U.S. Department of Justice

Federal Bureau of Prisons

Office of the Director

Washington, DC 20534

June 13, 2005

The Honorable Scott J. Bloch
Special Counsel
Office of the Special Counsel
1730 M Street, N.W., Suite 300
Washington, D.C. 20036-4505

Re: OSC File No. DI-04-2815; ALLEGED VIOLATION OF LAW, RULE, OR REGULATION AND SPECIFIC DANGER TO PUBLIC HEALTH OR SAFETY AT THE FEDERAL PRISON INDUSTRY FACTORY, ATWATER, CALIFORNIA

Dear Mr. Bloch:

I am in receipt of your correspondence wherein you conclude that allegations raised by an employee of the United States Department of Justice, Federal Bureau of Prisons (BOP), constitute a substantial likelihood that a violation of law, rule, or regulation and a substantial and specific danger to public health or safety has occurred. Specifically, Leroy A. Smith, Jr., an employee and Safety Manager of the United States Penitentiary in Atwater, California (USP Atwater), has made allegations related to health and occupational safety violations in a Federal Prisons Industries (FPI) factory at USP Atwater. Mr. Smith also alleged that he suffered retaliation by USP Atwater executives for reporting the violations to the appropriate authorities. The Office of Special Counsel requested an investigation and report on the allegations made by Mr. Smith. Please accept this correspondence as a summary of our investigation and findings.

Sincerely,

Harley G. Lappin
Director

Federal Bureau of Prisons Office of Internal Affairs (OIA)

OIA Case Number 2005-00010
OSC Case Number DI-04-2815

Report of Investigation

June 13, 2005

Subject: ALLEGED VIOLATION OF LAW, RULE, OR REGULATION AND SPECIFIC DANGER TO PUBLIC HEALTH OR SAFETY AT THE FEDERAL PRISON INDUSTRY FACTORY, ATWATER, CALIFORNIA

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Preliminary Statement

1. This investigation commenced in December 2004, upon receipt of an Office of Special Counsel (OSC) letter tasking the Bureau of Prisons to conduct an investigation pursuant to 5 USC §1213.

2. The OSC is an independent federal agency whose primary mission is to safeguard the merit system by protecting federal employees and applicants from prohibited personnel practices, especially reprisal for whistle blowing. The OSC also serves as a channel for federal workers to make allegations of: violations of law; gross mismanagement or waste of funds; abuse of authority; and a substantial and specific danger to the public health and safety.

3. Reports of investigations conducted pursuant to 5 USC §1213 must include: (1) a summary of the information with respect to which the investigation was initiated; (2) a description of the conduct of the investigation; (3) a summary of any evidence obtained from the investigation; (4) a listing of any violation or apparent violation of any law, rule, or regulation; and (5) a description of any action taken or planned as a result of the investigation, such as changes in agency rules, regulations or practices, the restoration of any aggrieved employee, disciplinary action, and referrals to the Attorney General of evidence of criminal violations.

Information Leading to the OSC Tasking

4. The United States Penitentiary (USP) Atwater is a federal penitentiary located in Atwater, California. Located inside the facility is a Federal Prison Industries (FPI) factory. The factory employs eight federal employees and approximately 117 federally convicted inmates. The factory mission is the

recycling of electronic components. One component of the recycling process involves dismantling Cathode Ray Tubes (CRTs) by manually breaking the glass CRTs in a specially designed glass breaking booth.

5. The OSC identified Mr. Leroy A. Smith, Jr., Safety Manager (GS-12), as the person who provided the OSC the information that led it to task this investigation. The OSC said Mr. Smith alleges the FPI factory began the CRT recycling process after his repeated directives that the factory perform a health and risk assessment to determine concerns associated with the release of hazardous metals contained in the monitors. The OSC said Mr. Smith told them that staff and inmates were exposed to lead, cadmium, barium and beryllium above the Occupational Safety and Health Administration's (OSHA) established limits because of the FPI's failure to perform the assessment. The OSC also said Mr. Smith reported he suffered retaliation by USP Atwater Executives for reporting the violations.

6. More specific information contained in the OSC letter and a subsequent e-mail leads to the formulation of specific allegations for our investigation:

a. Allegation 1: Mr. Smith alleges staff and inmates at USP Atwater are exposed to hazardous materials emitted from broken CRTs without adequate safeguards. Despite Mr. Smith's repeated recommendations, the recycling factory opened for operation without any assessment of potential environmental and health risks.

b. Allegation 2: Mr. Smith alleges that there is current impermissible exposure occurring within the FPI factory and warehouse, but away from the CRT breaking area.

c. Allegation 3: Mr. Smith alleges that blood tests taken in 2004 from three inmates revealed high concentrations of barium, with one of the three inmates also testing positively for cadmium. Additionally, one staff member tested by his private physician revealed the presence of cadmium in his blood.

d. Allegation 4: Mr. Smith alleges his recommendations for initial and periodic blood testing of all who come in contact with CRTs in addition to an environmental risk and health assessment by an outside firm have not been implemented.

e. Allegation 5: Mr. Smith alleges that FPI relies on specious air quality test results to justify continuance of operations in the recycling factory.

f. Allegation 6: Mr. Smith alleges the FPI factory operates an internal food service area that exposes workers to toxic material, in violation of 29 C.F.R. § 1910.141.

g. Allegation 7: Mr. Smith alleges that other FPI recycling factories have been recycling CRTs with even fewer safety precautions than those which were in place initially at USP Atwater. He alleges workers at those facilities have been exposed to hazardous materials at concentrations above the OSHA's established limits.

h. Allegation 8: Mr. Smith alleges that USP Atwater and FPI officials abused their authority by repeatedly ordering reactivation of operations in the CRT breaking area without fully implementing the safety measures prescribed by him and without his written approval.

i. Allegation 8a: Mr. Smith alleges FPI officials and USP Atwater's Warden acted in concert to discredit his safety concerns.

j. Allegation 8b: Mr. Smith alleges the Warden told him not to contact the OSHA.

k. Allegation 8c: An FPI staff member alleged that both the Atwater Factory Manager and FPI Associate Warden gave him a direct order to supervise glass breaking in Atwater's relocated booth without Mr. Smith's approval.

l. Allegation 8d: An FPI inmate worker alleged he was threatened by Atwater's FPI Factory Manager with a reduction in pay grade if he did not work in the glass breaking booth.

m. Allegation 8e: Mr. Smith alleged FPI and Atwater officials retaliated against him for reporting deficiencies and violations of regulations within the FPI factory.

