



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1600 John F. Kennedy Boulevard
Philadelphia, PA 19103

SUBJECT: Request for Change in Scope
For a Removal Action at the Safety Light Corporation Site
Bloomsburg, Columbia County, Pennsylvania

FROM: Ann DiDonato, On-Scene Coordinator
Eastern Response Section (3SD31)

THRU: Michael Towle, Chief
Preparedness and Response Branch (3SD30)

TO: Paul Leonard, Director
Superfund and Emergency Management Division (3SD00)

Site ID # 03DG

I. PURPOSE

The purpose of this Action Memorandum is to request a change in scope to add an additional time-critical task necessary to protect public health, welfare, or the environment to the removal action at the Safety Light Corporation Superfund Site (Site) located in South Centre Township, Columbia County, Pennsylvania. In July 2004, the United States Environmental Protection Agency (EPA) approved a Request for Funding (2004 Action Memorandum), initiated a removal action (“Removal Action”) and undertook time-critical and non-time critical removal actions at the Site under the authority of Section 104 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. §§ 9601 et seq. EPA subsequently approved additional Action Memoranda, discussed in the Section II.B below, which increased funding, changed scope, and/or approved exemptions from the \$2 Million and 12-Month Statutory Limits, in April 2006, June 2007, October 2007, July 2008, January 2009, November 2012, February 2013, June 2013, December 2013, September 2014, June 2015, September 2015, February 2016, and December 2018 (collectively referred to herein as “Previous Action Memoranda”). There are no nationally significant or precedent-setting issues associated with the response requested herein.

The On-Scene Coordinator (OSC) has evaluated available information and the current conditions at the Site pursuant to the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 C.F.R. Part 300. The OSC finds that current conditions pose unacceptable threats which warrant continued Removal Action at the Site. Additionally, Site

conditions and threats warrant continued exemption from the statutory limits found in CERCLA Section 104(c) of CERCLA, 42 U.S.C. § 9604(c), as indicated in Section V of this Action Memorandum.

The Change in Scope described in the Action Memorandum is necessary to prevent or minimize the additional release and threat of release of radioactive substances from the Site. The response actions described in this Action Memorandum will prevent or minimize the releases of hazardous substances, human exposure to hazardous substances, and the movement/migration of hazardous substances from the Site into the environment and the residential area which abuts the Site.

The Change in Scope for the Removal Action documented herein involves the removal of contaminated soil from the Site right-of-way (ROW) outside of the fence, along Old Berwick Road and transporting these soils to the fenced area of the Site. The change in scope will also address discrete objects found during a remedial survey of the Site and any discrete objects that might be found during activities in the ROW. The fate of these contaminated soils will be determined as part of the final selected remedial action in the Final ROD for Operable Unit 3 (OU-3) of the Site.

To date, as documented in the 2004 Action Memorandum and Previous Action Memoranda, EPA has approved a combined project ceiling of \$27,963,465. No additional funding is necessary to change the scope of the Removal Action to prevent or mitigate the additional releases/threatened releases identified in this Action Memorandum.

II. SITE CONDITIONS AND BACKGROUND

This Action Memorandum requests a change in scope of the Response Action to be performed at the Site. The Removal Action for the Site was originally selected in an Action Memorandum signed July 2, 2004. The Previous Additional Action Memoranda increased funding, changed scope, and/or approved exemptions from the \$2 Million and 12-Month Statutory Limits. The Site was placed on the National Priorities List (NPL) on April 27, 2005. EPA issued a Record of Decision (ROD) for the Site on September 2, 2010, for Operable Unit (OU) 1, and an Early-Interim ROD for OU-3 on June 30, 2016. The Early-Interim ROD has been modified by two Explanations of Significant Differences, dated August 24, 2017, and September 26, 2018, respectively.

Refer to Previous Action Memoranda for background information, in addition to the information contained in this 2023 Action Memorandum, which is specific to the Change in Scope documented herein.

A. Site Description

1) Removal Site Evaluation

Additional Site evaluation in the Remedial process was performed as part of the Remedial Investigation following the completion of most of the response actions completed by the Removal Program. The Remedial Project Manager (RPM) had identified areas that needed to be assessed because of identified data gaps. Those areas included along the Susquehanna River and the ROW, located along Old Berwick Road, immediately outside the Site fence. Because of these data gaps, the RPM arranged to have a radiation survey performed on February 22, 2023, of the area adjacent to the Susquehanna River where discrete objects contaminated with Ra-226 were identified. A second radiation survey was performed on March 7, 2023, of the ROW. The RPM utilized the START contractor, to conduct the radiation surveys. Soils contaminated with radioactive materials with gamma levels up to 10x background were found in the ROW.

