

**EXPLANATION OF SIGNIFICANT DIFFERENCES  
SAFETY LIGHT CORPORATION SUPERFUND SITE  
OPERABLE UNIT 3  
BLOOMSBURG, PENNSYLVANIA**

**I. INTRODUCTION AND STATEMENT OF PURPOSE**

Site Name: Safety Light Corporation  
EPA ID Number: PAD987295276

Site Location: Bloomsburg, Columbia County, Pennsylvania

Lead Agency: U.S. Environmental Protection Agency  
Region III

Support Agency: Pennsylvania Department of Environmental Protection

The United States Environmental Protection Agency (EPA) selected an early-interim remedy (Selected Remedy) for the Safety Light Corporation (SLC) Superfund Site (Site), Operable Unit (OU) 3, as set forth in an Early-Interim Record of Decision (ROD) issued June 30, 2016 (2016 Early-Interim ROD) and later modified by an Explanation of Significant Differences (ESD) dated August 24, 2017 (2017 ESD). A detailed description of the 2016 Early-Interim ROD and 2017 ESD is provided below.

EPA is issuing this 2018 ESD in accordance with Section 117(c) of the Comprehensive Environmental Response, Compensation, and Liability Act, as amended (CERCLA), 42 U.S.C. § 9617(c), and Section 300.435(c)(2)(i) of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 C.F.R. § 300.435(c)(2)(i), to document changes to the Selected Remedy, as modified by the 2017 ESD, and to demonstrate that the revised Selected Remedy complies with the statutory requirements of Section 121 of CERCLA, 42 U.S.C. § 9621. The NCP requires publication of an ESD when the differences in a remedial action significantly change but do not fundamentally alter the basic features of the remedy with respect to scope, performance or cost.

This 2018 ESD modifies the Selected Remedy, as modified by the 2017 ESD, to continue excavation of radionuclide-contaminated soils/debris, which include radioactive discrete objects, in the 100-year floodplain and within and immediately adjacent to the abandoned canal *up to and including the entire length of the canal on the Site, as necessary*. The basis for this modification is set forth in Section III of this 2018 ESD, Description of Significant Differences and the Basis for those Differences.

This 2018 ESD is incorporated into the Administrative Record for the Site, in accordance with Section 300.825(a)(2) of the NCP, 40 C.F.R. § 300.825(a)(2), and is available for review as described below in Section IV, Community Involvement.

## **II. SUMMARY OF THE SITE HISTORY, CONDITIONS AND SELECTED REMEDY**

### **Site History**

The Site is located at 4150-A Old Berwick Road, South Centre Township, Columbia County, Pennsylvania, approximately six miles east of Bloomsburg and six miles west of Berwick. The Site is approximately ten acres and formerly contained numerous radioactively-contaminated buildings/structures, which have been demolished and removed. Other contaminated areas, including lagoons, dumps, and an abandoned canal currently remain on-Site. Most of the Site is currently enclosed by fencing.

The Site was most recently operated by SLC, which ceased manufacturing operations in approximately December 2007. When operating, SLC made lighting products with radioactive material (tritium) as the energy source under two licenses formerly administered by the Nuclear Regulatory Commission (NRC), now administered by the Pennsylvania Department of Environmental Protection (PADEP). The licenses, which expired on December 31, 2007, were License Number 37-00030-02 for the characterization and cleanup of contaminated facilities, equipment, and land from past activities, and License Number 37-00030-08 for the use of byproduct material to make exit signs. Tritium (H-3) was used by SLC in the production of luminous signs and dials, paints, gas chromatograph foils, and accelerator targets. SLC also held a license administered by PADEP (License Number PA-0166) for the radium contamination at the Site and for sealed calibration and/or reference radium sources up to 10 millicuries. This license expired on March 31, 2008.

Historic activities at the Site varied over time and involved the use of a number of different radionuclides. The Site had also been used for metal finishing and plating. Site operations involved a variety of radionuclides, chemicals, fuel oil, solvents, and heavy metals.

