Pennsylvania Department of Environmental Protection
Rachel Carson State Office Building
P.O. Box 8469
Harrisburg, PA 17105-8469
February 14, 2006

Bureau of Radiation Protection

Larry Harmon, Plant Manager
Safety Light Corporation
4150-A Old Berwick Road
Bloomsburg, PA 17815

Re: DEP Inspection Report, License No. PA-0166

Dear Mr. Harmon:

Enclosed with this letter is a copy of the report that documents the inspection conducted by DEP personnel at your facility on January 24, 2006. No violations were identified during this inspection.

If you have any questions regarding the report, please contact me at 717-783-8979.

Sincerely,

Robert C. Maiers

Robert C. Maiers, P.E.
Chief, Decommissioning and Surveillance Division
Bureau of Radiation Protection

cc: D. Allard, BRP
R. Hamm, BRP
J. Maher, DEP
Mitch Cron, EPA
Marie Miller, US NRC
Jeffrey Miller, USR Metals
Rick Shipman, DEP
Dennis Matlock, EPA
Larry Newcomer, DEP

DEP Inspection Report

Location: Safety Light Corporation (SLC) Superfund Site, Bloomsburg, PA

License: PA-0166

Date of Inspection: January 24, 2006

Type of Inspection: Announced routine inspection of radium licensee.
Note: U.S. NRC Region I conducted a concurrent inspection of activities licensed by NRC under license 37-00030-02.

Licensee Contacts:

William Lynch	SLC Vice President
Larry Harmon	SLC Plant Manager/Radiation Safety Officer
Zach Laubach	SLC Health Physics Technician
Jeff Miller	USR Metals, Inc. Operations Manager

Regulatory Agency Representatives:

DEP Inspection Team:

Bureau of Radiation Protection:	Jeff Whitehead.
NCRO HSCA Program:	Larry Newcomer
NCRO Waste Management:	Todd Miller

NRC Inspector:

U.S. NRC Inspector:	Robert Prince

EPA personnel:

EPA Remedial Project Manager	Mitch Cron
TetraTech NUS (EPA Contractor)	Andy Frebowitz

Inspection Focus Area:
Inspection and spot check measurements taken by SLC personnel in support of USR Metals, Inc. preparations for relocation of their operations and production equipment to a location off the Safety Light Superfund site.

Background:
USR Metals, Inc., a non-licensee and long-time tenant on the SLC site is planning to relocate its operations to a location off the SLC site in nearby Berwick, PA. Currently the bulk of USR Metals, Inc. equipment is located within the restricted area of the SLC site and therefore must be cleared of radiological contamination prior to release from the site. The inspectors utilized NRC Regulatory Guide 1.86 (Termination of Operating Licenses for Nuclear Reactors) as "default" guidance on acceptable contamination levels.

Description of Inspection Activities and Observations:
During the entrance meeting, Mitch Cron, EPA Superfund Remedial Project Manager for the Safety Light Superfund Site provided an update on status of remedial and emergency removal actions. He also provided EPA's enforcement position to USR Metals, Inc.: i.e., USR Metals must disposition all of their equipment, materials, waste, etc. by taking it with them, selling it, properly disposing of it, etc. when they

leave the site (or shortly thereafter). EPA will pursue cost recovery for any materials that are abandoned on the site resulting in disposal at government expense.

USR Metals Operations Manager, Jeff Miller explained that USR Metals, as part of its relocation plans, intends to take presses, ovens, dies, screening equipment, spray hoods, etc. to their new location in Berwick, PA. All equipment slated to be relocated has been identified, numbered and listed. USR Metals provided copies of the list of equipment to the inspectors. USR Metals has not yet identified the equipment that they own but don't plan to use at their new location. Ownership of equipment which was in place prior to the creation of USR Metals, Inc. from the former US Radium Corp is, in some cases, unclear.

To determine whether equipment could be removed from the site, SLC obtained one "composite" smear sample (to check for removable contamination) from each major piece of equipment and one smear sample from each lot of smaller items (e.g., die sets). SLC counted the smears for alpha-beta-gamma on their proportional counter. SLC provided smear sample results to the inspectors. All smears results indicated "bkgd" with the exception of one die set (item # 100F) which was 3,600dpm/100cm^2. Item 100F was withdrawn from list of equipment USR plans to relocate.

USR Metals and SLC provided a tour of the areas where USR Metals equipment is located. DEP performed random direct measurement and scan spot checks of the identified equipment using an Alpha-Beta scintillation detector. The equipment on which spot checks were preformed included presses, milling machines, ovens, spray booths, dies sets, shears, etc. Approximately one third of the equipment checked exhibited fixed contamination above the acceptable surface contamination levels specified in NRC Reg. Guide 1.86. A summary of these measurements is included in the attached table.