When the discrete objects were found, they were removed from the soil and put into a connex box on-Site because of the potential for them to migrate the next time the river level rises.

2) Physical Location

The Site is located along Old Berwick Road in a mixed residential and commercial neighborhood in Bloomsburg, Columbia County, Pennsylvania. The Susquehanna River courses alongside the southern boundary of the Site and flooding, including flooding of the Site, is a regular occurrence. Residential properties abut the north, east, and western boundaries of the Site. Hazardous substances from the facility migrated onto one adjacent residential property during a 2011 flooding event, which required cleanup by EPA.

3) Site Characteristics

The Site was once the location of Safety Light Corporation (Safety Light), which manufactured several types of products containing radioactive substances. The premises included numerous buildings in which production or the storage or other processing of radioactive materials was accomplished. The manufactured products included lighted products (e.g., lighted exit signs) containing radioactive tritium gas (H3). The buildings on the Site are now demolished and the vast majority of the wastes, once within those buildings, have been disposed of off-Site in accordance with Previous Action Memoranda.

The Site is currently subject to an EPA Remedial Action. The Site is privately owned by Safety Light, which is responsible for the contamination. Safety Light is currently performing very limited security and maintenance-related work activities at the Site.

The ROW along the Site property line is approximately 570 feet in length and ranges from 9 to 24 feet in width. The ROW is the area from the edge of Old Berwick Road to the fence installed as part of the previous removal action. During previous removal actions many residents were seen walking along the Site in the ROW. There are no sidewalks along Old Berwick Rd, so residents are walking through and potentially disturbing the contaminated soils in the ROW. The ROW beyond the Site is also where both sides of Old Berwick Road residential mailboxes are located.

4) Release or threatened release into the environment of a hazardous substance, pollutant, or contaminant

The soils in the ROW, outside the facility fence, contain radioactive substances, specifically Ra-226. Radionuclides are hazardous substances designated at 40 C.F.R. § 302.4.

Based upon the information available, a release of radioactive materials may occur if appropriate measures are not taken to remove the soils from the ROW. Residential areas are located directly to the north of the Site, across Old Berwick Road, and directly to the east and west of the Site. Residents and trespassers also may become exposed to the hazardous substances located at the Site if further action is not taken. During previous on-Site activities many residents have been observed walking in the ROW and potentially being exposed.

5) National Priority Listing

The Safety Light Corporation Site was listed on the National Priorities List (NPL) on April 27, 2005.

B. Other Actions to Date

A brief synopsis of Removal Action is below. See Previous Action Memoranda for additional information.

1) Previous Actions

EPA selected a time-critical removal action at the Site in July 2004 addressing the disposal of certain radioactive wastes from within an underground “silo” at the Site. These waste items had not been effectively addressed by the Site owners. In April 2006, the funding ceiling for the Removal Action was increased and exemption from the 12-Month and \$2M statutory limits (“emergency waiver”) was approved to complete characterization of the wastes and conduct off-Site disposal.

EPA’s contractors were unable to conduct disposal and EPA executed an Interagency Agreement with the Army Corps of Engineers in 2005 to conduct disposal of the silo wastes. The silo wastes were removed from the Site and shipped in 2007 to a facility in Texas where they remained in storage for years. EPA ultimately entered into a direct negotiated contract (\$2,936,176) for disposal of the silo wastes in 2013, directly issuing a Procurement Request to a waste company in Texas capable of properly disposing of the waste.

On June 21, 2007, EPA approved a non-time-critical removal action concerning the demolition of seven on-Site buildings and also approved an increase to the removal ceiling and an exemption from the \$2M statutory limits (using the “consistency waiver” under Section 104(c) of CERCLA, 42 U.S.C. § 9604(c)) to conduct demolition and disposal activities. The

June 2007 action did not address the Main Building or the Butler Building where wastes were being consolidated and staged and several other on-Site structures (e.g., water tower).

On October 22, 2007, EPA issued an Action Memorandum pertaining to the operation and maintenance of the safety/security systems for certain remaining buildings at the Site, including the Main Building. On November 13, 2007, EPA issued a Unilateral Administrative Order (UAO) to Safety Light Corporation, Metreal Corporation and Isolite Corporation, requiring certain maintenance activities at the Site. Safety Light currently performs very limited security and maintenance-related work activities at the Site.

On July 2008, EPA approved an increase to the funding ceiling for the Removal Action.

On January 22, 2009, EPA issued an Action Memorandum, which focused on the removal of soil from a residential property adjacent to the Site. The soil was removed.