During Site operations, an unused canal adjacent to the Susquehanna River was divided into a series of lagoons and dump sites. The canal was used for the disposal of sewage, liquid waste (including silver plating wastes and anodizing solutions), low-level radioactive waste, radium-226 contaminated ductwork, and radionuclide-contaminated debris (such as radium dials and possibly strontium deck markers). Wastes generated at the Site included solid and liquid waste streams contaminated with radioactive materials, including radium-226, strontium-90, cesium-137, and tritium. These waste materials were disposed of in multiple areas of the Site throughout the years.

The Site was proposed for the NPL on September 23, 2004, and listed as final on the NPL on April 27, 2005, making it eligible for long-term cleanup under the Superfund program.

EPA has issued several Removal Action Memoranda for the Safety Light Site. These Action Memoranda are included in the Administrative Record for the Site. Further detailed information

regarding the various EPA Removal Actions undertaken at the Site may also be found at [www.epaossc.org/safetylight](http://www.epaossc.org/safetylight).

EPA organized the work at the Site into three operable units (OUs):

- Operable Unit One (OU-1): Safety Light Buildings and Structures
- Operable Unit Two (OU-2): Ground Water
- Operable Unit Three (OU-3): Soils, Sediments, and Surface Water

The OU-1 Remedial Action is complete and documented in the “*Final Remedial Action Completion Report; Operable Unit-1*,” dated September 2015, and issued by EPA on November 23, 2015. The OU-2 Remedial Investigation/Feasibility Study (RI/FS) is being performed by EPA. A final response action for OU-2 will be determined by EPA when the RI/FS is complete. The OU-3 RI/FS is currently ongoing and will require additional data evaluation and field activities prior to finalizing the OU-3 RI/FS Report. However, sufficient information had been evaluated to support a Selected Remedy in an Early-Interim ROD for the West Dump, West Lagoon, East Dump, and East Lagoon areas of OU-3 to mitigate potential threats to human health and the environment. The remainder of OU-3 will be addressed by future response actions when the OU-3 RI/FS is complete. The final remedy will be documented in a final ROD for OU-3.

### **Site Conditions OU-3**

Radiation surveys performed with on-Site instrumentation and off-Site laboratory analysis of samples indicate that the Site is contaminated with numerous hazardous substances listed at 40 C.F.R. §302.4, primarily radionuclides such as cesium-137, strontium-90, radium-226, lead-210, tritium, and non-radionuclides such as polyaromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), arsenic, cadmium, and chromium, among others. The Site soils contaminated with significant concentrations of radionuclides are considered principal threat wastes (PTW).<sup>1</sup> In addition to non-radionuclide and radionuclide-contaminated soils, items buried on-Site include radioactively-contaminated duct work and other contaminated items that had either been returned to the Site by their customers or were manufactured at the Site. Extremely high-activity radiologically-contaminated items (up to 27,000 disintegrations per minute (dpm) transferable alpha contamination) have been discovered buried within several inches of the ground surface of the flood-prone lagoons/dumps during past removal actions.

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<sup>1</sup> Principal threat wastes are those source materials considered to be highly toxic or highly mobile that generally cannot be reliably contained or would present a significant risk to human health or the environment should exposure occur. They include liquids and other highly mobile materials or materials having high concentrations of toxic compounds. No “threshold” level of toxicity/risk has been established to equate to “principal threat.” However, where toxicity and mobility of source material combine to pose a potential risk of 1E-03 or greater, generally treatment alternatives should be evaluated (*A Guide to Principal Threat and Low Level Threat Wastes*, OSWER 9380.3-06FS).



The Site is located on a terrace and floodplain on the north bank of the Susquehanna River. High-activity radiologically-contaminated sources found on or near the ground surface at the Site pose a long-term threat of release of hazardous substances if these items are uncovered by environmental conditions, including but not limited to flooding. The Site has experienced flooding in the past above the 100-year floodplain, during which several radioactively-contaminated buildings, prior to demolition under OU-1, were flooded. Following Tropical Storm Lee in 2011, EPA determined that contamination had migrated from the West Dump to an adjoining residential property (prompting a Removal Action in the West Dump) and that further flooding could release additional hazardous substances, primarily the above-described radionuclides, into the environment. The assessment of the Site, including the lagoons and dumps, identified items such as gamma and beta sources, radium painted dials and other miscellaneous manufacturing waste materials, within a few inches of the current surface. The West Dump, West Lagoon, East Dump, and East Lagoon contain high levels of soil contamination. Soils and radioactive discrete objects may become mobile in flood conditions and may cause unacceptable exposures to the public. Flooding may also cause the migration of non-radionuclide and radionuclide-contaminated soils/debris, including radioactive discrete objects, from the lagoons and dumps to other areas of the Site and cause further impacts to Site soils.

