

# Toxic Sweatshops

October 2006

How UNICOR Prison Recycling Harms Workers, Communities,  
the Environment, and the Recycling Industry

Center for Environmental Health, Prison Activist Resource Center, Silicon Valley Toxics Coalition, Computer TakeBack Campaign



# TOXIC SWEATSHOPS:

## How UNICOR Prison Recycling Harms Workers, Communities, the Environment, and the Recycling Industry

Center for Environmental Health

Prison Activist Resource Center

Silicon Valley Toxics Coalition

Computer TakeBack Campaign

October 2006

### Authors

**Anita Sarah Jackson** is a researcher for the Center for Environmental Health (CEH). CEH protects the public from environmental and consumer health hazards. They are committed to environmental justice, reducing the use of toxic chemicals, supporting communities in their quest for a safer environment, and corporate accountability. CEH changes corporate behavior through education, litigation, and advocacy.

**Aaron Shuman** is a researcher for the Prison Activist Resource Center (PARC). PARC is an all-volunteer grassroots group committed to producing materials that expose human rights violations behind prison walls while fundamentally challenging the rapid expansion of the prison industrial complex. PARC provides support to prisoners, their family members, and communities, and information to educators and activists.

**Gopal Dayaneni** is a researcher and organizer for the Silicon Valley Toxics Coalition (SVTC). SVTC is a diverse organization engaged in research, advocacy, and grassroots organizing to promote human health and environmental justice in response to the rapid growth of the high-tech industry.

**The Computer TakeBack Campaign** is a national coalition of organizations promoting sustainable and responsible practices throughout the high-tech electronics industry, to protect public health and the environment.

### Design

Design Action Collective

### Editors

Happy /L.A. Hyder

Michael Starkey, Silicon Valley Toxics Coalition

Robin L. Turner, University of California, Berkeley

### Acknowledgements

Thank you to all of the prisoners and all those working in UNICOR's factories who trusted us with their stories. We thank Leroy Smith, a prison safety manager, who blew the whistle on violations at UNICOR's recycling operation. Thank you to Sheila Davis, Ted Smith, Sarah Westervelt, Michael Green, Aditi Vaidya, Barbara Kyle, Maureen Cane, Michael Robin, John Doucette, Satya, Martha Hoppe, and all external reviewers for their comments, suggestions, and support.

# TABLE OF CONTENTS

- Executive Summary..... 4**
  - Key Findings.....6
  - UNICOR has failed to adequately protect prisoners and staff from exposure to toxics.....6
  - UNICOR has failed to protect communities from hazardous materials.....6
  - UNICOR undercuts responsible recycling businesses.....6
  
- I. Introduction.....8**
  
- II. How UNICOR Ran Into Trouble with the Law.....10**
  - Investigations Lead to Public Scrutiny.....12
  - Special Counsel Becomes Involved.....18
  
- III. UNICOR: The Problem of Federal Prison Industries.....18**
  - A Cure for Idleness: the Development of UNICORE.....18
  
- IV. Government Sweatshops: As Cheap as Export Dumping.....22**
  - UNICOR’s “Repatriation” Is Not Job Training.....24
  
- V. E-Waste, Environmental Justice, and the EPA.....26**
  - Prisoners Are an Environmental Justice Community of Concern.....28
  - EPEAT Rejected Banning Use of Prison Labor.....29
  - A Long Toxic Legacy Creates Costs For Everyone.....29
  
- VI. Alternatives: Responsible Electronics Recycling.....32**
  - The Pledge of True Stewardship for Electronics Recyclers.....32
  - Workers’ Rights Are the First Line of Defense.....33
  - Clean, Secure, and Efficient Demanufacturing Processes.....34
  
- VII. Undercutting Responsible Recyclers.....36**
  - Responding to the E-Waste Crisis: Making a Just Choice.....38
  
- VIII. Conclusion.....40**
  
- Appendix A: UNICOR: Things You Can Do.....42**
  
- Appendix B: UNICOR’s Electronics Recycling Claims and Facts.....46**
  
- End Notes.....50**



# EXECUTIVE SUMMARY

In the past few years, the storm of complaints about UNICOR's recycling program from prisoners, prison guards, and others has brought these hidden sweatshops into public view. Since 1994, UNICOR has built a lucrative business that employs prisoners to recycle electronic waste (e-waste). A massive array of e-waste is largely hidden from view, as are the workers who handle the waste. Over

100,000 computers become obsolete in the U.S. every day.<sup>1</sup> And that's only the computers. E-waste includes computers, personal digital assistants, TVs, and other electronic devices. E-waste is a double-edged sword: it is rich in precious materials that can be recycled, but it also contains a cocktail of hazardous chemicals such as lead, mercury, polyvinyl chloride (PVC), and cadmium.

