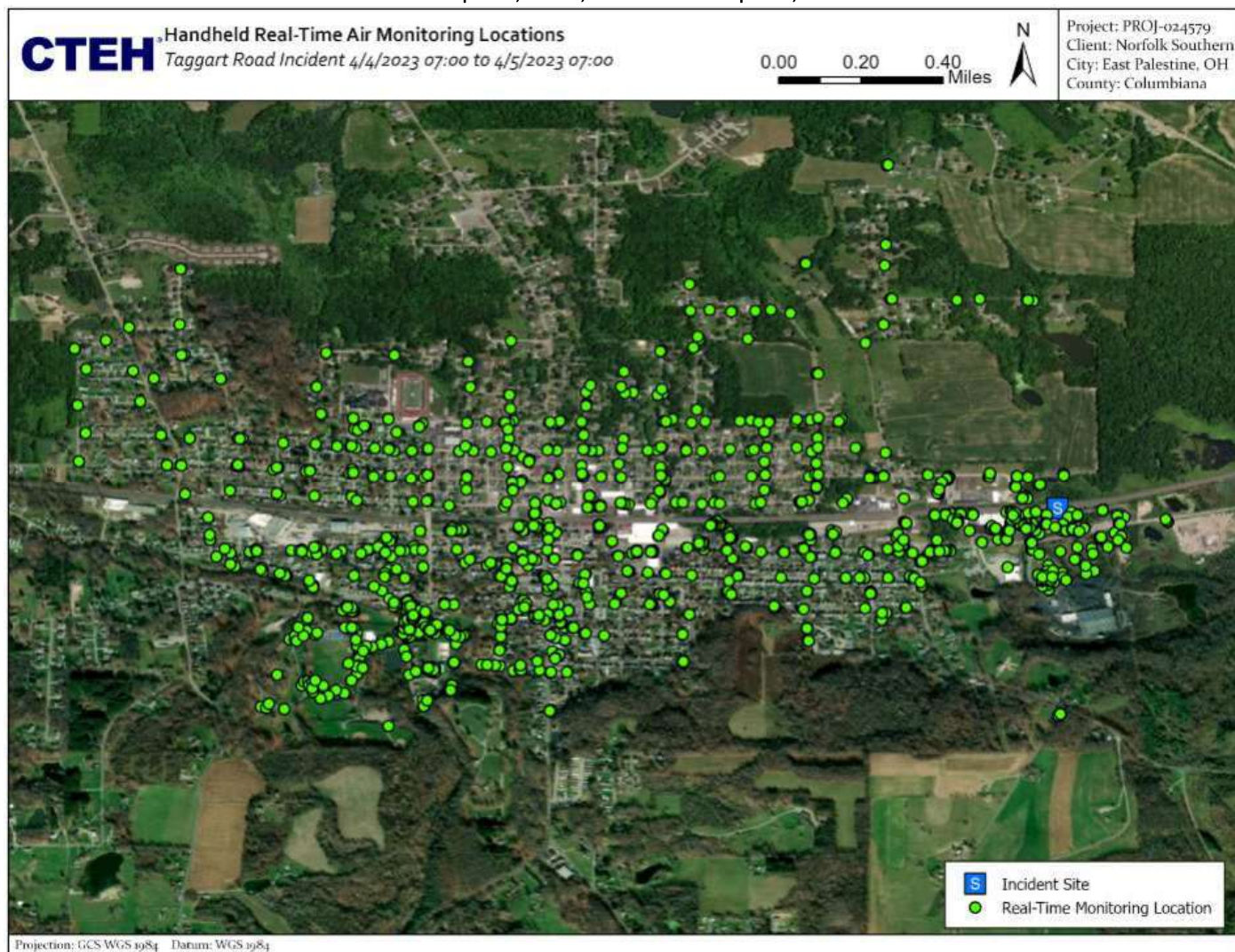
Prepared For: EPA

Prepared By: Tetra Tech Inc.

**Exhibit C**  
**to Ralph Dollhopf Declaration**

**Figure 1.3a Handheld Real-Time Air Monitoring Locations**

0700 EST April 4, 2023, to 0700 EST April 5, 2023



**Figure 1.3b Stationary Radio-Telemetered Real-Time Air Monitoring Locations**

As of April 18, 2023\*



\*AreaRAEs are instruments that are fixed locations and radio-telemeter data back to a console in real-time. This map is current for where stations are located.

Figure 1.3c Air Sampling Locations

As of April 18, 2023