Trespassing has been documented several times at the Site, and both residents and trespassers may become exposed to hazardous substances located at the Site if further action is not taken. Some of the highest levels of radionuclide soil contamination and concentration of radiological discrete objects/items are in the West Dump, West Lagoon, East Dump, and East Lagoon areas of the Site.

### **Selected Early-Interim Remedy for OU-3**

EPA issued an Early-Interim ROD for OU-3 on June 30, 2016, to address contamination in the West Dump, West Lagoon, East Dump, and East Lagoon portions of the Site. The major components of the remedy selected by EPA in that ROD included the following:

1. Site Preparation - Mobilize and setup support facilities, remove vegetation, and establish soil erosion and sediment controls. Regularly inspect and maintain erosion and sediment controls during vegetation clearance, soil excavation and stockpiling, waste loading, backfilling, and regrading operations, until excavation and backfilling is complete and a gravel protective cover is established at the West Dump, West Lagoon, East Dump, and East Lagoon to minimize erosion.
2. Soil Excavation - Excavate all materials including soils/debris and radioactive discrete objects from the West Dump, West Lagoon, East Dump, and East Lagoon in the approximate area of concern depicted in Appendix C (Figures 4 to 7).<sup>2</sup> Continue vertical excavation until ground water or the native soil interface (the point at which fill material meets the native soil surface) is encountered, whichever occurs first, or to the maximum extent practicable based on Site or excavation conditions. Excavation depths are

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<sup>2</sup> Appendix C of the "Early-Interim Record of Decision; Operable Unit Three; Safety Light Corporation Superfund Site; Bloomsburg, Pennsylvania" dated June 30, 2016.

expected to range from approximately 4 to 16 feet below ground surface (bgs). The total in-situ volume of material designated for removal is approximately 5,978 cubic yards.

3. Post-Excavation Sampling – Collect post-excavation samples from the floor and side walls of each excavation area, prior to backfilling and regrading, to determine and document the concentration of radionuclide and non-radionuclide soil contamination that may remain in-place. Conduct gamma walkovers of the excavated areas prior to backfilling to assess any remaining radiological activity.
4. Package all excavated material as radioactive waste and load into intermodal containers (IMCs) for shipment to disposal sites. Transfer excavated material by licensed vendors in accordance with transportation regulations to an off-Site facility as described in #5, below.
5. Waste Disposal - Dispose off-Site, at a Nuclear Regulatory Commission (NRC) licensed radioactive waste facility, and in accordance with Section 121(d)(3) of CERCLA, 42 U.S.C. § 121(d)(3), and Section 300.440 of the NCP, 40 C.F.R. §300.440, all materials excavated pursuant to item #2 above. Certain waste materials (including, but not limited to, dials and some discrete objects) may also exhibit chemical hazardous waste characteristics requiring treatment (e.g., stabilization) prior to permanent disposal. Such waste materials shall be sampled and analyzed using the Toxicity Characteristic Leaching Procedure (TCLP) pursuant to the Resource Conservation and Recovery Act (RCRA) to determine if they exhibit hazardous waste characteristics. For those waste materials that fail TCLP, such treatment shall be performed at the off-Site licensed radioactive waste facility to render such materials non-hazardous prior to disposal at that licensed facility.
6. Site Restoration – Backfill excavated areas with clean material derived from an off-Site borrow source. Backfill material shall meet Pennsylvania Criteria for Management of Fill specifications for chemical constituents, as certified through laboratory analysis. Regrade excavated areas to approximate original contours, ensuring appropriate Site drainage. Install and place geotextile and a layer of gravel, with a minimum thickness of 12 inches, on disturbed surfaces of the West Dump, West Lagoon, East Dump, and East Lagoon as a protective cover to minimize erosion.