**“What I and others think is the funniest thing about this recycling plant is that the STATE made it illegal to dispose of computers and computer peripherals in their waste and garbage dumps, because it is hazardous to the health of STATE citizens. Guess who our biggest provider of old and recycleable computers and monitors is?? Yup, you guessed it: the good ol' STATE!!! They are too dangerous for their law-abiding citizens, who need to be protected, but they aren't too hazardous to federal prison inmates incarcerated in STATE, who are not given all the information, the correct or adequate tools...and who are not being given adequate safety gear to protect them from the hazardous wastes that the citizens are being protected from. Ironic, isn't it?!!”**

—Prisoner A

This report examines the e-waste recycling programs run by Federal Prison Industries (FPI), a government-owned corporation that does business under the trade name UNICOR. Founded in 1934 as a work program to keep prisoners occupied, FPI has become a large government contractor, generating over \$765 million in sales in 2005. UNICOR's connections gave it access to lucrative government contracts and easily made it a force in the e-waste recycling industry. As journalist Elizabeth Grossman states, “With revenue of ten million dollars in 2004, seven locations ... and roughly one thousand inmate employees who in 2004 processed nearly 44 million pounds of electronic equipment, UNICOR is one of the country's largest electronics recyclers, and its prices are tough to beat.”<sup>2</sup> Unfortunately, UNICOR's low prices come at the expense of its captive labor force.

Some types of discarded electronics are considered hazardous waste by the EPA and other regulatory agencies, researchers, industries, and advocates across the globe. As states become aware that these hazards may leach into and contaminate soil and groundwater, more are banning televisions, monitors, and sometimes other electronics from landfills.

Quoted in sidebars throughout this report, you will hear directly from prisoners, the front-line workers recycling e-waste for UNICOR. The conditions prisoners describe are dire. UNICOR's captive laborers work in conditions similar to those in sweatshops across the world. Prisoners have few of the labor rights and protections other U.S. workers enjoy. Prisoners are excluded from the Fair Labor Standards Act and insufficiently protected by regulatory agencies such as

the Occupational Safety and Health Administration, which cannot conduct surprise inspections. The quotations presented in this report are drawn from letters and affidavits received by Silicon Valley Toxics Coalition. Identifying characteristics have been stripped due to reports of firings and retaliation against prisoners. While this report is grounded in prisoners' experiences, you also will meet responsible recyclers, contractors, and prison staff who recognize the problems of exploitation in e-waste.

Government hearings and investigations confirm that serious problems exist. As U.S. Special Counsel Scott Bloch stated:

Federal employees and prisoners inhaling poisons due to the neglect of their superiors, and federal agencies whitewashing the investigation. It sounds like a Hollywood dramatization like Shawshank Redemption, or a John Grisham novel with wild conspiracy theories. In this case, however, workers and inmates were exposed to hazardous materials without protection... and the Bureau of Prisons and Federal Prison Industries did nothing to stop it, and indeed frustrated attempts to investigate the matter... Now some people might say, prisoners getting poisoned? What's the big deal? Who cares? We do.<sup>3</sup>

This report's principal findings are outlined below.

# KEY FINDINGS

## UNICOR has failed to adequately protect prisoners and staff from exposure to toxics.

When dismantling electronics, prisoners handling toxic components need ventilation, proper tools, and adequate protective gear, as do prison staff working in the area. UNICOR facilities repeatedly failed to provide proper recycling procedures to captive laborers and staff supervisors. UNICOR's policy of measured modernization—limiting automation in order to maximize the number of prisoners who work—increases the risk of workplace injuries to prisoners and guards. The adverse health effects of long-term exposure to the toxic materials in e-waste are costs that families and/or public health services will bear—not UNICOR.

## UNICOR has failed to protect communities from hazardous materials.

Poor workplace safety practices affect communities as well. Leroy Smith, a prison health and safety manager, has expressed concerns about prison guards who go home to their families with dust on their clothes. Smith's attorney Mary Dryovage and Jeff Ruch, director of Public Employees for Environmental Responsibility, have noted that Smith's claims "were not fully investigated," including charges that UNICOR disposed of "hazardous metals" and "contami-

nated mopheads...at county landfills" and that "mop water would be disposed down sewage drains, which would be released into the city waste water treatment plant."<sup>4</sup> Concern about the community health and safety effects of prisons is in keeping with the findings of the recently concluded national, bipartisan Commission on Safety and Abuse in America's Prisons, which open, "What happens inside jails and prisons does not stay inside jails and prisons. It comes home with prisoners when they are released and with corrections officers at the end of each day's shift .... It influences the safety, health, and prosperity of us all."<sup>5</sup>