On September 2, 2010, EPA's Remedial Program issued a ROD for OU-1, which selected a remedy ("OU-1 Remedial Action") consisting of the demolition of the Main Building and other remaining structures on-Site. However, implementation of the OU-1 Remedial Action was delayed due to funding issues.

In October 2012, the Remedial Program requested that the Removal Program review a draft structural evaluation report and consider whether a removal action would be appropriate to complete structural repairs to the Main Building. As a result of a Removal Site Evaluation, EPA initiated a time-critical removal action at the Site on November 8, 2012. The 2012 Action Memo changed the scope of the Removal Action, raised the ceiling, and continued to exempt the Removal Action from the 12-month statutory limits based upon the "consistency waiver." The 2012 Action Memo was intended to stabilize the Main Building in the 3- to 5-year term to prevent the release of radionuclides staged therein to the environment while awaiting funding to implement the Remedial Action.

During the implementation of the 2012 Action Memo, additional response actions were identified as being necessary to prevent identified unacceptable threats involving the release or threat of release of hazardous substances from the Site. On February 20, 2013, EPA issued another Action Memo to increase the funding and change the scope of the Removal Action based on these newly identified threats.

In the spring of 2013, the Remedial Program requested that the Removal Program assess the 'Solid Waste' building (a small outbuilding at the Site) and its contents. The Solid Waste building was adjacent to the Susquehanna River and was flooded during Tropical Storm Lee in 2011. The OSC directed the EPA contractor to complete an assessment of the Solid Waste building and all other remaining outbuildings in or near the flood plain of the Susquehanna River. During the assessment activities, numerous radioactively-contaminated items and radioactive sources were identified/consolidated/secured in the Main Building and in more secure outbuildings. In addition, the Removal Program reviewed the current status of one of the locations on the southern portion of the Site property called the 'West Dump,' which had eroded onto an adjacent residential property after being flooded during Tropical Storm Lee.

To address these additional threats, EPA approved a change in the scope and additional funding for the Removal Action on June 11, 2013. The activities undertaken pursuant to the June 2013 Action Memorandum resulted in the removal and off-Site disposal of most radiologically contaminated items from the Site, the construction of an engineered cap for the West Dump, and additional security of the premises. However, EPA was unable to locate an off-Site disposal facility for devices that contained finely shaved depleted uranium turnings, known as Pyros.

On December 16, 2013, as the structural integrity of the remaining on-Site buildings continued to decline, EPA approved additional funding and a change in the scope of the Removal Action to conduct the demolition and disposal of the Main and Butler Buildings, the demolition and recycling of the elevated Water Tower, and the recycling of portions of the clean structural steel located in the Butler Building. As part of the Removal Action approved in December 2013, EPA completed asbestos abatement in all structures containing asbestos prior to demolition, and assessed, removed, and disposed of underground storage tanks.

Beginning in July 2014, EPA commenced the Remedial Action selected in the OU-1 ROD and funded by the Remedial Program, including demolition of the Tritium Building, the Machine Shop, and the Boiler Room, as well as the removal of the foundations of the buildings demolished during the 2013 and 2014 response actions and recycling of the on-Site unaffected Water Tank. EPA completed the OU-1 Remedial Action in September 2015, except for the off-Site disposal of a limited amount of source materials removed from the buildings. Due to the unique nature of some of these items (e.g., Pyros), EPA considered long term on-Site storage necessary.

On September 26, 2014, EPA changed the scope of the Removal Action and approved additional funding for removal of underground storage tanks and associated piping, removal of associated soil contamination from the tanks/piping as practicable, and the assessment and removal of discrete radiologically contaminated objects and associated soils.

On June 17, 2015, EPA again changed the scope of the Removal Action and approved additional funding to continue removal and off-Site disposal of buried radioactively-contaminated items and soils located at the Site (primarily from the areas under the former building foundations and adjacent to and in the flood plain of the Susquehanna River) and to stabilize areas of disturbed soil through limited capping to prevent movement/migration of radioactive material from the Site in the event of a flood.

On September 18, 2015, EPA changed the scope of the Removal Action and approved additional funding to address the discovery of numerous high activity, radiologically-contaminated items and soil in the areas of the West Lagoon, East Lagoon and East Dump. EPA changed the scope of the Removal Action again in a February 1, 2016 Action Memorandum, to both continue the Removal Action and include construction of an engineered cap for those areas.

