U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Route 31 Sludge Disposal - Removal Polrep

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region II

Subject: **POLREP #2**
Provision of Bottled Water and Multimedia Assessment
Route 31 Sludge Disposal
A2C7
Washington, NJ
Latitude: 40.7291569 Longitude: -74.9739105

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From: Margaret Gregor, On-Scene Coordinator
Date: 5/9/2025
Reporting Period: March 9, 2025 - May 9, 2025

1. Introduction

1.1 Background

Site Number:	A2C7	**Contract Number:**	
D.O. Number:		**Action Memo Date:**	
Response Authority:	CERCLA	**Response Type:**	Emergency
Response Lead:	EPA	**Incident Category:**	Removal Action
NPL Status:	Non NPL	**Operable Unit:**	

Mobilization Date:	12/10/2024	**Start Date:**	11/20/2024
Demob Date:		**Completion Date:**	
CERCLIS ID:	NJN000220039	**RCRIS ID:**	
ERNS No.:		**State Notification:**	834057
FPN#:		**Reimbursable Account #:**	

1.1.1 Incident Category
Poly- and perfluoroalkyl substance (PFAS) contamination of residential and commercial drinking water wells and soil.

1.1.2 Site Description

1.1.2.1 Location
The Site is located in Washington and Franklin Townships in southeastern Warren County, approximately 1.5 miles south of Washington Borough, within the New Jersey Highlands Planning Area. This predominantly agricultural and residential area includes commercial businesses along NJ State Highway 31 (Route 31). The area being investigated for PFAS groundwater contamination includes almost 400 residential homes and dozens of farm parcels over 4.25 square miles.

1.1.2.2 Description of Threat
The presence of highly elevated PFAS levels in groundwater used for drinking water at the Site, including perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS), constitutes a release of hazardous substances that presents a significant public health hazard. The threat is primarily from human exposure by ingestion of PFAS-contaminated groundwater from impacted private wells.

PFAS compounds persist in both the environment and the human body, bioaccumulating over time. Exposure to PFAS has been linked to various health effects, including elevated cholesterol levels, liver enzyme changes, decreased infant birth weight, decreased fertility and increased high blood pressure in pregnant women. Studies have also established an increased risk of kidney, prostate and testicular cancer from these exposures.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

For more detailed information on the site history and activities through March 8, 2025, see PolRep #1.

Contamination of potable wells was first identified by the New Jersey Department of Environmental Protection (NJDEP) in March of 2019 when routine private well sampling at a business located at 410 Route 31 identified PFAS compounds at levels well above the New Jersey Drinking Water Maximum Contaminant Levels (MCLs). The property owner installed a point-of-entry treatment (POET) system under NJDEP oversight to address the contamination. From 2020 through 2024, NJDEP conducted an extensive Unknown Source Investigation of the surrounding area, which included sampling of 121 nearby private drinking water wells for PFAS analysis, and oversaw installation of 30 additional POET systems. Of these 121 wells, 77 contained PFAS at levels exceeding federal MCLs, which are lower than the state MCLs. PFOA, PFOS and perfluorononanoic acid (PFNA) were detected at concentrations up to 5,950 parts per trillion (ppt), 8,350 ppt and 354 ppt, respectively, compared to their corresponding federal MCLs of 4, 4 and 10 ppt. The NJDEP concluded that the main source of PFAS contamination was historic disposal of waste sludge from a former textile processing and finishing facility located about 1.5 miles away, over at least 45 acres of farmland, and potentially other industrial sources, including a local wastewater treatment facility.

In November 2024, due to the continued expansion of the investigation, and following the designation of PFOA and PFOS as hazardous substances under EPA's Superfund law (the Comprehensive Environmental Response, Compensation and Liability Act or CERCLA) and the establishment of federal MCLs for several PFAS, the NJDEP referred the Site to EPA as the lead. The request is for EPA to evaluate the Site conditions for CERCLA removal action eligibility and placement on the National Priority List (NPL). Since some of the former sludge disposal site properties are active farm fields, the NJDEP also requested that EPA assess PFAS uptake in crops and potential use of those crops for livestock and human consumption.