## UNICOR undercuts responsible recycling businesses.

Not all electronics recyclers are the same. Much of what passes as "electronics recycling" is exporting harm — dumping e-waste on poor communities in China, India, Pakistan, Nigeria, and other countries.<sup>6</sup> However, a growing segment of the U.S. electronics recycling industry is taking concrete steps to educate and to protect workers, communities, and the environment. These recyclers are being undermined by UNICOR's government sweatshop model. UNICOR's low wages, limited worker protections, and use of outdated equipment allow UNICOR to underbid conscientious commercial recycling operations.

In the past few years, a barrage of complaints about UNICOR's recycling program from prisoners and prison guards has forced the Bureau of Prisons (BOP) to

**"When the operation began, most glass room workers would heft the CRT [cathode ray tube] to head height and slam the CRT down on the metal table and keep slamming it on the table until the glass broke away from whatever they were trying to remove."**

**—Prisoner D**

investigate workplace conditions. BOP admitted in a 2005 report that prisoners and staff in at least three UNICOR Recycling factories—Elkton, Ohio; Texarkana, Texas; and Atwater, California—were exposed to toxics.<sup>7</sup> The U.S. Office of Special Counsel later declared BOP's inquiry “cursory at best”<sup>8</sup> and recommended an independent investigation.

In September 2006, Special Counsel Scott Bloch named BOP employee Leroy Smith Public Servant of the Year for blowing the whistle on UNICOR's failure to protect workers. Smith served as a health and safety manager at the Atwater federal prison. In his prepared comments for the award ceremony, Smith contended that conditions at UNICOR Recycling have not been remedied:

I receive calls from my colleagues working in computer recycling operations at other correctional institutions who describe coming home coated in dust. They had been assured that there was no danger. Now, many have health problems and others are scared about what lies in store for them .... [B]oth staff and inmates do not know what they have been exposed to or in what quantities. I am at a loss as to what to tell them. I do not know what resources are available to them or who will be able to answer their questions.<sup>9</sup>

Despite media coverage of problems with UNICOR Recycling, prisoners and impacted communities continue to face major barriers in pursuing their rights to be free of exposure to toxics. In recent years, some of UNICOR's larger clients, including Dell Inc. and the state of

California, have pulled their contracts due to public pressure. Additionally, recyclers have successfully challenged UNICOR's effort to compete for EPA recycling contracts set aside for small businesses.

By publishing this report, the Center for Environmental Health, Silicon Valley Toxics Coalition, Prison Activist Resource Center, and the Computer TakeBack Campaign aim to uncover and stop the environmental health abuse and exploitation of workers in prisons; expose UNICOR as an unacceptable choice for electronics recycling; and educate institutions, corporations, and individuals seeking responsible electronics recycling options that promote high labor, environmental, and human rights standards.<sup>10</sup>

**“We are required to scrape the labels off the CRTs but we aren't given scrapers to do it with. We are told to use or make sharp knife-like objects [out of monitor parts] and to use them to scrape the labels off the CRTs. Many inmates lacerate themselves while following these orders.”**  
—Prisoner B

I.

# INTRODUCTION

A new form of electronic waste (e-waste) recycling has emerged in the U.S.: the prison recycling program. These government sweatshops are competing successfully with the dismally low wages and dire working conditions found in poor communities in countries such as China, India, the Philippines, and Nigeria.<sup>11</sup>

Prison recycling programs—specifically those run by Federal Prison Industries (FPI, or UNICOR)—externalize many operational costs onto taxpayers and place

most of the risks onto the expanding pool of captive prison labor, overwhelmingly poor people of color. UNICOR's prison recycling program creates environmental injustices, violates prisoners' rights, and undermines responsible commercial e-waste recycling businesses.

E-waste includes computers, TVs, monitors, stereos, cell phones, and other electronic equipment. E-waste contains a mixture of hazardous chemicals, precious

metals, and plastics. During the recycling process, electronics must be carefully dismantled because the hazardous materials within—carcinogenic, mutagenic, reproductive, and developmental toxins—can have profoundly deleterious effects on workers.<sup>12</sup> For example, lead comprises roughly 20% of the glass in a traditional TV or computer monitor.<sup>13</sup> Lead can damage the nervous system, cardiovascular system, and the kidneys.<sup>14</sup> Other toxic materials that can be found in electronics include mercury, cadmium, and halogenated organics such as brominated flame retardants. Prisoners describe being forced to break open some computer monitors because prisoners were denied the proper tips to unscrew housing shells from the Cathode Ray Tubes (CRTs), and report using hammers to break the CRTs' leaded glass.<sup>15</sup> These kinds of practices put prisoners and prison staff at risk.