On June 30, 2016, EPA's Remedial Program issued an Early-Interim Record of Decision for OU-3, continuing the work detailed in the February 2016 Action Memorandum. Specifically, the Early-Interim ROD provided for additional excavation of the West Dump, West Lagoon, East Dump, and East Lagoon areas of the Site. The Remedial Program issued an Explanation of Significant Differences (ESD) on August 24, 2017, to address additional areas

for excavation of radionuclide-contaminated soils/debris, including radioactive discrete objects in the 100-year floodplain, within and immediately adjacent to the abandoned canal on the Site. On September 26, 2018, the Remedial Program issued a second ESD to continue excavation in the 100-year floodplain, within and immediately adjacent to the abandoned canal up to and including the entire length of the canal on the Site, as necessary.

On December 6, 2018, EPA changed the scope of the Removal Action and approved additional funding to address the off-Site removal, treatment, and disposal of the devices known as Pyros, which were used to transport and store H3. The devices additionally contained finely shaved depleted uranium turnings. The Pyros were discovered in 2013 and had proven difficult for EPA to treat and dispose. All Pyros have been transported off-Site as of August 2022 and treatment of the devices is nearing completion. EPA anticipates the treatment and disposal of the devices to be completed during spring 2023.

All activities detailed in the July 2004, April 2006, June 2007, October 2007, July 2008, and January 2009 Action Memoranda are complete. All activities detailed in the November 2012, February 2013, June 2013, December 2013, September 2014, June 2015, September 2015, January 2016, and December 2018 Action Memoranda and the June 2016 Early-Interim ROD are substantially complete. Ongoing Remedial Actions at the Site are noted in the following ‘Current Actions’ section.

2) Current Actions

The EPA Remedial Program is currently performing the OU2 and OU3 RI/FS. The work includes installation of additional monitoring wells and ground water sampling to assess current ground water conditions and collection of additional soil samples from the river floodplain on-site and surrounding residential properties. The information will be used to further assess risks and potential cleanup alternatives. Remedial surveyed the ROW and the area along the Susquehanna River where the discrete objects were found to address data gaps found in the RI/FS. The future remedial action is not anticipated to start before 2026, after all data gaps have been addressed in the RI/FS.

C. State and Local Authorities Role

EPA’s RPM and OSC continue to coordinate with the Nuclear Regulatory Commission (NRC), Pennsylvania Department of Environmental Protection’s (PADEP) Bureau of Radiation Protection (BRP), and PADEP’s Hazardous Site Cleanup Act (HSCA) Program. However, EPA is the Lead Agency at the Site.

III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT

Section 300.415 of the NCP lists the factors to be considered in determining the appropriateness of a Removal Action. Paragraphs (b)(2)(i) and (vii) of Section 300.415 directly apply to the conditions at the Site.

300.415(b)(2)(i) “Actual or potential exposure to nearby human populations, animals or the food chain from hazardous substances or pollutants or contaminants”

The soils in the ROW outside the facility fence contain radioactive substances, specifically Ra-226. Radionuclides are hazardous substances designated at 40 C.F.R. § 302.4. The release of hazardous substances from the contaminated soil poses a threat to any persons in contact with the ROW soils, particularly pedestrians and children who may be walking along Old Berwick Road. Consequently, the public may be exposed to the hazards of Ra-226. Ra-226 emits both gamma and beta radiation. Gamma radiation is in the form of energy. Beta contamination can be carried offsite by becoming trapped in the soles of outer footwear. The gamma levels were seen up to 10x background. In consultation with the Region 3 radiation program manager, it was determined that gamma values above 3x background presented an unacceptable risk to the public. The residents in the area regularly are seen walking along the ROW and near where the mailboxes are located on Old Berwick Road.

Discrete objects contaminated with Ra-226 were found along the Susquehanna River during a remedial survey and could have migrated with a future river rise. The objects showed gamma activity greater than the meter could measure (in excess of one million counts per minute). They have been placed within the fenced in area of the Site, but still pose a risk to potential trespassers in the interim between this proposed removal action and future remedial action.

300.415(b)(2)(vii) “The availability of other appropriate federal or state response mechanisms to respond to the release”

The NRC and PADEP’s BRP and HSCA Programs, which are potential response agencies for the Site, have indicated that they do not have the resources to fund response actions at the Site. In addition, the owner and former operator of the facility, Safety Light, has continually asserted that it has insufficient funds to perform any further response actions at the Site.

IV. ENDANGERMENT DETERMINATION

Based upon information gathered during the assessment of the Site, as described above, the actual or threatened releases of hazardous substances from this Site, if not addressed by implementing the response action selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, welfare, or the environment.