The estimated cost of the 2016 Early-Interim ROD was \$9,068,000. EPA entered into a Superfund State Contract (SSC) with the Commonwealth of Pennsylvania on August 4, 2016. The OU-3 interim remedial action commenced on August 12, 2016, and is presently ongoing.

## **2017 ESD**

In November 2016 additional sampling was conducted in the former canal area. As a result of the sampling, additional areas which required excavation within and adjacent to the former canal were identified. The locations of these areas were beyond the original scope of the 2016 Early-Interim ROD. Therefore, to continue with the excavation of these additional areas, a modification of the 2016 Early-Interim ROD was documented in an ESD issued on August 24, 2017. At the time, the additional volume of radionuclide-contaminated soils/debris was

estimated to be approximately 998 cubic yards and could be completed within the cost estimate provided in the 2016 Early-Interim ROD.

### **III. DESCRIPTION OF SIGNIFICANT DIFFERENCES AND THE BASIS FOR THOSE DIFFERENCES**

The 2016 Early-Interim ROD required the excavation and off-Site disposal of non-radionuclide and radionuclide-contaminated soils/debris, including radioactive discrete objects, from the West Dump, West Lagoon, East Dump, and East Lagoon located within the abandoned canal and within the 100-year floodplain. This early-interim remedial action commenced in August 2016 and is presently ongoing at the Site.

The 2016 Early-Interim ROD was subsequently modified by the 2017 ESD to include additional areas within the abandoned canal and/or 100-year floodplain for excavation. The radionuclide-contaminated soils/debris, including radioactive discrete objects, in these areas are subject to the same migration potential as described in the 2016 Early-Interim ROD for the West Dump, West Lagoon, East Dump, and East Lagoon located within the same abandoned canal and 100-year floodplain.

As previously stated, EPA originally anticipated that these additional areas, as depicted in Figure 1, were localized in nature. However, excavation at location TP-12, also referred to as the “outfall area” (Photo 1), revealed that the subsurface radioactive contamination was more extensive than previously believed with readings over one million counts per minute (cpm) in some locations.<sup>3</sup> The outfall area is the former location of a buried 12-inch drainage pipe that exited the East Lagoon discovered during the installation of TP-12 (see 2017 ESD; Table 1), and it was assumed that any radioactive soil contamination would be limited to the immediate vicinity of the buried drainage pipe. However, during the excavation at TP-12, radionuclide-contaminated soil/debris continued to be found eventually encompassing the entire area from TP-12 to SU18-7/SU18-8 and north to the former southern berm of the East Lagoon. The outfall area required the excavation and off-Site disposal of approximately 1,387 tons (991 cubic yards) of radionuclide-contaminated soil/debris from the Site.

Likewise, excavation immediately east of the former East Lagoon berm near TP-HS-02 revealed radioactive contamination ranging up to one million cpm in subsurface soils. In this area, a variety of debris was encountered, including metal, glassware, and an ashy material. A segment of the northern stone wall of the former canal was also exposed, and it became evident that radionuclide-contaminated soils/debris, including radioactive discrete objects, were dumped immediately adjacent to the canal wall (Photo 2) and followed a seam of radionuclide-contaminated soils/debris that approximates the assumed depth of the former canal.

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<sup>3</sup> For comparison, the 2016 Early-Interim ROD cited a calculated reference background value in the general Site area of 8,796 cpm. Dose rates from the background area ranged from 9 to 10 microrentgen per hour ( $\mu\text{R/hr}$ ). Background concentrations for specific radionuclides in soil are presented in Table 1 and Table D-2 of the 2016 Early-Interim ROD.



Several radioactive discrete objects were also found buried in the vicinity of TP-HS-02. A small radioactive gold-foil, which subsequently broke into two pieces while handling (Photo 5), was uncovered in this area. Gamma and beta contact dose rates of up to 380 milliroentgen per hour (mR/hr) and 80 Rad/hr, respectively, were detected on a single piece of the gold foil.<sup>3</sup> A small vial (Photo 6) was also discovered in this area containing what appears to be radium paint with a gamma contact dose rate on the vial of 80 mR/hr and approximately 2.2 million dpm transferrable alpha contamination of the liquid within the vial. Several small painted metal plates (Photo 7) were also found with a gamma contact dose rate of up to 20 mR/hr and a beta dose rate on contact of up to 1,634 mRad/hr.