Description of the Conduct of the Investigation

OIA Supervisory Special Agent Vernon Ledesma and OIA Special Agent Scott Hourigan conducted interviews with FPI and Safety staff at USP Atwater during the week of December 7, 2004. Marianne Cantwell (FPI General Counsel and BOP Environmental Executive), Jim Copps (FPI Technical Officer), John Lee (BOP National Safety Coordinator), Matthew Korbelak (BOP Industrial Hygienist), and Jeff Limjoco (Environmental Law Attorney) assisted them during interviews and provided technical expertise about FPI and Safety matters. Agents Ledesma and Hourigan

conducted interviews with FPI and Safety Staff in the BOP's Central Office during the week of January 3, 2005, with follow-up interviews of staff occurring again at USP Atwater during the week of January 10, 2005. Agent Hourigan conducted additional interviews of staff at USP Atwater during the week of May 9, 2005. Agency memoranda, BOP policy, OSHA regulations, and other relevant documents were reviewed. A tour of the USP Atwater FPI factory by investigators and consultants also occurred during the investigation.

Summary of Evidence Obtained During the Investigation

The following BOP staff and other individuals were interviewed:

1. Paul Schultz, ATW Warden
2. Richard Luna, ATW Associate Warden
3. Leroy Smith, Jr., ATW Safety Manager
4. Tom Stahley, ATW FPI Program Manager
5. Janice Aragon, ATW FPI Factory Manager
6. Angel Garcia, ATW FPI Foreman
7. Larry Novicky, BOP FPI General Manager
8. Cynthia Keidel, BOP FPI Program Manager
9. Varney Smith, BOP FPI Program Manager
10. Steve Tussey, BOP National Safety Administrator
11. Jeff Limjoco, BOP Senior Counsel, Environmental Law
12. Monica Rijos, ATW FPI Business Manager
13. Aaron Aragon, ATW FPI Program Manager
14. William Bernthold, ATW Recycling Factory Technician
15. Inmate Luis Orta, Register Number 06220-032
16. Alan Booth, ATW Associate Warden
17. Donald Moore, ATW Recycling Factory Technician
18. Louis Martin, ATW General Foreman
19. Terry Whiteside, FCI Texarkana Factory Manager
20. Robert Grieser, BOP FPI Chief Administrative Officer
21. Jesse Gonzalez, ATW Executive Assistant
22. Phil Rodriguez, ATW Safety Specialist
23. Jon Franco, ATW Medical Officer
24. Ricardo Willis, ATW Health Services Administrator
25. Richard Swete, ATW Correctional Officer
26. Michael Allison, FCI Herlong Correctional Counselor
27. Matthew Korbelak, BOP Industrial Hygienist
28. John Lee, BOP National Safety Coordinator
29. Warren Eggly, Technical Support, Labcorp, San Diego, CA
30. Janice Prudhomme, D.O.M.P.H., Department of Health Services, Occupational Health Branch, State of CA
31. William Walsh, Director, Environmental Health Services, National Loss Control Service Corporation

Other evidence:

Memoranda authored by Leroy Smith
Other BOP Memoranda, documents, notes, e-mail transactions
Personal Air Sampling Data Table for UNICOR Glass Breaking at USP Atwater (BOP National Safety Office document)
Table summary of OCCU-TEC, Inc. and Cal-Inc. test results
HEC Environmental Group, Inc. assessments
NATLSCO assessments
C&IH, Inc. assessments
Labcorp Inc. Reports
BOP OIA Case File (2005-00010)

Investigative Findings

Allegation 1:

Mr. Smith alleged that staff and inmates have been exposed to hazardous materials emitted from the broken CRTs without adequate safeguards. He claims that FPI and USP Atwater staff are not following Occupational Safety and Health Administration (OSHA) regulations and BOP policy pertaining to the protection of workers exposed to these hazardous materials. He also claims that despite his repeated recommendations, the factory opened for operation in April 2002 without any assessment of potential environmental and health risks. The OSHA regulations applicable to Mr. Smith's concerns are 29 C.F.R. 1910.1025 (lead), 29 C.F.R 1910.1000 (barium and beryllium) and 29 C.F.R. 1910.1027 (cadmium). The applicable BOP policy is Program Statement 1600.08, Occupational Health and Environmental Safety.

OSHA regulations establish permissible exposure limits (PELs) for various air contaminants including lead, cadmium, barium and beryllium. Lead, cadmium and barium are found inside the CRTs, while beryllium is found inside the power source of the computers' central processing unit. The OSHA's PELs are based on eight-hour time weighted average exposures to these materials and are set to protect workers against any deleterious health effects caused by such exposure. The OSHA also establishes an additional safeguard for lead and cadmium exposures by creating an eight-hour time weighted action level (AL). Exposure at or above the AL triggers biological monitoring requirements for each exposed worker.

Findings:

Our investigation revealed that in November 2001, Mr. Smith alerted USP Atwater FPI officials via memorandum about his concerns that factory workers would be exposed to hazardous

metals. Having limited knowledge of the specific hazards, Mr. Smith formally recommended that an environmental risk and health assessment be conducted prior to implementation of the CRT breaking program. In January 2002, Mr. Smith again reminded the same officials via memorandum of his concerns and recommended the environmental risk and health assessment.

Mr. Smith himself apparently performed a hazard assessment by reviewing Material Safety Data Sheets and other information. Based on this assessment, he recommended that workers involved in the breaking of CRTs use personal protective equipment (PPE). FPI implemented its CRT recycling program at USP Atwater on April 9, 2002 with PPE which included dust masks, gloves, boots, eye and ear protection, and kevlar sleeves.