This report uses prisoners' letters and affidavits, information revealed by prison staff, published reports, and public hearings and investigations to bring UNICOR's toxic sweatshops into public view.

Featured in sidebars throughout this report are quotations from prisoners, the front-line workers in UNICOR factories.<sup>16</sup> Identifying characteristics have been removed to protect prisoners from retaliation.

UNICOR is a government-owned corporation, operating in the name of justice and the people, with significant resources from taxpayer dollars through direct and indirect subsidies. Despite UNICOR's claims about environmental stewardship in e-waste recycling, its practices fall short in comparison with responsible commercial domestic recyclers. UNICOR has periodically drawn opposition from business and labor groups concerned about its effect on the U.S. economy. The history of UNICOR's expansion and the resistance against it provide both concern and hope for the future of electronic waste recycling. We begin by describing how UNICOR's prison recycling program first received public scrutiny.



*A fire in November 2003 at Atwater Prison set computer monitors and televisions at the UNICOR electronics recycling facility ablaze.*

## II.

# HOW UNICOR RAN INTO TROUBLE WITH THE LAW

UNICOR began its electronics recycling business in 1994 in a federal prison in Marianna, Florida. Over the next few years, UNICOR's electronics recycling operation spread to several federal prisons, including Elkton, Ohio and Fort Dix, New Jersey.<sup>17</sup> As of September 2005, UNICOR had electronics recycling facilities in seven prisons.<sup>18</sup>

When it opened in April 2002, the electronics recycling facility in Atwater, California was hailed as UNICOR's "largest to date."<sup>19</sup> At that time, Leroy Smith was the health and safety manager at the Atwater federal prison. As a fourteen-year veteran of the Bureau of Prisons (BOP), Smith consistently received outstanding job evaluations.

# UNICOR E-WASTE RECYCLING TIMELINE

## Prison Locations with UNICOR Electronics Recycling Facilities

Atwater, CA  
 Fort Dix, NJ  
 Marianna, FL  
 Tucson, AZ  
 Elkton, OH  
 Lewisburg, PA  
 Texarkana, TX

**1994.** UNICOR opens its first e-waste recycling facility at the federal prison in Marianna, FL.<sup>20</sup>

**MAY 1997.** “Demanufacturing” of CRTs begins at the federal prison at Elkton, OH.<sup>21</sup>

**OCTOBER 2001.** “Demanufacturing” of CRTs begins at the federal prison at Texarkana, TX.<sup>22</sup>

**APRIL 2002.** UNICOR’s “largest to date” electronic waste recycling facility opens in Atwater, CA.<sup>23</sup>

**MARCH 2003.** SVTC tours the UNICOR facility at Atwater.<sup>24</sup> A prisoner affidavit says that UNICOR shut down the “glass-breaking” unit the following day.

**JUNE 2003.** SVTC/CTBC publishes “Corporate Strategies for Electronics Recycling: A Tale of Two Systems,” which contrasts Micro Metallics (a recycler used by Hewlett Packard) with UNICOR (a recycler used by Dell).<sup>25</sup>

**JULY 2003.** Dell announces it will stop using UNICOR.<sup>26</sup>

**MARCH 2005.** Public Employees for Environmental Responsibility publicly alleges that BOP headquarters “removed most admissions of fault” from an Atwater warden’s response to OSHA.<sup>27</sup>

**JUNE 2005.** BOP submits a report to the Office of the Special Counsel concerning Leroy Smith’s allegations. The report concedes that toxic exposure occurred in at least three UNICOR recycling facilities—Atwater, CA.; Elkton, OH; and Texarkana, TX., but BOP claims that no toxic exposures have been documented at Atwater since December 2003.<sup>28</sup> Leroy Smith later files a response with the OSC.

**AUGUST 2005.** UNICOR’s “Project GREEN-FED,” a pilot project that offers Arkansas residents free e-waste recycling, is announced. E-waste will be shipped to Texarkana. If profitable, UNICOR plans to offer this service nationwide.<sup>29</sup>

**APRIL 2006.** The Office of Special Counsel finds the BOP’s report “unreasonable” and backs Leroy Smith’s call for “an independent investigation not subject to BOP management.”<sup>30</sup>

**MAY 2006.** The Inspector General of the Department of Justice announces an audit will be conducted to investigate conditions at all UNICOR recycling facilities.<sup>31</sup> An arbitrator is scheduled to hear a grievance from the guards union at Atwater concerning UNICOR Recycling.