On or around June 7, 2018, during regrading operations in the vicinity of TP-HS-02, two adjacent areas of elevated radioactivity were encountered near B-03 and B-04 (see Figure 1). B-03 and B-04 represent the locations of the two former underground silos on the Site (the silos are more fully discussed in the 2016 Early-Interim ROD). Further investigation with on-Site radiation detection instruments revealed over 3 million cpm on contact with the soil. A grab sample of the soil analyzed with an on-Site in-situ object counting system (ISOCs) revealed up to 558 pCi/g radium-226 and up to 1,981 pCi/g Cs-137 in the soil sample.<sup>3</sup>

Based on the identification of the exact locations of the two former underground silos and the soil sample results which indicated a potential risk to human health and the environment, EPA determined it was necessary to undertake excavation of the two silos. Excavation of the two silos began on June 14, 2018, and was completed on or about June 29, 2018. The two silos were excavated to the extent practicable considering field constraints, including excavation slope stability and encountering the ground water table at the base of the excavation. Significant radiological levels were observed throughout the silo excavation suggesting that the silos were not backfilled with clean fill.<sup>4</sup> The remaining intact metal walls (Photo 3) and concrete base (Photo 4) of each silo were also removed. It was discovered that the silo located nearest B-03 had a drain in the center of its concrete base. The purpose of this drain is unknown. The bases of both silos were in the ground water table. After removal of the concrete base from the silo located nearest B-03, the greatest dose rates in the excavation were documented: 50 mR/hour on contact with the floor of the excavation and 20 mR/hour in the general area above the floor. In an attempt to reduce these dose rates, an additional 6 to 12 inches of soil were removed from the excavation below the ground water table. A final survey scan of the floor of the excavation revealed radioactivity at approximately 400,000 cpm. Further excavation was not possible because of significant ground water entering the excavation.

Excavation of the silos resulted in the off-Site disposal of an approximate additional 59 intermodal containers (IMCs) and a total of approximately 990 tons (707 cubic yards) of radionuclide-contaminated soil/debris which were not included in cost estimates for excavation of the former canal.

This 2018 ESD further modifies the 2016 Early-Interim ROD, as modified by the 2017 ESD, to expand and continue the excavation of the test pit/boring locations depicted in Figure 1 in the 100-year floodplain and within and immediately adjacent to the abandoned canal *up to and*

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<sup>4</sup> The 1994 Settlement Agreement between SLC and the Nuclear Regulatory Commission (NRC) required the excavation of the radionuclide contamination from the underground silos located at the Site.

*including the entire length of the canal on the Site, as necessary.* The continued excavation of the former canal will be consistent with the soil excavation performance standard (Item #2) as specified in the Selected Early-Interim Remedy for OU-3 in Section II of this 2018 ESD, except that the soil excavation performance standard will apply to the entire canal east of the former lagoons/dumps.

The exact construction specifications of the former canal are unknown; however, the remaining on-Site portion of the former canal is assumed to be a tetrahedron: 380 feet long, 60 feet wide, with a depth of approximately 5 feet. This results in an approximate volume of 3,000 cubic yards of radionuclide-contaminated soils/debris (not including the approximate 707 cubic yards of silo material already excavated), if the entire remaining portion of the canal is excavated.

The original 2016 Early-Interim ROD cost estimate for the West Dump, West Lagoon, East Dump, and East Lagoon early-interim remedial action was \$9,068,000. The 2016 Early-Interim ROD was subsequently modified by the 2017 ESD to include additional areas within the abandoned canal and/or 100-year floodplain for excavation. At the time, EPA anticipated that these additional areas were localized in nature and could be completed within the 2016 Early-Interim ROD estimate. However, as discussed above, it soon became apparent that subsurface radioactive contamination was more extensive than originally estimated, which necessitated the increase in the volume of radionuclide-contaminated soil (including radioactive discrete objects) requiring excavation. Therefore, with the 2017 ESD, EPA added approximately \$3,318,610 to complete the excavation of the outfall area and other areas immediately east of the East Lagoon where additional radioactive soils/debris was encountered.