During program implementation, USP Atwater FPI officials and Mr. Smith decided that a CRT glass breaking booth should be installed, and it was installed approximately three (3) weeks after activation of the factory. The booth was placed inside the factory rather than outside due to security concerns raised by the former Warden at USP Atwater. The booth chosen for this operation was designed for use in the painting industry to capture powder over-spray in a staged filter system. Based on information provided by the vendor from whom FPI purchased the booth, an ATW FPI official and Mr. Smith determined that the booth could serve as the CRT breaking area ventilation system and would effectively filter lead, cadmium, barium and beryllium.

On June 20, 2002, Mr. Smith used local Safety Department funds to pay for testing of the CRT breaking booth area. He did so, he reported, because USP Atwater FPI officials did not initiate testing themselves, despite his recommendations that they do so. Apparently based on tests previously conducted at FCIs Elkton and Texarkana (See Allegation 4), FPI officials viewed testing as unnecessary. Regardless, on June 27, 2002, results from personal air sampling[1] were received which revealed that the CRT breaking area exceeded the OSHA's PEL and AL limits for lead and cadmium. FPI shut down its CRT breaking operation on July 1, 2002. It was determined that, although the booth filtration system was operational, the vacuum mechanism was not sufficiently powerful and did not work as effectively as expected.

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[1] Personal air sampling is the OSHA's standard for evaluating exposure criteria. The air sampling was conducted by OCCU-TEC, Incorporated.

Although the FPI manager at USP Atwater had limited knowledge of ventilation systems in general, or the removal of air contaminants in particular, modifications were made to the booth ventilation system in an attempt to lower the levels of lead and cadmium in the air. Also, after consulting with the BOP's Industrial Hygienist on appropriate PPE, FPI took action to protect workers in the CRT breaking area by fit-testing and providing them with full-faced High Efficiency Particulate Air (HEPA) respirators. Additionally, a plastic barrier was installed to separate the CRT breaking area from the remainder of the factory. However, when FPI resumed its recycling operations on July 24, 2002, personal air samples again exceeded the OSHA's PEL and AL limits for lead and cadmium, according to test results received on August 2, 2002. FPI, again, halted its CRT breaking program after receiving these results.

This cycle of testing, shutting down, modification, opening, and re-testing continued until the booth was moved in December 2003 to an area outside of the factory floor. FPI arranged for several visits by the BOP's Industrial Hygienist to assist in those efforts. In November 2002, according to a contemporaneous memorandum, the BOP's Industrial Hygienist advised a USP Atwater Safety Specialist against resuming CRT glass breaking operations, and recommended conducting additional engineering control measures and sampling to get below the lead and cadmium PELs. According to the BOP Industrial Hygienist's contemporaneous notes, he also "advised (the BOP FPI Program Manager) that all glass breaking locations have booths that exhaust to outside (no recirculation)." The FPI Program Manager did not recall the specific November 2002 conversation, but did recall having some discussion with the BOP Industrial Hygienist about booths venting exhaust to the outside.

The results of personal air samples collected from CRT glass breaking workers during the months of June, July, September, and November 2002 showed that cadmium and lead levels exceeded the OSHA's established limits. The results of personal air samples collected in January 2003 showed cadmium levels above the OSHA's established AL. Finally, the results of personal air samples collected in February 2003 showed that workers were exposed to cadmium above the OSHA's PEL and AL limits, and also, according to one sample collected from a CRT worker, to beryllium above the PEL limit.

Approximately one year later, a personal air sample collected from a CRT worker in February 2004, showed evidence of exposure to cadmium above the OSHA's PEL and AL limits. This appears to have been the result of the inmate, at some point

prior to the test, having removed a protective flap from the ventilation system which he perceived to be in his way. The inmate was not authorized to do so.

Personal air samples were taken during testing periods beginning in September 2002 through January 2003 from four (4) inmates who worked in the factory, but outside the glass breaking booth. Results from one inmate's sample in January 2003 showed evidence of exposure to cadmium above the OSHA's AL. This particular inmate worked outside the booth directly across from the booth's exhaust location. Our investigation revealed that the booth's 3rd stage filter had not been re-inserted in the filter bank during the testing period which occurred in January 2003. As air exhausted during this period, the inmate and staff were inadvertently subjected to insufficiently filtered exhaust. The booth's filter bank was inspected after factory staff alerted the FPI Associate Warden of the presence of silvery dust in the area. It was discovered that the final stage filter was not in place, and it was replaced.

Further testing was conducted of this inmate's blood and urine as required by OSHA regulations. The inmate's cadmium urine concentration of 1.5 mcg/L was below both the OSHA's 2.0 mcg/g environmental exposure standard and the OSHA's 3.0 mcg/g occupational exposure standard. The inmate's cadmium blood concentration of 4.0 mcg/L exceeded the OSHA's environmental exposure range for smokers (0.6 - 3.9 mcg/L), but did not exceed the OSHA's occupational exposure standard of 5.0 mcg/L. Institution medical staff confirmed the inmate to be a smoker. Finally, the inmate's personal air sample reading of .0033 mg/M3 exceeded the OSHA's cadmium AL of .0025 mg/M3 for cadmium.

Between January 2004 and September 2004, personal air samples were taken from fifteen (15) inmates who worked in the factory, but outside the CRT breaking area. All results were below the OSHA's PEL and AL limits for lead, cadmium, barium and beryllium.

BOP Program Statement 1600.08, Occupational Health and Environmental Safety, provides guidance on actions to be taken in situations concerning the use of ventilation systems to remove air contaminants. Specifically, the Industrial Ventilation manual published by the American Conference of Governmental Industrial Hygienists is required to be used as a guide to determine proper measurement and design of the ventilation system. However, it is apparent neither Mr. Smith nor the FPI manager consulted this section of the policy, reviewed the manual, or possessed adequate experience or training to assess

the effectiveness or ineffectiveness of efforts at physically modifying the booth. Although FPI program managers at BOP Headquarters had limited knowledge of ventilation systems in general, and of the removal of air contaminants in particular, they also provided additional recommendations for modifications to the ventilation system, and several attempts were made to fashion engineering controls for lead and cadmium levels. Ultimately, no system proved effective until the booth was moved outside the factory floor in December 2003, air permits from relevant environmental regulators were received, and the filtered air exhausted to the outdoors.

