



Welcome!

Fairmont Brine Site

Community Meeting

November 14, 2024

Unified Command – Fairmont Brine Site

LOCAL	WVDEP	WVDH	EPA
Responsible for safety of community during all emergencies	Responsible for ensuring work is being performed in accordance with WV Environmental Requirements	Responsible for overseeing actions related to radiation and protection of public health	Responsible for providing funding and contractors to perform work necessary to mitigate the threat of release of hazardous substances, pollutants, or contaminants

A Unified Command approach enables agencies with applicable authorities and jurisdiction to work toward solutions which meet Local, State, Tribal, and Federal requirements.

Unified Command members must have the ability to commit resources on behalf of their respective agencies.

EPA Team – Fairmont Brine Site



EPA Involvement – Superfund

Action through Comprehensive Environmental Response, Compensation, and Liability Act (**CERCLA**), commonly known as **Superfund**.

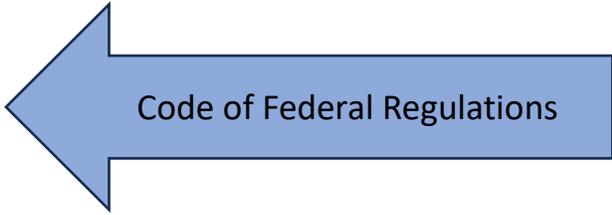
Law provides federal authority to respond directly to releases or threatened releases of hazardous substances that **may endanger public health or the environment**.

Removal action – Actions that may be taken to address releases or threatened releases requiring prompt response.

EPA Involvement – Role of the OSC

The **On-Scene Coordinator** (OSC) is a federal official pre-designated to coordinate and direct emergency response and/or removal actions of the National Contingency Plan.

(40 CFR §300.5)



Code of Federal Regulations



Fairmont Brine Site Background

Fairmont Brine was a former Brine Processing Plant

- Fairmont Brine accepted **brine water** from the oil and gas exploration industry
- The company used this water in a multi-stage process to create and sell distilled water, saltwater solutions, and salt products for commercial use
- Fairmont Brine ceased operations sometime around 2018 and was sold in 2020
- A fire occurred at the facility in 2023
- The facility was also subject to trespassing



Lower Impoundment

Frac Tanks

Waste Rolloffs

Upper Impoundment

Location of 2023 Fire

Concrete Basin

Annotated Aerial Image of Fairmont Brine Processing Plant

- Lower Complex
- Upper Complex



After the Fire

- West Virginia Department of Environmental Protection (WV DEP) issued violations against former operator to perform necessary actions
 - Actions by responsible party were **performed improperly**
- WV DEP, WV DH, and EPA returned to the site
 - Additional monitoring indicated Site security was necessary

Tank in Upper Complex



Terminology Check

milliRem/hr (mrem/hr) indicates gamma radiation being emitted from a source and is used to explain exposure and dose. **Gamma radiation** exposure in units of mrem/hr can be measured with field instruments.