Due to the isolated and, apparently, fixed nature of the contamination, the elevated readings obtained on USR Metals equipment are not indicative of a hazard to the health and safety of USR Metals employees.

At the exit meeting, SLC and USR Metals were informed that some of the equipment slated for relocation to USR Metals new location has fixed contamination above the allowable level for unrestricted areas. Based on the limited measurements and scans made by DEP it is apparent that the equipment could not be released without more comprehensive measurements (for both fixed and removable contamination) and any necessary decontamination to ensure it meets the acceptable levels specified in Reg. Guide 1.86.

No violations were identified during this inspection.

Follow-up Issues:

During the inspection DEP spot checked a walk-in oven in the Main Building that was listed on the USR Metals list of equipment to be moved to their new location. One location checked was the intake air filter on the oven. The filter read approximately 5,600 counts per minute (cpm) using the alpha-beta scintillation probe. USR Metals stated that they usually change the filters on their ovens on a weekly basis. This high reading on the filter raises concerns over the potential for elevated airborne radioactivity levels in the work areas of the Main Building and whether contaminated filter media is disposed of in the regular trash. Follow up air sampling may be warranted.

A direct reading on a storm drain grate behind the Main Building produced a reading of 23,600 cpm. Water was flowing through the storm drain from an unknown location. SLC indicated that they do not know the source of the water nor the location of its outflow. Follow up on this discovery should be made to determine, if possible, if contamination is flowing into the Susquehanna River from this storm drain.

Conclusion:

No violations were identified during this inspection, however it was determined that some of the equipment slated for relocation to USR Metals, Inc. new location has fixed contamination above the allowable levels for unrestricted areas. More comprehensive measurements (for both fixed and removable contamination) and any necessary decontamination to meet the acceptable levels specified in Reg. Guide 1.8 must be performed prior to removing USR Metals, Inc. equipment from the Safety Light Site.

Prepared by: Jeffrey Whitehead, Rad. Health Physicist, Bureau of Radiation Protection

Jeffrey L Whitehead Date: Feb. 13, 2006

Approved by: Robert Maiers, P.E., Chief- Decom and Env. Surv. Division, BRP

Robert C. Maier Date: 2/13/06

PADEP Bureau of Radiation Protection
Radiological Survey Data
Date: 1/24/2006 Time: 10:40AM - 12:22PM
Location: Safety Light Superfund Site, Bloomsburg, PA
Type: Direct Measurements and Scans of USR Metals Equipment, etc.
Instrument: Eberline E600/Alpha-Beta Scintillation Probe
Ser. #'s: Instrument 3016 Probe 1318
Probe Area: 100 cm^2
Efficiency: Beta 0.25 Alpha 0.18
Cal Date: 3/30/2005
Cal Due Date: 3/30/2006
Source Check: Satisfactory
Surveyor: J.L. Whitehead

Meas./Scan #	USR Item #	Description	Type	Count Time (sec)	Gross CPM	Approx. Bkg. CPM	Estimated Activity* (dpm/100cm^2)
1	3	35 ton press	Beta	60	1,350	300	4,200
2	3	35 ton press	Alpha	20	24	10	<MDA (192)
3	7	25 ton press	Alpha/Beta	20	1,010	300	2,840
4	7	25 ton press	Alpha/Beta	20	1,790	300	5,960
5	1	Denison Multipress	Alpha/Beta	Scan	400	300	N/A
6	17	Milling Machine	Alpha/Beta	Scan	300	300	N/A
7	15	Drill Press	Alpha/Beta	Scan	300	300	N/A
8	19	Belt Sander	Alpha/Beta	Scan	300	300	N/A
9	45-I	Dies	Alpha/Beta	20	1,680	300	5,520
10	27	Screening Machine	Alpha/Beta	20	1,010	300	2,840
11	38-A	Spray Booth	Alpha/Beta	Scan	300	300	N/A
12	39-E	Rack inside Exhaust Booth	Alpha/Beta	20	1,460	300	4,640
13	36	Air Intake Filter on Oven	Alpha/Beta	Scan	5,600	300	N/A
14	10	Shears	Alpha/Beta	Scan	1,000	800	N/A
15	25	Litho Printing Press	Alpha/Beta	Scan	400	300	N/A
16	N/A	Storm Drain behind Main Bldg	Alpha/Beta	20	23,600	250	N/A

* For Alpha/Beta measurements, the beta efficiency was used for activity calculations. This was based on the assumption that the ratio of beta to alpha counts (75:1) on measurements #1 and #2 (same location) is representative of all locations.