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Update to EPA Report Submitted Pursuant to Section 2(b) of Executive Order 14108

***Executive Order 14108 on Ensuring the People of East
Palestine Are Protected Now and in the Future¹***

August 23, 2024

¹ See 88 FR 66265 (9/26/23).

Introduction

On September 20, 2023, President Joseph Biden issued Executive Order 14108 (*Executive Order on Ensuring the People of East Palestine Are Protected Now and in the Future*). The order directed EPA to provide a report to the President within 30 days on the cleanup efforts, on Norfolk Southern's compliance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) unilateral administrative order to address the imminent and substantial endangerment caused by the company's derailment, and on the status of air, soil, and water monitoring. EPA was also directed to provide the President with an updated report every 60 days until all cleanup, assessment, and monitoring work required by EPA's order has been completed. This report is the fifth update in the series and the sixth report overall. It provides updates on activities and developments since EPA's last report (June 21, 2024).

Status of Cleanup Efforts

During the first half of calendar year 2024, cleanup operations were focused on three major operational efforts: (1) the assessment and cleanup of contaminated/oiled sediments in Sulphur and Leslie Runs (2) the double-check confirmatory soil sampling at the derailment site and other adjacent areas; and (3) the ongoing collection and disposal of rainwater and other precipitation that has come into contact with parts of the site that have not yet received a final assessment. Initial cleanup work in the local streams is now complete. The sitewide confirmatory sampling effort has continued to make steady progress, and is now more than 85% complete.

As part of its water-management efforts, Norfolk Southern has partitioned the cleanup site into 15 sub-watershed units. As sitewide confirmatory sampling has progressed, most of these areas have been determined to be clear of vinyl chloride. Precipitation that comes into contact with these areas no longer needs to be collected or disposed of, and this water can be allowed to resume its natural flow back to the ditches along the rail line and ultimately into Sulphur Run. This has dramatically reduced the volume of water that needs to be actively managed, allowing nearly all the extensive water-management infrastructure that had been constructed on-site to be decommissioned, decontaminated, and demobilized. More than 260 frac tanks have been removed from the large staging areas ("frac tank farms") where frac tanks were used to store site-generated wastewater. Similarly, six large water storage tanks associated with the onsite water treatment system and one of the two 1-million gallon storage tanks have been demobilized and dismantled. In turn, this has enabled additional progress on confirmatory soil sampling of the areas that were formerly beneath the footprint of the water-management infrastructure.

With several of the most prominent cleanup objectives achieved, the response organization for the cleanup made an important transition on July 1, transitioning from a Unified Command to a Multi-Agency Coordination Group (MAC-G). This transition is typical at long-term emergency responses and is consistent with the reduced scale of cleanup activities that remain to be completed. Representatives from all Unified Command organizations (EPA, Ohio EPA, Columbiana County, East Palestine, and Norfolk Southern), as well as assisting agencies, continue to meet weekly to receive progress updates, discuss and coordinate work plans and manage ongoing field activities. EPA's unilateral administrative orders remain in place, and EPA and Ohio EPA still have legal jurisdiction to ensure that cleanup, sampling, and monitoring work are completed. Both agencies continue to have personnel on-site and will remain closely involved in day-to-day activities.

Plans and preparations remain in place to bring the cleanup to a successful conclusion. As of August 2024, cleanup operations are focused on (1) final restoration of the areas around the derailment site that have been excavated, sampled, and cleared as part of the final sitewide confirmatory sampling; (2) water infrastructure decommissioning and demobilization; and (3) ongoing completion of sitewide confirmatory soil sampling. Other key operational highlights since June 21, 2024:

Other actions

Other actions currently performed by Norfolk Southern under EPA direction include:

- Temporary storage, transportation, and disposal of wastewater from the site.
- Continued groundwater and sentinel well sampling.
- Monitoring drinking water through private and public water supply sampling.
- Continued downstream creek sampling to determine system recovery.
- Community and worker air monitoring, sampling and analysis at derailment-related work zones.
- Ongoing community engagement.

As of August 2024, more than 193,000 tons of contaminated soil and more than 73 million gallons of contaminated liquid have been shipped off-site for disposal. To date, EPA, its state and local partners¹, and Norfolk Southern have collected more than 56,000 samples, including: more than 32,000 air samples, more than 1,800 groundwater samples, 16 pore water samples, more than 600 sediment samples, more than 200 sheen samples, more than 8,500 soil samples, more than 1,300 solid waste samples, more than 4,800 surface water samples, and more than 4,300 wastewater samples. Available data continue to show that air contaminants of concern (vinyl chloride and n-butyl acrylate) have not been detected at sustained levels in the air in the affected communities since the evacuation order was lifted on February 8, 2023. Raw water and treated municipal drinking water show no detection of contaminants associated with the derailment. To date, sampling indicates that residential groundwater wells have not been negatively affected by chemicals associated with the derailment.