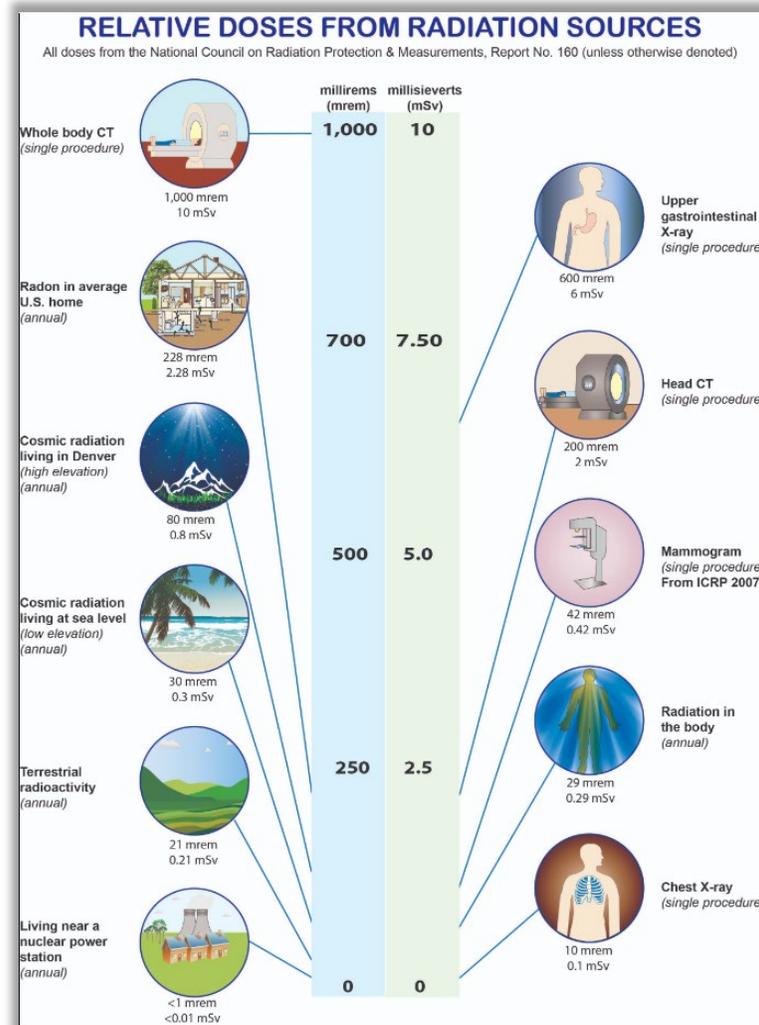
PicoCuries (pCi) are a unit of measure of radioactivity in soil, water or air. Laboratory instruments are used to determine these quantities.

Gamma Radiation at Fairmont Brine Site

Readings of gamma radiation around the base of the tank were approximately **3 mrem/hr**

Chest X-Ray	Annual Estimated Exposure to all sources	Annual Estimated Exposure to members of public	Maximum annual exposure for radiation workers	EPA's recommendation of maximum annual exposure from one Site
10 mrem	620 mrem	100 mrem	5,000 mrem	12 mrem
Nuclear Regulatory Commission	Nuclear Regulatory Commission	Nuclear Regulatory Commission	Nuclear Regulatory Commission	EPA

Radiation Sources and Doses





EPA Response

EPA Cleanup Approaches to Contaminated Sites

EPA Emergency Responses and Removals

National Priorities List Sites

Superfund Alternatives Sites

State, Tribal or Other Federal Agency

Deferred to RCRA (Resource, Conservation, and Recovery Act)

Deferred to Nuclear Regulatory Commission

Removal Assessment- Engaging Technical Experts

EPA's National Center for Radiation Field Operations (NCRFO)



Figure 3. Total gamma counts per second plotted over areas scanned with Buggy. Multiple locations exceeding three times background (color coded as white and magenta).

NCRFO Key Findings

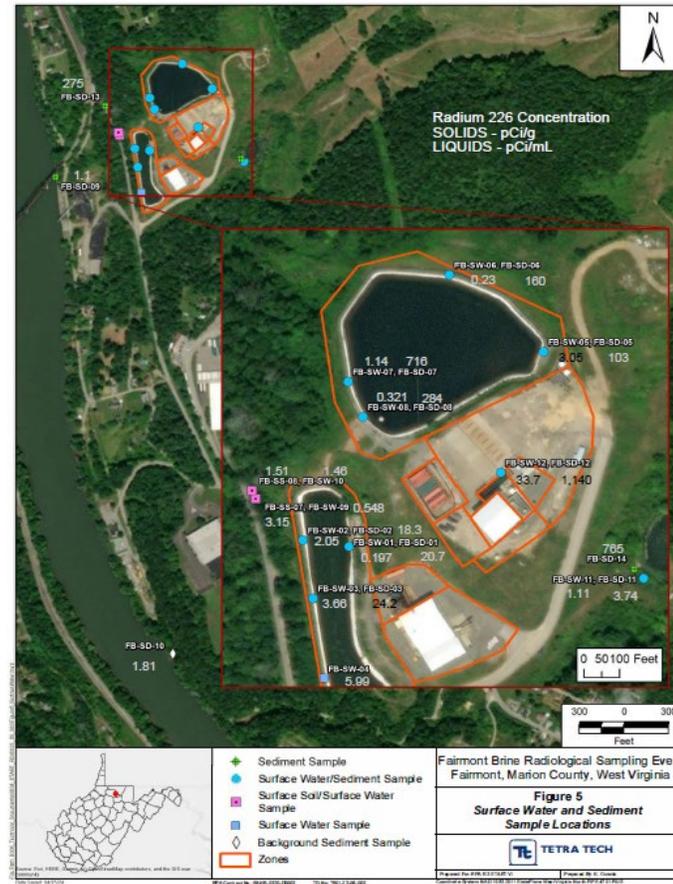
- Results of higher readings were consistent with previous findings using handheld instruments
- Additional elevated reading identified near east pond
- All results were radioactive isotopes found in TENORM.
- Sampling was performed in areas where elevated readings were found



