



U.S. Department of Justice

Federal Bureau of Prisons

United States Penitentiary  
Atwater, California 95301

December 21, 2004

MEMORANDUM FOR PAUL M. SCHULTZ, WARDEN

DAVE CLEMENTS, WESTERN REGIONAL SAFETY ADMINISTRATOR

FROM: P. Rodriguez, Safety

SUBJECT: Harmful Dusts (i.e., Hazardous Metals)

According to Program Statement 1600.08, Chapter 1, Page 5, Section D - Imminent Hazard, I am required to officially inform you of the **HARMFUL DUST (i.e., HAZARDOUS METALS.)** conditions that exist in the UNICOR Factory and UNICOR Warehouse, which will reasonably cause serious physical or health concerns to staff and inmate workers.

During the week of September 27, 2004, Matthew Korbela, Central Office Industrial Hygienist, conducted personal air and wipe samples at the UNICOR Factory and UNICOR Warehouse. The air samples were below the OSHA Occupational Exposure Limits. However, the wipe samples taken off inmate skin, clothing, working surfaces, equipment, flooring, and CRT's etc. detected **HARMFUL DUST (i.e., HAZARDOUS METALS)**.

Based on past and present wipe samples conducted by Mr. Korbela and other certified outside sources have demonstrated a potential serious physical or health concern, which staff and inmate workers are ingesting and inhaling harmful dusts (i.e., hazardous metals). The exposure to low concentrations over an accumulative period of time will cause staff and inmate workers blood or urine levels to rise. OSHA and EPA have identified exposure to low concentration over an accumulative period of time to be harmful. Dusts (i.e., hazardous metals) may cause kidney damage, increased risk of cancer of the lung, prostate cancer, health impairment and disease which arise after periods of exposure as short as days or as long as several years, which is below the OSHA Occupational Exposure Limits. Also, reviewing components of the CPU which identifies WARNING - lead in solder used in this product is listed as a known reproductive toxicant by the California Health and Welfare Agency. Also, certain electrical parts may contain chemicals

listed as known to the State of California to cause cancer and/or birth defects or other reproductive harm, which these components require you to follow manufactures service instructions and use of proper precaution.

The Safety Department further reviewed the blood and urine test results from 2002, 2003, and 2004, for inmates working in the glass breaking operation, which showed elevated levels of Barium in their blood from the previous years. These inmate Barium blood levels increased from 10 to 100 percent over an accumulative period of time. Most recently, two inmate workers currently handling CRT's at the packaging, shipping, receiving, and disassembly lines were given initial blood and urine tests, which showed elevated levels of Barium in their blood. They were removed from the present jobs for thirty days and most recent the Safety Office was made aware that Health Services also requested that these inmates be removed from the UNICOR Factory two weeks prior to taking their blood and urine tests. Their blood and urine test results showed a decrease of Barium in their blood, which supports the staff and inmate workers are being exposed to low concentrations of harmful dusts (i.e., hazardous metals) over an accumulative period of time.

The Hazard Assessment for harmful dust is conducted by air sampling and wipe sampling. Also, under the OSHA Hazard Assessment and Personal Protective Equipment guidelines requires employers to protect staff and inmate workers being exposed to harmful dusts (i.e., hazardous metals) even when below the OSHA Occupational Exposure Limits and Toxicology guidelines.

The following Bureau Policy and OSHA guidelines has required the Safety Department to conduct a reassessment of the personal protective equipment and environmental control measures for the UNICOR Factory and UNICOR Warehouse dissembling areas, shipping and receiving, handling of CRT's, and CRT's spill clean-ups, which will minimize staff and inmate workers being exposed to low concentrations of harmful dusts (i.e., hazardous metals) over an accumulative period of time.

The Safety Department provides you Bureau Policy and OSHA guidelines, which appropriate expertise and professional judgement to accomplish these tasks are being exercised: According to Program Statement 1600.08, Chapter 1, Page 24, Section P - Personal Protective Equipment, Subpart 7 - A Hazard Assessment of Personal Protective Equipment must be conducted in compliance with 29 CFR 1910-Subpart I Appendix B, Section 3 (a) - The purpose of the survey is to identify sources of hazards to workers or co-workers. Consideration should be given to the basic hazard categories, 1. Impact, 2. Penetration, 3. Compression (roll-over), 4. Chemical, 5. Heat, 6. Harmful Dust, and 7. Light (optical) radiation.

Also, Section 3 b - Sources. During the walk-through survey the safety officer should observe Section (d) - sources of harmful dust. Section 3 d - Each of the basic hazards should be reviewed and a determination made as to the type, level of risk, and seriousness of potential injury from each of the hazards found in the area. Additional Program Statement 1600.08 and OSHA guidelines identify this responsibility of reassessing this survey to be conducted by the Safety Officer.

Finally, according to Program Statement 1600.08, Chapter 1, Page 5,

Section D, Reactivation of the work or process shall be contingent upon Safety reinspection and written approval.

As a precautionary measure the UNICOR Factory and UNICOR Warehouse operations shall be temporarily suspended. UNICOR will need to develop a plan of action to comply with Program Statement 1600.08 and OSHA Hazard Assessment and Personal Protective Equipment guidelines and route this through the Safety Department to ensure the measures implemented by UNICOR meets the mandatory requirements.

The Safety Department will provide recommendations to assist UNICOR in their goal to be in compliance with Program Statement 1600.08 and OSHA Hazard Assessment and Personal Protective guidelines to ensure the safety and health of staff and inmate workers: Also, an reinspection will need to be conducted by the Safety Department and a written approval by the Safety Department needs to be received prior to these areas returning to full operation.

1. Update the UNICOR CRT's Procedures to include these new operations and handling procedures
2. Initially test 20% of the UNICOR Factory and UNICOR Warehouse inmate workers for hazardous metals in their blood and urine and repeat that every 6 to 12 months with the same or different inmate workers
3. Remove all air hoses to prevent the harmful dust (i.e., hazardous metals) to be blown from the surface areas in the UNICOR Warehouse back into the air
4. Purchase HEPA Vacuums for proper housekeeping around all work stations and work sites
5. Identify proper Personal Protective Requirements
6. Identify proper hygiene measures
7. Develop a clean-up crew and place them in the medical surveillance program
8. Need to develop a cleaning process of the CRT's prior to be shipped into the UNICOR Factory

Should you require any additional information, please advise.

cc: Executive Assistance  
Janice Aragon  
Safety File