EPA estimates now that an additional \$4,200,000 will be needed to complete the excavation of the test pit/boring locations depicted in Figure 1 in the 100-year floodplain and within and immediately adjacent to the abandoned canal *up to and including the entire length of the canal on the Site, as necessary.* If the entire canal requires excavation, the total approximate cost of the 2016 Early-Interim ROD, as modified by the 2017 ESD and this 2018 ESD, is estimated at \$16,586,610.

The expanded excavation, *up to and including the entire length of the canal on the Site, as necessary,* will be remediated in accordance with the performance standards set forth in the 2016 Early-Interim ROD, which remains protective and continues to meet ARARs in accordance with 40 C.F.R. § 300.430(f)(1)(ii)(B)(1) and (2). Although the scope of the Selected Remedy has been modified to include excavation *up to and including the entire length of the canal on the Site, as necessary;* the scope is consistent with the Selected Remedy in that the scope of the cleanup work remains within the former abandoned canal and/or 100-year floodplain. EPA has also determined that the continued excavation and off-Site disposal of radionuclide-contaminated soil/debris, and radioactive discrete objects, from the Site utilizes current on-Site resources efficiently and in a cost-effective manner. Therefore, this modification to the Selected Remedy does not fundamentally alter the basic features of the Selected Remedy with respect to scope, performance, and cost.

A final cleanup remedy for OU-3 will be addressed in a future response action when the OU-3 remedial investigation/feasibility study (RI/FS) is completed. The final remedy for OU-3,



including the floodplain areas, will be documented in a Final ROD for OU-3.

#### **IV. COMMUNITY INVOLVEMENT**

This 2018 ESD and the information upon which it is based will become part of the Administrative Record in accordance with Section 300.825(a)(2) of the NCP, 40 C.F.R. § 300.825(a)(2). A public notice will be published in the *Press Enterprise* in October 2018, to announce the availability of this 2018 ESD for review in the Administrative Record for the Site in accordance with Section 300.435(c)(2)(i) of the NCP, 40 C.F.R. § 300.435(c)(2)(i). The Administrative Record includes the documents that formed the basis for EPA's decision. The Administrative Record is available for public review on the internet at: <https://semspub.epa.gov/src/search> and at the following locations:

Bloomsburg Area Public Library  
225 Market Street  
Bloomsburg, PA 17815  
(570) 784-0883

U.S. EPA Region III  
6<sup>th</sup> Floor Docket Room  
1650 Arch Street  
Philadelphia, PA 19103  
(215) 814-3157

Questions concerning EPA's action and requests to review the Administrative Record should be directed to:

John Banks  
Remedial Project Manager  
Hazardous Site Cleanup Division  
US EPA Region III (3HS22)  
1650 Arch Street, Philadelphia PA 19103  
Phone: (215) 814-3214  
[banks.john-d@epa.gov](mailto:banks.john-d@epa.gov)

Cathleen Kennedy  
Community Involvement Coordinator  
Hazardous Site Cleanup Division  
US EPA Region III (3HS52)  
1650 Arch Street, Philadelphia, PA 19103  
Phone: (215) 814-2746  
[kennedy.cathleen@epa.gov](mailto:kennedy.cathleen@epa.gov)

#### **V. SUPPORT AGENCY REVIEW**

In accordance with Section 300.435(c)(2) of the NCP, 40 C.F.R. § 300.435(c)(2), EPA has notified PADEP of the modifications to the Selected Remedy described in this 2018 ESD. PADEP supports the modifications to the cleanup as set forth herein as documented in PADEP's letter to EPA dated September 25, 2018 (included with this 2018 ESD as Attachment 3).

#### **VI. AFFIRMATION OF STATUTORY DETERMINATION**

Considering the changes that have been made to the Selected Remedy under this 2018 ESD, EPA believes that the Selected Remedy for the Site, as modified, satisfies the CERCLA Section 121 requirements: 1) to be protective of human health and the environment; 2) to comply with Federal and more stringent State applicable or relevant and appropriate requirements (ARARs); 3) to be cost effective; and 4) to utilize permanent solutions or alternate treatment technologies or resource recovery technologies to the maximum extent practicable.