Status of Norfolk Southern's Compliance with Unilateral Orders

On February 21, 2023, EPA issued a CERCLA unilateral administrative order² to Norfolk Southern, ordering the company to conduct all necessary actions associated with the cleanup of the derailment. EPA continues to conduct oversight and believes Norfolk Southern is in compliance with the order.³

On October 18, 2023, EPA issued a Clean Water Act section 311 unilateral administrative order to Norfolk Southern, requiring the company to remove contaminated sediments in culverted areas of Sulphur Run and to further delineate, characterize, and, as necessary, remove oil and Clean Water Act hazardous substances from the sediments in Leslie and Sulphur Runs.⁴ EPA continues to closely monitor and

¹ Ohio EPA, Columbiana County Health Department, and the Pennsylvania Department of Environmental Protection.

² The unilateral administrative order was amended by EPA on March 27, 2023. This amendment made several minor changes to the order.

³ EPA's compliance evaluation is current as of August 23, 2024.

⁴ The effective date of the Clean Water Act order is October 18, 2023 – the date Norfolk Southern received the order.

evaluate Norfolk Southern's compliance with this order and all approved work plans. EPA continues to conduct oversight and believes Norfolk Southern is in compliance with the order.⁵

Proposed Settlement with Norfolk Southern

On March 30, 2023, the Department of Justice filed a complaint on behalf of the EPA alleging claims under sections 309 and 311 of the Clean Water Act and sections 107 and 113 of CERCLA against Norfolk Southern Railway and Norfolk Southern Corporation related to the derailment of Train 32N.

On May 23, 2024, the United States announced a proposed settlement with Norfolk Southern resolving the allegations in the complaint. The proposed settlement is valued at more than \$310 million and holds the company accountable to address and pay for the damage caused by the derailment. Once finalized, the settlement will incorporate remaining requirements of the EPA's CERCLA and CWA unilateral administrative orders, and Norfolk Southern will continue work pursuant to the finalized settlement. If approved by the court, the proposed consent decree will also require Norfolk Southern to:

- Reimburse the United States for all past and some future costs, estimated at \$235 million, so that cleanup efforts can continue and the company, rather than taxpayers, covers the cost.
- Pay a \$15 million civil penalty to resolve the alleged violations of the Clean Water Act.
- Pay \$25 million for an up to 20-year community health program that includes medical monitoring for qualified individuals, mental health services for individuals residing in affected counties (including those in Pennsylvania) and first responders who worked at the site, and a community facilitation plan to assist community members in using the benefits of the program.
- Spend approximately \$15 million to implement long-term monitoring of groundwater and surface water for a period of 10 years.
- Pay \$15 million for a private drinking water monitoring fund that will continue the existing private drinking water well monitoring program for 10 years.
- Implement a "waterways remediation plan," with an estimated budget of \$6 million, for projects in Leslie Run and Sulphur Run that may address historical pollution, reduce non-point source pollution through infrastructure upgrades and stormwater management projects, and restore aquatic and riparian habitat.
- Pay \$175,000 for natural resource damages, to be used by the United States to restore, rehabilitate, replace, or acquire the equivalent of the natural resources injured as a result of the derailment.

In addition, the consent decree requires Norfolk Southern to undertake projects to improve the safety of transporting hazardous materials by rail, including the installation of additional devices to detect overheated wheel bearings early enough to prevent derailments like the one that happened in East Palestine. Finally, the consent decree contains several important initiatives the Norfolk Southern must

⁵ EPA's compliance evaluation is current as of August 23, 2024.

develop and implement that are designed to improve emergency preparedness and response for train derailments involving hazardous materials.

The proposed settlement was open for public comment through August 2, 2024. On July 15-16, 2024, representatives from EPA and the Department of Justice were at the EPA East Palestine Welcome Center to answer questions from the public and local officials about the proposed settlement.

Status of Air, Soil, Surface Water, Groundwater, and Drinking Water

No significant update to report. The status of air, soil, surface water, groundwater, and drinking water has not changed significantly since August. Air monitoring and sampling still occur as necessary during all derailment-related cleanup activities at the specific location of that work. Overall, more than 115 million air monitoring data points, and more than 56,000 samples across all media (air, water, and soil) have now been collected. Since the evacuation order was lifted last year on February 8, 2023, no sustained air monitoring or analytical results for the contaminants of concern in air (vinyl chloride and n-butyl acrylate) have been found above screening levels established for the site. Ongoing data collection and scientific review continue to show that residents of East Palestine are not at risk from impacted surface water, soil, or air from the derailment.