**SEPTEMBER 2006.** The Office of Special Counsel names Leroy Smith Public Servant of the Year for his fight to hold the UNICOR recycling program accountable.<sup>32</sup>

When the Atwater facility opened, Smith was surprised to discover that, “There were no type of plans, procedures, any of those things to try to assist [Associate Warden and Atwater UNICOR Manager Thomas] Stahley or the institution or myself in how to implement this recycling program.”<sup>33</sup> This was after UNICOR had spent eight years in the e-waste recycling business and had established facilities in at least three other federal prisons.

In June 2002, Smith appeared on the UNICOR factory floor wearing ear muffs and safety glasses, and prisoners wanted better protective equipment. Thomas Stahley erupted. According to Smith’s supervisor at the time, Associate Warden Richard Luna, “Stahley’s words exactly were, ‘it could almost riot in the UNICOR factory with the way Mr. Smith was parading!’”<sup>34</sup> Stahley sought to bar Smith from the factory. Luna says, “The staff were being lackadaisical .... [T]he Warden had to make sure that we periodically went down there and made sure that the inmates and staff were wearing their personal protective equipment.”<sup>35</sup>

Affidavits from prisoners describe health and safety training at the time. Prisoners say that lead was the only toxic chemical mentioned by prison staff, and one prisoner claims his hire group was not even told about lead.<sup>36</sup> One prisoner reported that a prison staff member broke a tube “without wearing a mask or respirator” in front of his hire group, purportedly to show that the contents of the tube was “only air” and there was no risk of toxic contamination.<sup>37</sup> However, exposure to e-waste poses numerous health and environmental hazards, as shown in the body burden image on the next page.

## Investigations Lead to Public Scrutiny

Weeks later, Smith paid for air quality testing using his own departmental budget after UNICOR refused to foot the bill.<sup>38</sup> The tests found lead and cadmium levels in excess of Occupational Safety and Health Administration (OSHA) standards, prompting the first in what would be a series of shutdowns of UNICOR’s Atwater facility on July 1, 2002.

Between June 2002 and June 2003, the Atwater facility failed at least six air quality tests; one test was conducted by a hygienist from the BOP national office. During this period, UNICOR and the Atwater warden attempted to engineer low-cost so-called solutions, refusing to implement more expensive OSHA recommendations such as installing a shower facility or separating the cafeteria from the factory floor. A June 2005 BOP report described this period as a “cycle of testing, shutting down, modification, opening, and re-testing” in UNICOR’s “learn as you go” approach to complying with environmental regulations and worker health and safety standards.<sup>39</sup> Unfortunately, prisoners and staff were exposed to serious hazards while UNICOR “learned.” The report found that prisoners and staff in at least three UNICOR recycling facilities—Atwater, Elkton, and Texarkana—were exposed to toxics.

The Bureau of Prisons claims that there is no reason to believe Atwater prisoners or staff have been exposed to toxics since December 2003, when the glass-breaking booth was relocated to vent outdoors. BOP cites a series of tests in 2004 and 2005 that found no contamination above an actionable level. Leroy Smith has chal-

**"We at that time believed that we weren't in danger of toxicity poisoning and that all the hoop la about danger to us was being exaggerated by 'tree huggers and alarmists'—as [the UNICOR factory manager] refers to them. And that the safety measures implemented in terms of protecting us from toxic airborne particulates were over-kill. [The factory manager]'s cavalier attitude was absorbed by us and we reflected that attitude... we believed [the factory manager] because his force of personality was convincing if not threatening, and because we knew that [the factory manager] could make prison life better or worse with a few key strokes, or spoken words. [The factory manager] had far more power and influence over us than the safety officers, and he made that clear as opportunities presented themselves. If the safety officer told us to do one thing and [the factory manager] told us to do something else we followed [the factory manager]'s orders, and [the factory manager] was well aware of that and used that to increase production."**