Finally, memoranda written by Mr. Smith suggested that FPI did not shut down glass breaking operations promptly when problems were evident during the testing periods. Testimonial evidence was that recycling operations were shut down whenever bad test results were received. For example, OCCU-TEC collected personal air samples on November 4, 2002. According to the USP Atwater FPI Associate Warden, operations continued until November 18, 2002, when test results were received which indicated lead and cadmium levels above the OSHA limits. With regard to the circumstance in January 2003 described above when it was discovered a third stage filter was missing from the ventilation system, silvery dust emissions were observed by staff and inmates at that time. In this case, a preponderance of testimonial evidence from staff did indicate that the operation was not shut down for at least a few days following that discovery. (Coincidentally, OCCU-TEC was collecting personal air samples on the day, January 21, 2003, when the silvery dust emissions were observed and the filter was promptly replaced. The results of that testing, received approximately one week later, showed cadmium levels above the OSHA's established AL, as reported above. Thus, it is unknown whether operations were subsequently shut down due to the observance of the silvery dust emissions or, as was the practice at the USP Atwater factory, because bad test results were received.)

Conclusion:

CRT and factory workers were exposed to the hazardous materials lead and cadmium for a period of approximately eighty (80) days immediately after factory activation, as well as during some intervals when reengineering and additional testing occurred between late July 2002 and November 2002. Subsequent personal air sample results showed that exposure to cadmium also occurred during some intervals of days through January and February 2003 reengineering/testing periods, and apparently during a brief period in February 2004. Finally, personal air sample results

from February 2003 indicated exposure to beryllium above the PEL limit during that reengineering/testing interval. These exposures are most likely attributable to or exacerbated by the absence of successful engineering controls for ventilation and filtration of the air, as well by the two additional exigent circumstances noted above (i.e., not having all filter banks in place in the ventilation system in January 2003 and the unauthorized modification to the ventilation system by an inmate worker in February 2004).

It should be noted, however, that evidence of "exposure to air contaminants" does not necessarily mean that workers actually inhaled air contaminants. Under OSHA regulations, exposure is determined by measuring air contaminants without regard to the use of respirators. The PPE worn by workers upon activation in April 2002 did not include respirators, but full-faced HEPA respirators for CRT glass breaking workers and a barrier between the glass breaking area and the rest of the factory were added prior to resuming operations in July 2002. Although the OSHA identifies respirators as the least satisfactory means of controlling exposure, the OSHA also states that respirators are capable of providing significant protection. FPI provided HEPA respirators to CRT glass breaking workers prior to resuming operations in July 2002 and has continued to do so. FPI also provided biological monitoring (blood and urine collection) since that time, including in 2004 when testing has demonstrated lead and cadmium levels far below PEL and AL limits.

Nevertheless, when workers are exposed to lead and cadmium above the PEL, the OSHA requires that change rooms, showers, and filtered air lunchrooms be provided; that food, beverages, tobacco, and cosmetics are not utilized except in these facilities; that workers be required to use these facilities whenever exposed in excess of the PEL; that medical surveillance must be performed in certain circumstances; that protective clothing be provided; that housekeeping be performed sufficiently to maintain all surfaces as free as practicable of accumulations of lead dust; that workers whose blood levels exceed a certain limit are not allowed to work in the affected areas; that training, information, and signs be provided; and that workers are notified in writing whenever personal air sampling indicates exposure above the PEL. Our investigation revealed that there were occasions when some, but not all, of the above were required and were not provided.

Listing of Actual/Apparent Violations:

During activation of the USP Atwater FPI factory and on some

subsequent occasions, CRT workers were exposed to lead and cadmium in excess of the OSHA's PEL and AL limits without appropriate engineering controls and work practice controls in violation of 29 CFR 1910.1000, 29 CFR 1910.1025 and 29 CFR 1910.1027. Specifically, when establishing the CRT booth and during periods of attempted re-engineering, feasible engineering and administrative controls were not first determined, and equipment and technical measures used were not approved for each particular use by an Industrial Hygienist or other technically qualified person. 29 CFR 1910.1000(e).

Further, appropriate employee notification was not made [29 CFR 1910.1025(d)(8), 29 CFR 1910.1027(d)(5)]; mechanical ventilation did not conform to regulations [29 CFR 1910.1025(e)(4)(ii)]; appropriate respirators were not initially used [29 CFR 1910.1025(f), 29 CFR 1910.1027(g)], although appropriate respiratory protection was implemented after the first approximately 80 days; appropriate change rooms, showers, and lunchroom facilities were not provided [29 CFR 1910.1025(i), 29 CFR 1910.1027(j)]; medical surveillance and biological monitoring for booth workers was not mandated for all CRT dismantling factories nor were instructions disseminated to them until June of 2003 [29 CFR 1910.1025(j), 29 CFR 1910.1027(l)]; and appropriate employee information, training, and signage was not provided [29 CFR 1910.1025(l) and (m), 29 CFR 1910.1027(m)].

Action Planned or Taken:

Personal air samples of workers within Atwater's dismantling factory have revealed no instances of exposure above a PEL or AL since February 2004. In December 2003, FPI officials relocated the glass breaking booth outside the factory floor and exhaust was vented to the outdoors. The relocation resulted in no additional exposures above PEL or AL levels.

Workers in the booth receive initial and annual biological monitoring to assess blood levels of lead and cadmium in their systems. Lab results are evaluated by institution medical staff to determine compliance with the OSHA's environmental and occupational exposure standards.

Workers in the booth wear full-faced HEPA respirators, kevlar gloves, coveralls and boots while in the booth. Prior to exiting the area, they are required to HEPA vacuum themselves and their suits.

Training, information and signs are now provided to all workers associated with CRT destruction/dismantling.