Community and Public Engagement

EPA remains committed to robust community engagement, transparency, and timely, effective communications to the residents of East Palestine and other affected areas in both Ohio and Pennsylvania. In February 2023, EPA opened a Community Welcome Center in East Palestine to ensure that community members would be able to meet face-to-face with EPA staff to ask questions and learn about the response. Originally open 12 hours a day, 7 days a week, the Welcome Center has had more than 1,100 visitors and received more than 1,400 phone calls. The Welcome Center currently remains open by appointment. To make appointments or to ask questions, residents can call EPA's information line at (330) 775-6517. Questions can also be sent to r5_eastpalestine@epa.gov.

Throughout the response, the agency's outreach strategy has been informed by input from a stakeholder group that the agency helped organize – a community-based network of more than 50 trusted community leaders representing civic, faith-based, local government, and non-profit organizations. EPA continues to host meetings with this group twice a month. Typically, more than 15 members attend each meeting.

EPA staff have held or attended over 40 public meetings and community events – from public meetings to booths at local fairs – to share updates and answer questions about the derailment and EPA's cleanup activities.

Since March 2023, EPA has produced and distributed a community newsletter to residents in Ohio and Pennsylvania to provide updates on site activities and answer key questions. More than 8,000 area addresses receive each newsletter. EPA's [website](#) include dozens of documents and photos, more than 60 videos, and dashboards and maps to display monitoring and sampling data in an accessible format.

Remaining Timeline and Conclusion

Based on the latest estimates, EPA anticipates that the following significant cleanup operations will continue in the coming months:

- Plans to finish restoring the natural flow of water from the derailment site into Sulphur Run continue to be systematically implemented. As of August 2024, natural flow from 12 of 15 subwatersheds has been restored.
- Initial stream sediment cleanup resumed in mid-April and was completed in June. Water and sediment sampling and analysis will occur following completion of sheen mitigation. Continued quarterly sampling and monitoring in Sulphur and Leslie Runs is required by the approved workplan.
- The sitewide characterization effort for the derailment site, adjacent support areas, and other locations in the Village of East Palestine is expected to be mostly complete in September 2024 and fully complete in November 2024.
- As part of sitewide characterization effort, a study of the potential for a vapor intrusion pathway near the derailment site is underway. Samples are collected each quarter to complete the study. Two of the four sampling events are completed and the third is underway. EPA anticipates that final sampling for this effort will be conducted in September 2024. Also, planning is underway to conduct additional sampling in the eastern area of the site, where the excavation of the tracks and South Ditch was completed. This is to ensure residual contamination released from the derailment is addressed in areas that were previously inaccessible due to site operations.

- Although excavation and disposal of soil contamination resulting from the derailment was completed in October 2023, some management and disposal of site-related wastes continues, although at a greatly reduced scale. This includes a small quantity of hazardous soil and other miscellaneous waste materials that remain on-site, which are shipped based on landfill availability. Additionally, the purpose of final sitewide characterization is to doublecheck for remaining soil contamination. Some materials are generated during sampling efforts and from excavation of a few small, residual areas found as a result of the sampling. These, too, are shipped based on landfill availability.
- On January 26, 2024, EPA issued a directive requiring Norfolk Southern to deliver a combined water characterization report, interim sampling plan, and conceptual site model. When completed, this report is expected to contain updated sampling frequencies for groundwater, drinking water, and surface water, as well as comprehensive reporting of hydrologic delineation. Norfolk Southern has submitted a draft report, and the interim sampling plan has been approved. The conceptual site model and interim water characterization reports are expected to follow this summer. At EPA's direction, Norfolk Southern has completed installation of the remaining on-site monitoring wells for shallow groundwater.
- EPA anticipates that Norfolk Southern will have an on-site presence after all excavation work is complete to finalize restoration and study activities. The health and safety program, which protects cleanup workers, will continue through project end. Any monitoring efforts that extend beyond the duration of the Unified Command will be covered by specific health and safety protocols from Norfolk Southern that will remain under EPA oversight.

As noted in previous reports, EPA's timeline for final completion of the cleanup will be determined by conditions on the ground, and operations in East Palestine will continue as long as necessary to protect human health and the environment in East Palestine and nearby communities. EPA will continue to report to the President every 60 days until all cleanup, assessment, and monitoring work required by EPA's unilateral administrative orders is complete.