Prisoner D

**FootNotes**

- 1 <http://www.atsdr.cdc.gov/tfacts92.html>
- 2 <http://ehp.niehs.nih.gov/docs/1994/102-6-7/focus.html>, and  
<http://www.atsdr.cdc.gov/tfacts4.html>
- 3 <http://www.intox.org/databank/documents/chemical/mercury/cie322.htm>
- 4 <http://www.epa.gov/epaoswer/hazwaste/recycle/ecycling/faq.htm>
- 5 [http://www.atsdr.cdc.gov/HEC/CSEM/arsenic/exposure\\_pathways.html](http://www.atsdr.cdc.gov/HEC/CSEM/arsenic/exposure_pathways.html)
- 6 <http://www.atsdr.cdc.gov/tfacts19.html>
- 7 <http://www.intox.org/databank/documents/chemical/cadmium/ehc135.htm> and  
<http://www.eco-usa.net/toxics/cadmium.shtml>
- 8 <http://www.hc-sc.gc.ca/english/iyh/environment/lead.html> and  
<http://www.intox.org/databank/documents/chemical/lead/ukpid25.htm>
- 9 <http://www.noharm.org/pvcDehp/dioxin> and  
<http://www.bluevinyl.org/PVC.pdf>
- 10 <http://www.eco-usa.net/toxics/barium.shtml>
- 11 Greenpeace, Recycling of Electronic Waste in India and China, August 16, 2005.  
<http://www.greenpeace.org/raw/content/international/press/reports/recyclingelectronicwasteindiachinafull.pdf>
- 12 <http://www.atsdr.cdc.gov/tfacts17.html> and Greenpeace, Recycling of Electronic Waste in India and China, August 16, 2005.  
<http://www.greenpeace.org/raw/content/international/press/reports/recyclingelectronicwasteindiachinafull.pdf>
- 13 <http://www.epa.gov/pbt/pubs/dioxins.htm>

**Selenium**

Exposure to high concentrations causes Selenosis, which can cause hair-loss, nail brittleness, and neurological abnormalities (i.e. numbness and other odd sensations in the extremities).<sup>12</sup>

**Beryllium**

Exposure can cause lung cancer, and chronic beryllium disease (berylliosis) (affects lungs).<sup>3</sup>

**Mercury**

Exposure through ingestion or inhalation can cause central nervous system damage and kidney damage.<sup>9</sup>

**Chromium (IV) - Hexavalent Chromium**

Exposure can cause strong allergic reaction (linked to Asthmatic Bronchitis) and DNA damage to cells. Workers exposed at disposal stage and may be released into the environment from landfills and incineration.<sup>6</sup>

**Arsenic**

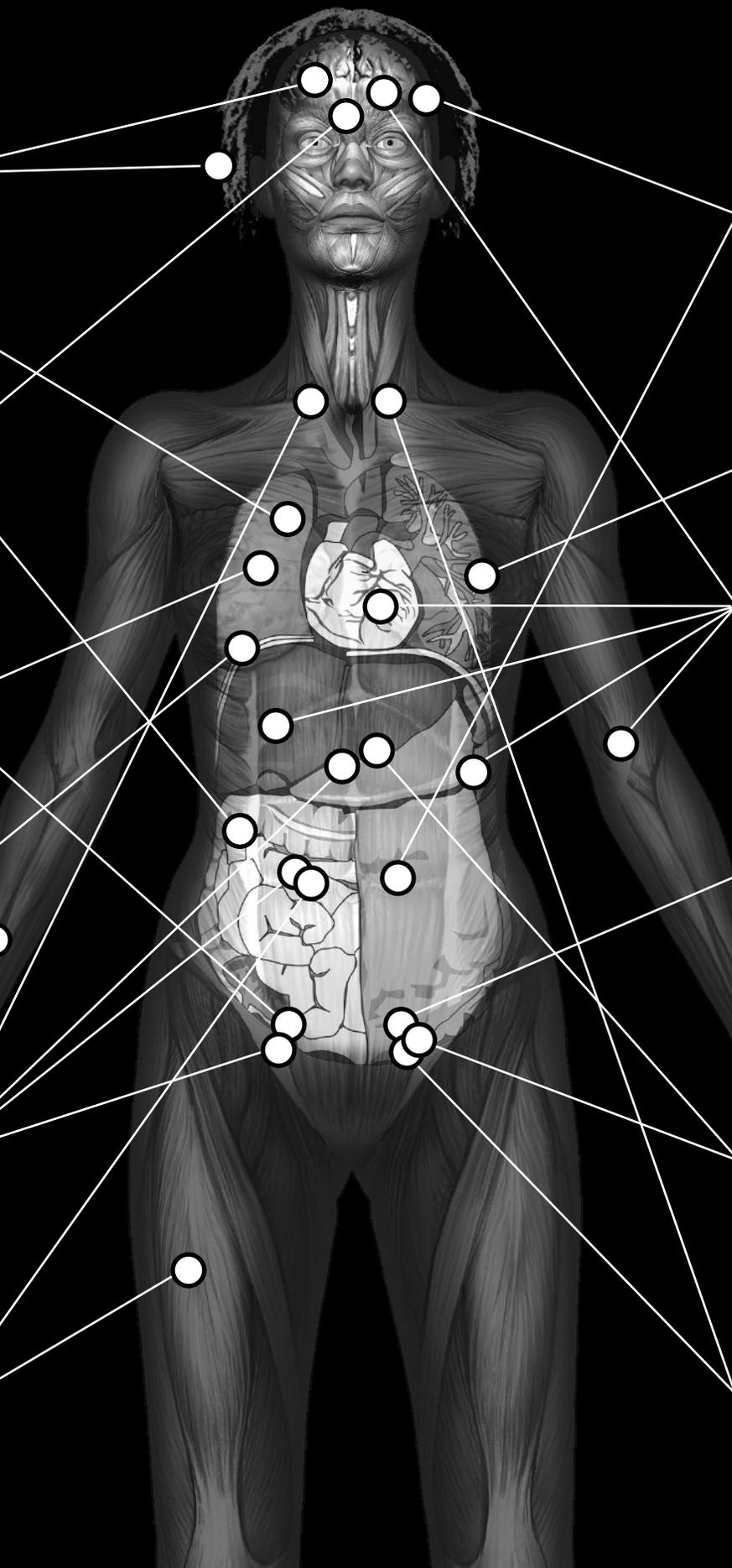
Long-term exposure may cause lung cancer, nerve damage and various skin diseases. Arsenic gas (AsH<sub>3</sub>), used in tech manufacturing, is the most toxic form of arsenic.<sup>1</sup>