In fall 2024, EPA began conducting significant public outreach and a drinking water assessment at the Site to determine whether additional properties have been impacted by PFAS contamination at levels exceeding the federal MCLs. The Site team's On-Scene Coordinators and hydrogeologists reviewed all available information, including a vast amount of background information collected by NJDEP as part of the Unknown Source Investigation, to determine potential groundwater flow directions and pathways near the suspected source areas. EPA designated an initial drinking water study area which includes all areas where there may be a potential for groundwater contamination from the suspected PFAS source areas. This area initially included approximately 365 potable water wells over approximately three square miles, covering the areas sampled by NJDEP.

From December 16-20, 2024, January 13-31, 2025, February 10-27, 2025, March 10-29, 2025 and May 5-6, 2025, EPA and its Superfund Technical Assessment and Response Team (START) contractor conducted potable well sampling at a total of 348 properties where the property owners allowed EPA access. Samples were analyzed for PFAS, volatile and semi-volatile organic compounds, polychlorinated biphenyls (PCBs), heavy metals and water chemistry. The purpose was to determine if additional contaminants are present which may be associated with the suspected sources, confirm the NJDEP PFAS results, provide information to help determine the extent of impact from the suspected sources, and inform the potential design of POET systems for these properties. EPA's Pre-remedial program is using the December 2024 potable well sampling data for the Hazard Ranking System package to score the Site for potential inclusion on the NPL.

The study area was expanded westward during the course of sampling based on receipt of additional information indicating livestock consumption of crops grown on known PFAS-impacted areas within the study area as well as elevated PFAS concentrations in well water outside of the initial study area. NJDEP had identified the elevated PFAS levels, which appear to be higher than ambient local PFAS concentrations, in areas upgradient of the initial study area, as part of sampling conducted under the New Jersey Private Well Testing Act, a state law that requires sellers and buyers to test potable wells for certain chemicals prior to completing property transactions. EPA's drinking water study area currently covers approximately 390 potable water wells across approximately 4.5 square miles and is bordered to the south by the Musconetcong River.

The current drinking water sampling effort has concluded, although the extent of the PFAS release has yet to be established. Due to the ubiquity of PFAS in groundwater in New Jersey, PFAS forensics and fingerprinting analyses and additional groundwater and hydrogeological study is necessary to attribute PFAS to the Site release, and therefore to determine where the drinking water study area should be expanded. This may necessitate specialized expert assistance.

EPA also sampled surface water during the drinking water assessment based on its use as drinking water and/or on information suggesting the potential for significant conveyance of PFAS from the source areas to the Musconetcong River. EPA sampled a total of 16 seeps, springs and tributaries to the Musconetcong River for PFAS analysis. All of these water bodies are on residential or NJDEP-owned properties. Sampling results indicate surface water concentrations of PFOA and PFOS up to 102 and 169 ppt, respectively, and EPA's assessment of surface water is ongoing.

Based on the seep, spring and tributary sampling results and in coordination with NJDEP, on May 1, 2025, EPA collected 40 surface water samples and 10 sediment samples from the 4.5-mile stretch of the Musconetcong River that borders the drinking water study area. The purpose was to evaluate whether PFAS-contaminated surface water bodies within the study area, which lead to the Musconetcong River, may be impacting the river at levels which present an unacceptable risk to human and ecological receptors using the river. Specifically, based on PFAS bioaccumulation studies, there is a potential for Site-related PFAS entering the surface water to rapidly bioaccumulate in fish at concentrations greatly exceeding the concentrations in the surrounding water. These fish may be consumed by humans and other animals within this ecosystem, resulting in contamination of the food chain. The results are pending. The NJDEP completed fish tissue sampling in the same stretch of river also on May 1, 2025, as part of its fish consumption advisory study program.

Lastly, from March 24 through April 11, 2025, EPA collected 815 soil samples from 170 locations in areas known or suspected to have historically received the Castle Creek/Northern Dyeing sludge, and several areas located adjacent to these disposal beds. The soil sampling area spanned five active farm fields, one commercial property and seven residential parcels where property owners provided access, totaling approximately 118 acres on either side of Rymon Road to the west of Route 31. The purposes were to assess risk for farmers and residents associated with the PFAS contamination identified by NJDEP, provide further delineation of areas previously sampled by NJDEP, provide information for the conceptual site model, and inform crop uptake modeling and potential future sampling. All samples are being analyzed for PFAS via Method 1633, and a subset of the samples are also being analyzed for TAL VOCs, SVOCs, PCBs and metals including mercury. During the sampling event, a distinctive layer of sandy, blue-black material was visibly observed in the upper foot of soil and just beneath the leaf cover throughout portions of the wooded area along South Lincoln Avenue, which historic records indicate was a main sludge disposal area. This material is suspected to be weathered sludge. The sample results are pending.