FPI officials also established procedures to safeguard workers against accidental breakages of CRTs. Workers are trained and directed to apply a light spray of water over the breakage of a CRT and any dust debris on the floor, prior to gently sweeping large broken glass to a centralized location. Workers then pick up the glass using a large dustpan, placing it in a small box. The box is then covered with shrink-wrap to prevent any airborne contaminants during handling and shipping to the glass breaking station. As a final response, workers use a HEPA vacuum to clean the floor of any remaining debris. Prior to returning to duty, workers are required to wash their hands and face with warm soapy water. These procedures were created by FPI officials at USP Atwater and disseminated to all other CRT dismantling facilities in September 2004.

FPI officials have also implemented a biological monitoring program (reference attached CD outlining Standard Operating Procedures, or, SOPs) to initially and annually monitor lead and cadmium levels in the blood and urine of workers assigned to the glass breaking booth, prospective workers requesting work in the booth and staff assigned to supervise the area. Blood work and urine samples are examined by laboratories and evaluated by physicians to ensure concentrations of hazardous metals do not exceed the OSHA's limits for exposure.

Disciplinary action against management officials is planned and under review at this time. Final actions will be communicated to the OSC.

Allegation 2:

Mr. Smith also alleges that there is current impermissible exposure occurring within the FPI factory and warehouse, but away from the CRT breaking area.

Findings:

In September 2004, the BOP's Industrial Hygienist, at FPI's request, conducted a technical assist visit at USP Atwater and collected personal air samples from inmates who worked outside the CRT breaking area. The results of all air monitoring were well below the OSHA action levels and PELs.

More recently, in March 2005, the OSHA conducted an inspection of the FPI recycling operation at USP Atwater in response to complaints regarding the working conditions and safety procedures. In its official response, the OSHA reported they were unable to substantiate any of the alleged violations of the OSHA's safety and health standards.

Conclusion:

There is no evidence to support the allegation of current impermissible exposure occurring within the FPI factory and warehouse.

Listing of Actual/Apparent Violations:

None

Action Planned or Taken:

The actions cited above with regard to Allegation 1, with the exception of disciplinary action, are applicable.

Allegation 3:

Mr. Smith alleges that blood tests taken in 2004 from three inmates revealed high concentrations of barium, with one of the three inmates also testing positively for cadmium. Additionally, one staff member tested by his private physician revealed the presence of cadmium in his blood.

Findings:

Our investigation revealed that the laboratory documents of blood tests taken from the three inmates reflected barium concentrations above acceptable limits. The inmates were consequently removed from their jobs inside the factory. Further investigation revealed, however, that the contract laboratory provided inaccurate information regarding the results of the tests. Specifically, the lab reports submitted by Labcorp of San Diego, California referenced the inmates' barium blood levels as ">79 Severe Elevation". This standard, according to a Labcorp report technician, was actually a reference for lead test levels rather than barium test levels. The technician elaborated that during the time of these tests, Labcorp was in the process of changing their report formatting, which resulted in the incorrect standard being referenced for the inmates' barium levels. Accurate laboratory reports submitted by the technician revealed all three inmates' blood tests were actually below the acceptable limits of laboratory references of "usually below 400 mcg/L" for barium exposure.

With respect to the inmate's positive cadmium blood test, the detected level that concerned Mr. Smith was 2.2 mcg/L. Our investigation determined the inmate was a smoker and that the OSHA's cadmium environmental exposure range for an individual that smokes is 0.6 - 3.9 mcg/L. Additionally, as this level was

also below the OSHA's cadmium occupational exposure standard of 5.0 mcg/L, FPI and medical officials saw no cause for concern regarding this inmate's test results.

The staff member with the cadmium reading provided an affidavit and laboratory report that referenced a detected level of cadmium at 0.1 mcg/L, well below the OSHA's occupational standard of 5.0 mcg/L. Based on this reading and according to the staff member, the physician directed a 30 day leave of absence from work. The staff member stated subsequent tests revealed no detectable amount of cadmium in his blood. The staff member returned to duty within the factory and undergoes annual testing to assess levels of the metals.

Listing of Actual/Apparent Violations:

None.

Action planned or taken:

Glass breaking booth workers undergo initial and annual biological monitoring to evaluate their lead and cadmium levels.

Allegation 4:

Mr. Smith urged initial and periodic blood testing of all who come in contact with CRTs in addition to an environmental risk and health assessment by an outside firm. He alleges these recommendations have not been implemented.

Findings:

Mr. Smith's recommendations in this regard have not been fully implemented. However, it is also true that they are not required by regulation or policy.

Nonetheless, in June 2003, FPI staff, with assistance from the BOP's Industrial Hygienist, developed and distributed the SOPs for CRT dismantling at all FPI CRT breaking factories. The procedures require all staff and inmates who rotate through the CRT glass breaking area to be given baseline and annual blood tests by an outside laboratory.

BOP policy instructs Safety Managers to seek guidance from the OSHA for assistance when necessary in managing industrial hygiene programs and other health hazards concerning environmental conditions present in the workplace which may cause illness or death. BOP policy also states that if the scope of the problem is beyond the expertise of the local Safety Manager,

the OSHA will provide services and guidance to federal agencies and assist them with development and implementation of occupational safety and health programs. The OSHA's Technical Services are also required to be available to agencies upon request. Unfortunately, it appears that no one from the BOP, including Mr. Smith, who had primary responsibility in this regard, ever took the prudent step of calling the OSHA for guidance prior to implementing the CRT breaking operation in 2002. (The allegation that the Warden told Mr. Smith not to contact the OSHA was precipitated by comments made at a meeting more than two years later. See Allegation 8b below.) Similarly, it appears Mr. Smith did not contact BOP Safety personnel at national headquarters prior to activation of the USP Atwater operation in 2002.

Conclusion:

It is true that FPI and Atwater officials did not contract for an environmental and health risk assessment prior to initiating operations at USP Atwater's FPI factory, but such an assessment by an outside consultant is not required. Our investigation revealed FPI officials did not see the need for an assessment by an outside consultant based on tests performed at FCIs Elkton and Texarkana, prior to Atwater's activation. Mr. Smith conducted his own hazard assessment, and USP Atwater FPI officials provided PPE to CRT workers upon activation. This was not sufficient, and it is reasonable to conclude that a risk assessment by a qualified private provider and a request for pre-operational guidance from the OSHA may have helped to prevent the exposures which occurred.