**Trichloroethylene (TCE)**

Exposure to TCE (depending on amount and route) can cause, liver and kidney damage, impaired immune system function, impaired fetal development or death. Manufacturing workers and communities where TCE leaches into drinking water are at greatest risk.<sup>13</sup>

**Cadmium**

Long-term exposure can cause kidney damage, and damage to bone structure, also a known carcinogen. Short term or acute exposure can cause weakness, fever, headache, chills, sweating and muscle pain.<sup>5</sup>



### **Lead**

Exposure can cause brain damage, nervous damage, blood disorders, kidney damage and developmental damage to fetus. Children are especially vulnerable. Acute exposure can cause vomiting, diarrhea, convulsions, coma or death.<sup>8</sup>

### **Polyvinyl chloride (PVC)**

Most widely-used plastic, found in everyday electronics. When burned produces large quantities of hydrogen chloride gas, which combines with water to form hydrochloric acid (HCl). Inhaling HCl can cause respiratory problems. Production and incineration of PVC creates dioxins.<sup>11</sup>

### **Barium**

Exposure may lead to brain swelling, muscle weakness, damage to heart, liver and spleen, or increased blood pressure.<sup>2</sup>

### **Brominated flame retardants (BFR's)**

Suspected of hormonal interference (damage to growth and sexual development), and reproductive harm. Used to make materials more flame resistant, but exposure studies reveal BFRs in breast milk, and blood of electronics workers, among others.<sup>4</sup>

### **Polychlorinated biphenyls (PCBs)**

Toxic effects of PCBs include immune suppression, liver damage, cancer promotion, nervous damage, reproductive damage (both male and female) and behavioral changes. Widely used (prior to 1980) in transformers and capacitors. Though banned in many countries, still present in e-waste.<sup>10</sup>

### **Dioxins and Furans**

Exposure can cause hormonal disruptions, damage to fetus, reproductive harm, and impairment of immune system. These highly toxic compounds bio-accumulate (concentrate in the body) and persist in the environment.<sup>7</sup>

**“[T]here is the issue of being denied any Material Safety Data Sheet information regarding all or most of the hazardous materials that may be or are present in the items being recycled. I and other inmates asked for such information, but each time we did we were given the implied threat that, ‘This job is a voluntary one. If you are not happy here, you can quit,’ meaning, ‘Shut up. Don’t ask us for anything. Do your job, or we’ll replace you by pushing you out or forcibly retiring you.’ ...Of the material safety data sheets made available to us, most are for the cleaning/janitorial supplies, NOT for all of the chemicals or heavy metals found in the monitors and/or other computer componentry. We are being told that we are not being unnecessarily exposed to any harmful materials, but I, for one, know otherwise. We ARE being lied to.”**

**Prisoner A**

lenged the validity of this testing. Referring to three lines doing disassembly of CRTs—each of which can contain many pounds of lead— Smith noted, “[There’s] one small problem [with these tests]: the three production lines were not disassembling CRTs at the time.”<sup>40</sup>

The suggestion that UNICOR manipulated work procedures to pass environmental tests is consistent with prisoner affidavits received by Silicon Valley Toxics Coalition, which describe a pattern of clean-ups before pre-announced inspections and instructions to work slowly on inspection days.