## VII. SIGNATURE

This 2018 ESD modifies the Selected Remedy, as set forth in the 2016 Early-Interim ROD, as modified by the 2017 ESD, to complete the excavation of radionuclide-contaminated soils/debris, which include radioactive discrete objects, in the 100-year floodplain and within and immediately adjacent to the abandoned canal *up to and including the entire length of the canal on the Site, as necessary*. The performance standards and ARARs in the 2016 Early-Interim ROD are not modified by this 2018 ESD.



Karen Melvin, Director  
Hazardous Site Cleanup Division

SEP 26 2018  
Date

# **ATTACHMENT 1**

## **FIGURES**



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### Legend

- Property Boundary
- + Fence
- Road
- Location of Historical Canal
- ⊗ Geoprobe Locations
- ▲ Test Pit Locations
- RI Boring Canal Locations
- RI Boring Locations

Imagery - ESRI, Bing Mapping Service, 2013  
Note: All buildings previously removed.

Coordinate System:  
WGS84 UTM Zone 18N Feet

0 200  
Feet

Safety Light Corporation Site  
South Centre Township  
Columbia County, Pennsylvania

Figure 1  
Geoprobe and Test Pit  
Locations

TDD#: W501-15-07-009  
Contract: EP-53-15-02  
Modified: 5/10/2017



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# **ATTACHMENT 2**

## **PHOTOS**

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**Photo 1: Outfall Excavation South of East Lagoon at TP-12**

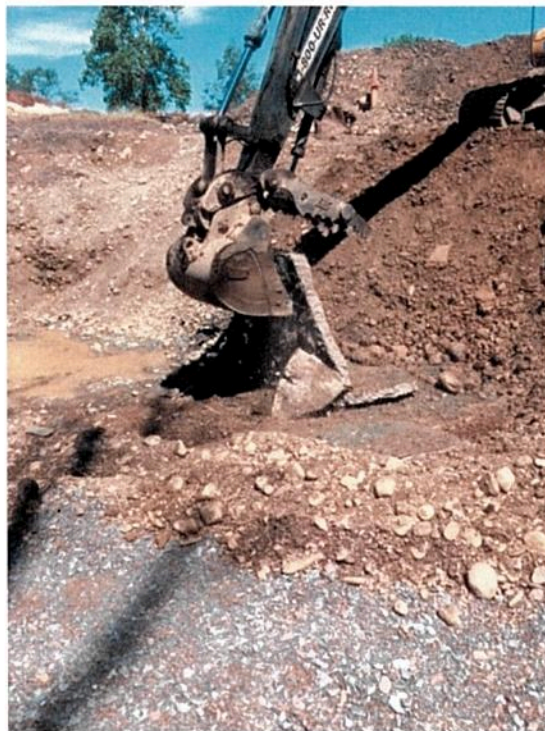


**Photo 2: North Wall of Canal East of East Lagoon Berm near TP-HS-02**





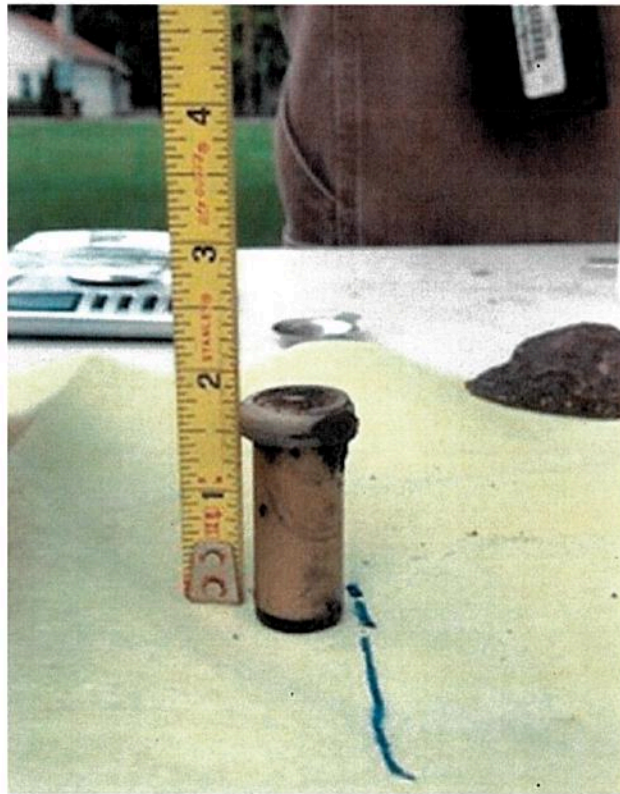
**Photo 3: Silo Wall Exposed Near B-03**