V. EXEMPTION FROM STATUTORY LIMITS

The deteriorating conditions warranting exemption from the 12-Month and \$2 Million Statutory Limits at this Site, as documented in Previous Action Memoranda, still exist. In

accordance with CERCLA § 104(c)(1)(C), 42 U.S.C. § 9604(c)(1)(C), continued response actions at the Site are appropriate and consistent with the selected Remedial Action.

Specifically, the Removal Action documented herein is fully consistent with the Remedial Action selected for the Site and any Remedial Action that may be selected in the future. The OSC and RPM have and will continue to fully coordinate on all activities at the Site.

VI. PROPOSED ACTIONS

The proposed actions are intended to mitigate the threat posed to the public health and welfare and the environment due to actual and/or substantial threat of release of hazardous substances. The proposed actions will stabilize the Site, until further actions by the Remedial Program can be implemented in accordance with any future RODs. The OSC will continue to coordinate with the RPM regarding all Site activities.

A. Proposed Actions

1) Description of Proposed Actions

- a. Remove soils contaminated with radioactive substances in areas above 3x background and excavate to background from the ROW and safely stage on-Site pending further long-term Remedial Actions;
- b. Confirm by utilizing gamma walk-over that the contaminated soils have been removed from the ROW;
- c. Backfill the soil excavation area with certified clean fill in order to prevent undermining of Old Berwick Road;
- d. Dispose of discrete objects off-Site, in accordance with CERCLA § 121(d)(3) and 40 C.F.R. § 300.440;
- e. Cover excavated soils with 6 inches of soil in the temporary staging area, to be disposed of in a future Remedial Action; and
- f. Furnish all equipment, labor, supervision, and material necessary to complete the Scope of Work.

2) Contribution To Remedial Performance

The Site is on the NPL. The Removal Action at the Site is consistent with the requirement of Section 104(a)(2) of CERCLA, 42 U.S.C. § 104(a)(2), which states that a removal action should, to the extent practicable, contribute to the efficient performance of any long-term remedial action.

3) Compliance with ARARs

The proposed Removal Action will comply with Federal and State ARARs to the extent practicable considering the exigencies of the situation. The OSC requested that PADEP submit additional applicable ARARs, if necessary. PADEP's BRP and HSCA Programs have both indicated that there are no additional ARARs to consider for the proposed action.

4) Project Schedule

The proposed action is expected to take 1 month to implement.

5) Estimated Costs

No additional costs are expected for this action. Previous ceiling will not need to be adjusted.

Total Removal Action Project Ceiling \$27,963,464

VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

If the scope of the removal action is not changed as described in the Action Memorandum or is significantly delayed, the subsequent release of hazardous substances and radionuclides to the adjacent community and environment may occur.

VII. OUTSTANDING POLICY ISSUES

There are no known outstanding policy issues pertaining to the Site.

VIII. ENFORCEMENT

The OSC will coordinate with the RPM regarding enforcement/cost recovery, as necessary. See the attached Confidential Enforcement Addendum.

IX. RECOMMENDATION

This Action Memorandum calls for a change of scope to the Removal Action due contaminated discrete objects found and soils that had not previously been assessed for the presence of radioactive substances and represents the selected Removal Action for the Safety Light Corporation Superfund Site in Bloomsburg, Pennsylvania, developed in accordance with CERCLA, as amended, and is not inconsistent with the NCP. This decision is based on the Administrative Record for the Site.

By signing this Action Memorandum, you are also hereby establishing the documents listed in Attachment B, Administrative Record Index, as the Administrative Record supporting the issuance of this Action Memorandum, pursuant to Section 113(k) of CERCLA, 42 U.S.C. § 9613(k), and EPA Delegation No. 14-22.

Because conditions at the Site meet the removal action requirements of the NCP, I recommend your approval of the proposed Removal Action. The total Removal Action Project Ceiling is \$27,963,464. Please indicate your approval or disapproval below.

Action by the Approving Official:

I have reviewed the above-stated facts and based upon those facts and the information compiled in the documents described above, I hereby determine that the release or threatened release of hazardous substances at and/or from the Site presents or may present an imminent and substantial endangerment to the public health or welfare or to the environment. I concur with the recommended removal action as outlined.

APPROVED: _____

DATE: _____

Paul Leonard, Director
Superfund and Emergency Management Division

DISAPPROVED: _____

DATE: _____

Paul Leonard, Director
Superfund and Emergency Management Division

ATTACHMENTS:

- A. Confidential Enforcement Addendum
- B. Gamma Walk Over Survey Results

ATTACHMENT A

Confidential Enforcement Addendum

ATTACHMENT B

Gamma Walk-over