In April 2025, EPA held calls with counterparts from NJDEP, the NJ Department of Agriculture (NJDA), the NJ Department of Health, the US Department of Agriculture, the Food and Drug Administration and others on assessing and addressing crop uptake and PFAS impacts to the food chain at farms. All are willing to assist, and EPA will be convening an interagency technical workgroup for the assessment, likely in early summer 2025, once EPA's site team has built out its approach based on the initial calls.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

On November 19, 2024, the Region 2 Superfund and Emergency Management Division Director granted a verbal authorization of a $1,800,000 total project ceiling, of which $1,650,000 is for mitigation contracting, for a CERCLA emergency response action at the Site. On November 20, 2024, EPA activated its Emergency and Rapid Response Service (ERRS) contractor to provide bottled water to occupants of all properties where NJDEP data had indicated the presence of PFAS at levels above EPA's MCLs during their investigation of the Site, and where it does not appear treatment systems are present.

The scope of the work for this emergency removal action includes the provision of bottled water and, following receipt of EPA-generated data as necessary, the installation of individual treatment systems to remove PFAS before the water is used for drinking, which creates the primary route of exposure.

2.1.2 Response Actions to Date

For information on site activities which occurred before March 9, 2025, refer to Pollution Report #1.

EPA has notified all properties within the drinking water study area of their drinking water sampling results by phone and has offered a bottled water delivery service to all homes with preliminary results showing PFAS levels exceeding the EPA MCLs. To date, EPA is providing bottled water to 186 residential properties through an ERRS subcontractor. Of the 345 properties for which EPA has preliminary sampling results, there are currently 224 homes which have exhibited EPA MCL exceedances, which is about 65% of all homes that were sampled. 25 of the homes that had their groundwater sampled exhibited elevated lead results. Due to the anomalous results, EPA resampled 24 of these homes between April 14 and May 5, 2025. Results are pending.

EPA has provided property owners and occupants with validated written results for all properties sampled in December 2024. EPA awaits final validated data tables for properties sampled from January onward. Currently, there are an estimated 40 existing POET systems, which include ones maintained through the NJDEP Spill Fund and those that were installed by homeowners without NJDEP assistance. Based on the results from the preliminary data, it is anticipated that approximately 200 new homes will be eligible for POET systems.

EPA is in the process of procuring an ERRS subcontractor for the installation, operation and maintenance of POET systems at properties with a PFAS result above the EPA MCL. EPA held a public meeting attended by approximately 200 people on April 30, 2025 to discuss all of its assessment and response activities to date, as well as next steps. The presentation from this meeting is provided in the *Documents* section of this website (www.response.epa.gov/Route31Sludge).

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

The historic textile facility operators which deposited the on-site sludge were owned by a common party for much of their existence and have been defunct since 1974. The OSCs are working with the Office of Regional Counsel and enforcement specialists to identify PRPs.

2.1.4 Progress Metrics

No waste has been generated to date.

2.2 Planning Section

2.2.1 Anticipated Activities

EPA will be addressing known PFAS contamination in drinking water from the Site, determining if expansion of the drinking water study area is warranted, and analyzing the soil and surface water data to evaluate whether a CERCLA removal action is warranted.

2.2.1.1 Planned Response Activities

EPA will continue providing bottled water to properties where sampling has indicated the presence of PFAS at levels exceeding the MCLs and will follow up with treatment system installations for all of these properties. Once these POET systems are installed and water sampling demonstrates their effectiveness, bottled water will be discontinued to these properties. In coordination with NJDEP, EPA will assume operation and maintenance of the POET systems installed under NJDEP oversight within the current drinking water study area.

Due to the ubiquity of PFAS in groundwater in New Jersey, PFAS forensics and fingerprinting work may be necessary to attribute PFAS to the Site release, and therefore to determine where the drinking water study area should be expanded, which may necessitate specialized expert assistance. This work is expected to begin in spring or summer 2025.