**Photo 4: Removal of Silo Concrete Base**



**Photo 5: Gold Foil - Canal**



**Photo 6: Paint Vial - Canal**





**Photo 7: Painted Metal Plates - Canal**



**ATTACHMENT 3**  
**PADEP CONCURRENCE**





**pennsylvania**  
DEPARTMENT OF ENVIRONMENTAL  
PROTECTION

208 West Third Street, Suite 101  
Williamsport, PA 17701-6448  
September 25, 2018

**Northcentral Regional Office**

570-327-3695  
Fax 570-327-3565

Ms. Karen Melvin, Director (3HS00)  
Hazardous Sites Cleanup Division  
US EPA Region III  
1650 Arch Street  
Philadelphia, PA 19103-2029

Re: Safety Light Superfund Site  
Explanation of Significant Differences  
Letter of Concurrence  
South Centre Township, Columbia County

Dear Ms. Melvin:

The Pennsylvania Department of Environmental Protection (The Department) has reviewed the draft 2018 Explanation of Significant Differences (2018 ESD) for the Safety Light Superfund Site (Site). The draft 2018 ESD was forwarded to the Department on September 17, 2018.

The 2018 ESD was prepared to provide the public with an explanation of proposed modifications to the components of the Early-Interim Record of Decision (ROD) remedy, summarize the information that supports the modifications and to affirm the selected remedy as revised by the 2018 ESD complies with the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

**DESCRIPTION OF SIGNIFICANT DIFFERENCES AND THE BASIS FOR SUCH DIFFERENCES**

The United States Environmental Protection Agency ("EPA") is issuing this proposed 2018 ESD to explain further modifications to the remedy selected in EPA's Early-Interim ROD, dated June 30, 2016. The 2017 ESD, for the Site amended the Early-Interim ROD to include radionuclide impacted soils and debris within the 100-year floodplain. This 2018 ESD further modifies the June 16, 2016 Early-Interim ROD to include additional areas of radionuclide contaminated soils in the abandoned canal for removal. The previously backfilled canal contains some radionuclide contamination in soils and radioactive discrete objects. By adding these changes, the 2018 ESD changes but does not fundamentally alter the remedy selected in the 2016 Early Interim ROD or the modifications put forth in the 2017 ESD with respect to scope, performance, or cost. Therefore, a ROD amendment is not necessary under the National Oil and Hazardous Substances Contingency Plan.

The Department hereby concurs with the EPA's 2018 ESD with the following conditions:

The Department will be given the opportunity to concur with the decisions related to future Remedial Actions to assure compliance with The Department's cleanup ARARs and design specific ARARs.

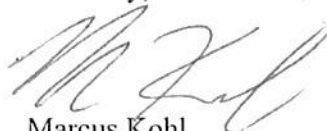
This concurrence with the selected remedial actions is not intended to provide any assurance pursuant to CERCLA Section 104(c)(3), 42 U.S.C. Section 9604(c)(3).

The Department reserves the rights and responsibilities to take independent enforcement actions pursuant to state and federal law.

This letter documents The Department's concurrence with EPA's draft 2018 ESD for the Safety Light Superfund Site.

Thank you for the opportunity to comment and concur on the 2018 ESD. If you have any questions regarding this matter please do not hesitate to contact me.

Sincerely,

A handwritten signature in dark ink, appearing to read 'M. Kohl', is written over the printed name.

Marcus Kohl  
Director  
Northcentral Regional Office

Cc: File (through McMann)  
Central Office (Ryan Kostival)  
John Banks, EPA