Listing of Actual/Apparent Violations:

None.

Action planned or taken:

SOPs which, among other things, address the issue of blood testing, were developed for all CRT dismantling operations and disseminated in June 2003.

Allegation 5:

Mr. Smith alleges that FPI relies on specious air quality test results to justify continuance of operations in the recycling factory. He states that FPI tested air quality in the USP Atwater factory when CRTs were not being broken and air contaminants were at their lowest, thereby enabling them to produce low test results.

Findings:

Our investigation revealed that the personal air samples obtained by Agency and other contracted companies were taken during varying and representative times of factory production.

Conclusion:

No evidence suggested that FPI manipulated production levels to produce better air quality results.

Listing of Actual/Apparent Violations:

None.

Action Planned or Taken:

None.

Allegation 6:

Mr. Smith alleges that the food service eating area inside the factory is exposed to toxic materials and violates 29 CFR 1910.141, which provides, "no employee shall be allowed to consume food . . . in any area exposed to a toxic material."

Findings:

29 C.F.R. 1910.141 defines exposure to toxic material as exposure to a substance that exceeds an applicable limit, with personal air sampling serving as the medium to assess such limits. Our investigation revealed that prior to January 2004, no personal air samples were taken from the food service eating area. Therefore, we could not determine whether the food service eating area was exposed to toxic materials prior to January 2004. However, in January, February, and September 2004, personal air samples were taken from the food service eating area and these tests were below the OSHA's PEL and AL limits for lead, cadmium, barium and beryllium. Wipe samples did show barely detectable levels of cadmium and lead on surfaces in the dining area, however.

During the course of the investigation, Mr. Smith also alleged BOP FPI officials and the former USP Atwater Warden approved the food service area to be inside the factory. Mr. Smith stated he was aware of this decision having been approved, and that he saw blueprints which showed the food service area was to be fully enclosed. Mr. Smith surmised that the food service area was not fully enclosed because of the high cost of doing so.

ATW and BOP FPI officials refuted Mr. Smith's claims in this regard. The decision to have the food service area inside and only partially enclosed, according to the ATW FPI official, was made by the former Warden based on his security concerns. Moreover, the officials denied viewing, possessing or knowing anything about blueprints which showed the food service area fully enclosed, or that budgetary reasons played a role in the decision to partially separate it. No evidence of the existence of those blueprints was discovered in the current investigation.

Conclusion:

Based on available tests which commenced in January 2004, there is no indication workers were exposed to toxic material in the food service area in violation of 29 C.F.R. 1910.141. The personal air samples did not indicate the presence of lead and cadmium exceeded an applicable limit. While it is undisputed some material made its way to the eating area, based on the wipe sample data, the personal air sample testing did not reveal amounts reached a toxic level.

Listing of Actual/Apparent Violation:

None.

Action Planned or Taken:

Based on the discovery of the barely detectable amounts of lead and cadmium in the food service area, the BOP's Industrial Hygienist recommended the food service eating area be isolated from factory operations and separately ventilated. BOP FPI officials directed FPI factories nationwide to close all internal food service operations by February 28, 2005.

Allegation 7:

Mr. Smith alleges that other FPI recycling factories have been recycling CRTs with even fewer safety precautions than those which were in place initially at USP Atwater. He alleges workers at those facilities have been exposed to hazardous materials at concentrations above the OSHA's established limits.

Findings:

Site visits to other FPI recycling factories did not occur during our investigation; rather, interviews of relevant FPI and Safety staff were used to determine when other factories opened and how and where CRT monitors were dismantled. The investigation revealed that CRT glass breaking commenced at an

FPI factory at FCI Elkton, Ohio in May of 1997. Workers at FCI Elkton broke CRTs in warehouses located outside of the factory with ball peen hammers while wearing barrier-type face masks, welder's aprons and kevlar sleeves. This method of CRT destruction was learned and observed from another non-governmental recycling company as well as a glass processing company, neither of whom conveyed any concerns with exposure to hazardous metals while breaking the glass in the CRTs. Additionally, at the request of FPI officials located at FCI Englewood, Colorado, an environmental consulting service, Chemistry & Industrial Hygienist, Inc. (C&IH) assessed the appropriateness of CRT waste (lead) for landfill disposal as early as March of 1998. C&IH reported to these officials that the representative sample of lead was not considered Resource Conservation and Recovery Act (RCRA) waste, and could therefore be deposited in a landfill. These three elements convinced FCI Elkton FPI officials to begin CRT destruction in the aforementioned manner.

In August 2001, FCI Elkton's Safety Manager sent wipe and air samples to the National Loss Control Service Corporation (NATLSCO) for an independent assessment of lead, cadmium, and beryllium concentrations associated with CRT destruction. The report identified no significant adverse findings. Also, as the volume of work increased, CRT dismantling moved inside the FCI's factory in August 2001. Shortly after this relocation, the Factory Manager complained of silvery dust accumulations, as did inmate workers. FCI Elkton's FPI Industrial Specialist relayed no cause for concern to the Factory Manager and inmate workers, based on NATLSCO's assessment of wipe and air samples. Still, a collective effort between the Safety Manager, the Factory Manager and FPI officials resulted in installation of a paint booth to better ventilate particulate matter outside the factory. In April 2003, an upgraded glass breaking booth was installed. Personal air samples were collected in May 2003, and two samples were collected in June 2004. The May 2003 results exceeded the OSHA's PEL and AL limits for cadmium. Results obtained in June 2004 did not indicate exposure above established limits.

CRT glass breaking commenced at an FPI factory at FCI Texarkana, Texas in October 2001, with workers breaking CRTs inside a room on conveyer belts over Gaylord containment boxes. FPI officials directed Texarkana staff to fit-test workers with HEPA respirators in August 2002. Personal air samples were collected in October 2002 and examined by the HEC Environmental Group, Incorporated (HEC). HEC advised FPI staff that "...personnel performing this operation are wearing appropriate personal protective equipment (PPE); therefore, the levels detected do not pose an immediate health threat to personnel

working this operation." In April 2004, a glass breaking booth with HEPA filtration was installed. Personal air samples were collected in September 2004. The September 2004 results exceeded the OSHA's AL limit for cadmium; however, workers were wearing appropriate PPE. With regard to Texarkana's adherence to FPI's SOPs issued in June 2003, the Factory Manager alerted a BOP FPI Program Manager he would not be in compliance by the date established and asked if he was to stop the booth's operation. He was informed by the Program Manager to continue production and to make progress toward the SOP goals.