2.2.1.2 Next Steps

EPA is analyzing preliminary sampling results as they are received, and anticipates installation of the drinking water treatment systems in the summer and fall of 2025.

2.2.2 Issues

Of the approximately 390 wells within the drinking water study area, EPA reached approximately 98% of property owners and sampled approximately 87% of the wells. This was due to denial of access to 22 properties and non-responsiveness of occupants at 20 properties following initial communication with EPA despite the site team's multiple attempts to reach them. Additionally, property owners of seven of the farmland parcels and one residential parcel where EPA sought access for soil sampling denied access for the sampling.

Receipt of water sampling data from both the laboratory and the START contractor, and corresponding provision of data to the residents, has been delayed due to the unusually large volume of data and associated review and processing requirements, including data validation.

2.3 Logistics Section

Not applicable.

2.4 Finance Section

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS - Cleanup Contractor	$1,650,000.00	$99,000.00	$1,551,000.00	94.00%
TAT/START	$550,000.00	$1,605,940.00	($1,055,940.00)	-191.99%
Intramural Costs				
Total Site Costs	$2,200,000.00	$1,704,940.00	$495,060.00	22.50%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

2.5.1 Safety Officer

The Site OSC is acting as the safety officer.

2.5.2 Liaison Officer

N/A: The Site OSC is acting as the liaison officer.

2.5.3 Information Officer

N/A: The Site OSC and Community Involvement Coordinator, Joel Waddell, are acting as the information officer.

3. Participating Entities

3.1 Unified Command

Not applicable.

3.2 Cooperating Agencies
New Jersey Department of Environmental Protection (NJDEP)
New Jersey Department of Health (NJDOH)
New Jersey Department of Agriculture (NJDA)
Agency for Toxic Substances and Disease Registry (ATSDR)
Food and Drug Administration (FDA)
United States Department of Agriculture (USDA)
National Park Service
Musconetcong Watershed Association
Washington Township
Franklin Township
Warren County Department of Health
Warren County Public Works
Warren County Board of Agriculture

4. Personnel On Site

EPA OSCs: Margaret Gregor, Jonathan Byk, David Rosoff, Patrick Ahern, and Kimberly Hong
4-9 START contractors

5. Definition of Terms

ATSDR: Agency for Toxic Substances and Disease Registry
CERCLA: Comprehensive Environmental Response, Compensation and Liability Act, commonly known as "Superfund"
ERRS: Emergency and Rapid Response Service Contractor
FDA: Food and Drug Administration
NCP: National Contingency Plan
NJDA: New Jersey Department of Agriculture
NJDEP: New Jersey Department of Environmental Protection
NJDOH: New Jersey Department of Health
NPL: National Priority List, commonly known as the Superfund list
MCL: Maximum Contaminant Levels for Drinking Water (drinking water standard)
OSC: EPA On-Scene Coordinator
PFAS: poly- and perfluoroalkyl substances
PFOA: perflurooctanoic acid, a type of PFAS
PFOS: perfluorooctane sulfonic acid, a type of PFAS
PFNA: perfluorononanoic acid, a type of PFAS
POET: point-of-entry treatment system
ppt: parts per trillion
PRP: potentially responsible party

Site: Route 31 Sludge Disposal Site
START: Superfund Technical Assessment and Response Team contractor

USDA: United States Department of Agriculture

6. Additional sources of information

6.1 Internet location of additional information/report
response.epa.gov/Route31Sludge

6.2 Reporting Schedule
POLREPS to be issued at project milestones, and monthly once the POET system installations begin.

7. Situational Reference Materials

See Documents section of response.epa.gov/Route31Sludge.

Several news articles have been published about EPA's response at the Site (listed from newest to oldest):
5/6/25, Lehigh Valley Live: "EPA expands 'forever chemicals' investigation into Musconetcong River"
3/8/25, nj.com: "Record-high 'forever chemicals' found in private N.J. well. But hundreds more being tested."
2/27/25, NJ Spotlight News: "'Startlingly high' levels of PFAS pollution found in Warren County hot spot"
2/20/25, Lehigh Valley Live: "EPA takes over groundwater contamination probe in Warren County. Sampling underway."
2/5/25, News 12 NJ: "EPA tests well water for PFAS 'forever chemical' contamination in Washington Township"
2/3/24, NJ Spotlight News: "EPA investigates Warren County PFAS hot spot"