Additional fencing installed to restrict access to east pond

Samples Collected

Surface soil, brine solids (solids that are not soil), surface water, and sediment



Removal Assessment leads to Removal Action

Actions approved:

Remove and properly dispose of sources of elevated TENORM

Site security

Removal of impoundment water and liners not included at this time.

Control migration of known sources

Removal Assessment leads to Removal Action

Properly remove sources of elevated levels of TENORM:



Rolloff containers of waste filter cake



Water and solids in concrete basin



Contaminated debris in upper complex building



Frac tanks



Surface soil in particular areas

Sources of Elevated Levels of TENORM

Contaminated debris in upper complex building



Water and solids in concrete basin



Sources of Elevated Levels of TENORM (cont.)

Rolloff containers of waste filter cake



Frac tanks



EPA Contractors for Removal Action

Technical Assistance (START)

TetraTech, Inc.

Support **radiation safety** onsite by providing health physicist and performing radiation monitoring and detection activities.

Cleanup Contractor (ERRS)

Environmental Restoration LLC

Manage **onsite logistics**, including the removal, packaging, and disposal of waste materials.

Disposal Process for Fairmont Brine Site



Current Response Actions

- Health and Safety Plan being modified
- Sampling strategy for waste solids being developed
- Draft work plan in process
- Cleanup contractor pursuing possible subcontractors to assist with radiation work

Fairmont Brine Impoundments

- Estimated total volume >7 million gallons
- Plastic liner conditions and discharge points currently unknown
- Seeps identified on AFR Drive
- Additional engineering work is needed to develop alternatives and costs



Fairmont Brine Impoundments (cont.)



More information is needed to determine options for impoundments and seeps



While removal actions are ongoing, EPA will initiate an **engineering evaluation** which will include options for treatment and/or disposal



EPA will share this information with the community



Additional funding will be dependent upon findings



Public Health and Community Engagement

How You Can Best Protect Yourself

- **Please keep off the site.**
 - Areas with elevated levels of contamination have additional fencing
 - NO TRESPASSING signs are posted
- Radiation contamination onto AFR Drive does not pose a threat of human exposure unless a person intentionally comes into **direct contact**.
- No concerns for drinking water.
 - No elevated levels of radiation have been detected in the drinking water intake.

Statement from Agency for Toxic Substances and Disease Registry (ATSDR)

"While it is possible that the Fairmont Brine site might have posed a risk to trespassers in the past, the Fairmont Brine Unified Command believes that the current radiological risk to the public has been significantly lessened by physical site controls (such as fencing and signage) that have been put into place.

The Unified Command is committed to the protection of public health and will communicate site actions on a regular basis while decontamination efforts continue."

EPA Community Commitment

- EPA is committed to:
 - Keeping community informed as actions progress
 - Creating safe working conditions which prevent offsite migration of TENORM or other hazardous substances
 - Working with our Unified Command partners
 - Maintaining a website containing important information at www.response.epa.gov/fairmontbrine
- We will continue to arrange for after hours meetings with individuals whenever requested and possible

Unified Command Public Engagement Activities

- Postcard Mailings
- Public Hotline
- Frequently Asked Questions (FAQs) Document
- Website and Electronic Documents
- Public Meeting
- After Hours Community Meetings
- Elected Officials Briefings
- Press Releases



EPA Site Contacts:

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www.response.epa.gov/fairmontbrine