FCI La Tuna briefly maintained a recycling program during four months of 2004, but no glass breaking occurred at that facility.

Conclusion:

Personal air samples taken from CRT workers at FCIs Elkton and Texarkana during months subsequent to booth installations exceeded the OSHA's limits for cadmium. Accordingly, it is reasonable to conclude that some level of exposure may have also occurred before booth installations went into effect. However, minimal testing at both facilities occurred before these installations. It appears that FPI and institution officials at both Elkton and Texarkana approached CRT destruction with what the FPI official who activated FCI Elkton's operation described as a "learn as you go" approach, relying on information from non-governmental companies and intermittent testing to guide them. Based on facts gathered during the investigation, however, there is no evidence that either factory's FPI or Safety staff intentionally or overtly placed CRT workers in harm's way.

Safety staff have assisted FPI at each of these locations, and efforts have been taken by FPI and Safety to address safety issues. The OSHA has reviewed complaints recently in April/May 2005 for both Elkton and Texarkana, and the OSHA has determined that their file on the matter can be closed and they do not anticipate any further action. In addition, in March 2004, the recycling factory at FCI Elkton received a visit from the OSHA regarding a complaint, and the OSHA investigator found no grounds for the complaint. The FPI recycling factory at FCI Texarkana has received inspection visits from Engineering & Environmental Services for Lower Colorado River Authority and Bach Training Safety & Consultation, and neither reported any negative findings.

Listing of Actual/Apparent Violations:

Workers at FCIs Elkton and Texarkana were exposed above the OSHA's limits for cadmium on two previous occasions.

Action Planned or Taken:

An examination of engineering controls, regulatory compliance and worker safeguards at all CRT dismantling factories will be completed. Outside contracted inspections of all FPI computer recycling factories are scheduled to occur during 2005.

Disciplinary action against management officials is under review at this time with regard to communication to FCI Texarkana about continuing production and making progress toward SOP goals. Final actions will be communicated to the OSC.

Allegation 8:

Mr. Smith alleges that USP Atwater and FPI officials abused their authority by repeatedly ordering reactivation of operations in the CRT breaking area without fully implementing the safety measures prescribed by him and without his written approval.

Findings:

Mr. Smith's allegation that reactivations occurred without his written approval was based on his interpretation that an imminent hazard existed in the factory. Our investigation revealed there was no imminent hazard. Specifically, air samples that exceeded the OSHA's PEL and AL presented conditions where exposed workers may experience chronic health effects as a result of exposures over time. These exposures did not, however, rise to the level of being imminently dangerous, as no immediate threat of death or serious physical harm occurred to workers when samples revealed levels exceeded the OSHA's PEL and AL. Because FPI and BOP Executives saw no imminent danger with the exposure concerns, they sought no written approval from Mr. Smith to resume operations after repetitive engineering efforts were made.

Conclusion:

FPI and Atwater officials did not abuse their authority when reactivations of factory operations occurred following efforts to better engineer the glass breaking booth.

Listing of Actual/Apparent Violations:

None.

Action taken or planned:

Relocation of the booth to a separate area with outside ventilation occurred in December 2003. This action resulted in no further exposures to workers inside the factory.

Allegation 8a:

Mr. Smith alleges FPI officials and USP Atwater's Warden acted in concert to discredit his safety concerns.

Findings:

A teleconference between BOP Safety and FPI officials, USP Atwater officials and Mr. Smith occurred in August 2004 at the direction of the Warden to Mr. Smith's immediate supervisor. The teleconference addressed Mr. Smith's interpretation that an accidental breakage of a CRT constituted a hazardous spill which would trigger emergency spill procedures. BOP Safety and FPI officials disagreed with Mr. Smith's interpretation during the teleconference. The teleconference allowed Mr. Smith's newly assigned immediate supervisor to become more familiar with oversight of the FPI operation.

Conclusion:

FPI officials and the Warden did not act in concert to discredit Mr. Smith's safety concerns. The teleconference occurred to educate Mr. Smith's immediate supervisor on FPI operations and for dialogue between Mr. Smith and FPI officials regarding the definition of hazardous spills and the application of procedures.

Listing of Actual/Apparent Violations:

None.

Action planned or taken:

None.

Allegation 8b:

Mr. Smith also alleges the Warden told him not to contact the OSHA.

Findings:

On August 3, 2004, the Warden called a meeting with the Associate Warden (Operations) and Mr. Smith to discuss institution protocol on the release of information without the Warden's knowledge. Several matters were discussed during the meeting. At some point in the discussion, Mr. Smith got up to leave the meeting and stated he was going to contact the OSHA.

Smith wrote a memorandum, dated the same day of the meeting,

in which he quoted the Warden as stating, "Come back in here and sit down, Leroy....you are not going to call OSHA or anyone else for that matter." Smith repeated this specific allegation in a memorandum dated September 30, 2004, to the Western Regional Director, and in his affidavit for the current investigation. The Associate Warden recalled the Warden directing Smith to come back in and sit down, but did not recall that he told Smith not to contact the OSHA. The Warden recalled Smith saying he was going to contact the OSHA as he (Smith) got up to leave the meeting. The Warden stated further, "I told him to make sure when he did call them that he be sure to tell them that he was the one that had developed the procedures. To this day, I don't know if he has called OSHA or not. I don't know whether I said he was not to call OSHA or not, but the context of my reply was that I wasn't done with him yet."

Conclusion:

Although the Warden and Associate Warden did not recall Smith being told specifically not to call the OSHA, the evidence suggests that a comment to that effect was made by the Warden. However, the testimony of all three employees present at the meeting is consistent with the conclusion that this comment was made in the context of a rebuke to Smith for attempting to leave the meeting prematurely. It is not evident that the Warden's intention was to issue a specific order to not contact the OSHA.

Listing of Actual/Apparent Violations:

None.

Action Planned or Taken:

Regardless of the context in which it was made, it was neither wise nor appropriate for the Warden to make any such comment. However, given the context in which it was made, it was determined that making the comment does not constitute official misconduct. This matter will be handled as a performance issue and the Warden will be counseled by his immediate supervisor.

Allegation 8c:

An FPI staff member alleged that USP Atwater FPI officials gave him a direct order to supervise glass breaking in Atwater's relocated booth without Mr. Smith's approval.

Findings:

The FPI Factory Manager gave the staff member a directive to work inside the relocated glass breaking booth. The staff member

contested the directive and questioned whether the booth's secure roll-down door was to be opened or closed during booth operation. The Factory Manager alerted the FPI Associate Warden for clarity regarding the roll-down door. The FPI Associate Warden challenged the staff member's failure to heed the Factory Manager's directive to work in the booth and a verbal disagreement ensued between the FPI Associate Warden and the staff member. The Factory Manager interceded for the staff member, with procedural clarity resulting in the roll-down door remaining open during glass breaking booth operation. The staff member subsequently agreed to work in the booth.

The investigation did reveal, however, that a management official was otherwise unprofessional in his interactions with the staff member when this issue arose. (OIA's report of this misconduct is forthcoming and will be shared with the OSC.)

Conclusion:

The FPI staff member was not given a direct order to work in the glass breaking booth without Mr. Smith's approval. Rather, a procedural misunderstanding occurred between the staff member, Factory Manager and FPI Associate Warden regarding the status of the booth's security roll-up doors during glass breaking.

Listing of Actual/Apparent Violation:

None, with the exception of an unrelated instance of Unprofessional Conduct on the part of a management official for the manner in which he confronted and addressed the staff member.

Action planned or taken:

Disciplinary action against the management official is planned and under review at this time. Final actions will be communicated to the OSC.

Allegation 8d:

An FPI inmate worker alleged he was threatened by USP Atwater's FPI Factory Manager with a reduction in pay grade if he did not work in the glass breaking booth.

Findings:

The FPI Factory Manager requested all factory foremen to submit names of inmates who would like to work in the glass breaking booth. FPI officials had previously established the requirement that booth workers possess a G.E.D. An inmate with Grade 3 pay was submitted for consideration. The FPI Factory

Manager evaluated the inmate's suitability for booth work and learned the inmate did not possess a G.E.D. The Factory Manager and FPI Business Manager explained to the inmate, whose primary language was Spanish, the educational requirements for working in the booth. The inmate misunderstood the explanation, stating he believed he'd been told he must work in the booth or lose his pay grade. The inmate also stated he knew booth workers were paid Grade 4 pay and he wanted an exemption from possessing a G.E.D. to work in the booth. The inmate's request for an exemption was denied and he continues to work in the FPI factory with Grade 3 pay.

Conclusion:

Our investigation revealed the inmate was not threatened with a reduction in pay grade if he did not work in the booth, nor did he express concern with the safety of the operation. Two staff witnesses provided statements that revealed the inmate misunderstood the pay grade discussion due to an English/Spanish language barrier.

Listing of Actual/Apparent Violations:

None.

Action Planned or Taken:

None.

Allegation 8e:

Mr. Smith alleged FPI and Atwater officials retaliated against him for reporting deficiencies and violations of regulations within the FPI factory.

Findings:

Mr. Smith alerted the OSC of his concerns about FPI and Atwater Management's response to his safety alerts regarding Atwater's FPI CRT dismantling operation. Our investigation did not reveal these officials retaliated against him after he alerted OSC of his concerns. FPI and Atwater officials did not, however, respond with the urgency that Mr. Smith perceived existed with respect to worker safety. FPI officials responded to each concern Mr. Smith presented, but at times their response was based on differences in policy interpretation or other disagreements with Mr. Smith's assertions.

The investigation did reveal, however, instances in which a management official communicated with Mr. Smith about unrelated

matters in an unprofessional manner in the workplace. (OIA's report of this misconduct is forthcoming and will be shared with the OSC.)

Conclusion:

There was insufficient evidence to substantiate Mr. Smith's allegation that he suffered retaliation by USP Atwater management for reporting violations to the appropriate authorities. There was, however, sufficient evidence of unrelated unprofessional behavior by a management official.

Listing of Actual/Apparent Violations:

None, with the exception of an unrelated instance of Unprofessional Conduct on the part of the management official for the manner in which he communicated with Mr. Smith.

Action taken or planned:

Disciplinary action against the management official is planned and under review at this time. Final actions will be communicated to the OSC.

Conclusion

The investigation revealed that OSHA violations, as outlined above under Allegation 1, did occur at the USP Atwater FPI CRT recycling factory during the initial months of its activation beginning in April 2002. Production stopped after the first series of test results indicated exposures. Additional exposures occurred on some subsequent occasions from July 2002 through February 2003 during a period of reengineering, intermittent operation resumption and testing. One additional exposure occurred in February 2004 as a result of an unauthorized system modification by an inmate worker.

The evidence also indicates that local and national FPI and Safety staff actively engaged in corrective action efforts after becoming aware, as a result of Mr. Smith's initiation of testing in June 2002, of problems in this regard. Unfortunately, staff responsible for making or monitoring various corrective actions, including Mr. Smith himself, did not always do so with a level of caution or strict adherence to applicable BOP policy and OSHA regulations which was, at least in hindsight, clearly in order.

Based on available evidence, it is reasonable to conclude there may have been similar violations in the past at the CRT recycling factories at FCIs Texarkana and Elkton, but there was

insufficient evidence to establish this.

At present and over the past two years, BOP FPI and Safety staff appear to have adequately addressed such concerns at all factories. For example, CRT standard operating procedures were established for all facilities in June 2003. And, as evidenced by the absence of negative test results in the recent past as well as the OSHA's recent positive inspection of the USP Atwater factory, such steps appear to be have been effective. In sum, FPI and Safety personnel appear to have taken the appropriate steps to ensure factories are operating safely and that they are in compliance with all applicable regulations and standards..