UNICOR claimed a clean bill of health, citing, for instance, a June 2003 California EPA Department of Toxic Substances Control statement that no violations were found at the Atwater facility.<sup>41</sup> However, under questioning by Smith’s attorney Mary Dryovage, Assistant Safety Administrator for the BOP’s Western Region Dave Clements confirmed Dryovage’s contention that “This document doesn’t state here that the glass breaking operation is in compliance with the state EPA requirements, let alone the federal EPA requirements.”<sup>42</sup> According to Clements, the EPA inspector did no air testing, but simply checked to make sure that UNICOR had completed paperwork required by the California EPA, met with Atwater UNICOR Manager Stahley, Leroy Smith, and Smith’s supervisor Associate Warden Alan Booth, and left.

In March 2005, Leroy Smith went public with reports that UNICOR was repeatedly exposing staff and prisoners to toxic chemicals and that he sought whistleblower protection.<sup>43</sup> The month before, Smith’s co-worker Phil Rodriguez protested the rewriting of his report on UNICOR

safety hazards by the Atwater prison warden and BOP assistant safety administrator.<sup>44</sup> Smith’s complaints were based on his observations between April 2002, when Atwater’s facility opened, and 2005. His story initiated a series of legal proceedings, hearings, and investigations by BOP and the Office of Special Counsel to determine whether any laws, rules, or regulations were violated.

## **Special Counsel Becomes Involved**

The U.S. Office of Special Counsel (OSC) is an independent federal agency that seeks to protect federal employees from prohibited workplace practices, especially reprisal for whistleblowing.<sup>45</sup> The Special Counsel is Scott J. Bloch, nominated by President Bush and unanimously confirmed by the Senate in 2003.<sup>46</sup>

In April 2006, Special Counsel Bloch concurred with “Mr. Smith’s recommendation of an independent investigation not subject to the supervision of BOP management” to determine “past and present dangers in FPI [UNICOR]’s computer recycling facilities and ... appropriate remedial measures for staff and inmate workers who may have been exposed.”<sup>47</sup> He ruled the BOP’s findings “unreasonable,” many of them “inconsistent with available evidence” and “cursory at best.”<sup>48</sup>

Director of Public Employees for Environmental Responsibility (PEER) Jeff Ruch also criticized the BOP’s 2005 report, arguing, “In this report, the Federal Bureau of Prisons insists that the problems it initially had vehemently denied now have been magically resolved by the same managers who created them in the first place.”<sup>49</sup> PEER later noted that

Smith's allegations remain under-examined, among them, that "UNICOR never properly informed staff and inmates of the hazards associated with the CPUs or CRTs nor provided them adequate training from 1994 through 2005."<sup>50</sup> An audit by the Department of Justice is underway.

The Special Counsel's findings drew national media coverage.<sup>51</sup> They also renewed guards' interest in filing claims, grievances, and litigation, and there are a growing number of official complaints against UNICOR. For example, Charlie Carter, a prison guard who helped to open UNICOR's recycling factory at the Elkton, Ohio federal prison, now believes his health problems may be attributable to his work there. The Atwater prison guards' union also has filed a grievance.

UNICOR's public response has been to object to the Special Counsel's report and to maintain videos on its website proclaiming UNICOR as a "true green solution" to e-waste. UNICOR's claim is flatly contradicted by its refusal to acknowledge its own toxic legacy, even in accordance with the limited findings of the BOP investigation.

**"When the glass breaking room was operating, shiny pieces of metal were floating in the air all around the factory. No matter where I went in there these small flakes were floating around. I thought it was cigarette ash at first, but then I thought about it and realized no one was smoking [it was strictly forbidden] and I captured the flakes in my hand to look at them. They were the same kind of flakes that floated around me when I broke tubes with my hammer."**

**Prisoner K**

**"During the normal course of operations in this factory finely milled [particulates] are spewed into the factory air. No air samples are being taken of the main warehouse, and no safety precautions are being taken to alleviate the hazards to workers. Federally mandated material data safety sheets for the above chemicals are not available for review .... [S]omeone needs to be informed of this. The health of hundreds of workers is being imperilled."**

**Prisoner B**



# III.

## UNICOR: THE PROBLEM OF FEDERAL PRISON INDUSTRIES

### **A Cure for Idleness: the Development of UNICOR**

From the beginning, prison industries have been highly contentious. Prisoner idleness was seen as a threat to the security of penal institutions, and prison industries developed in response to the problem of locking people away with nothing for them to do.<sup>63</sup> In 1918 and 1924, Congress appropriated funds to open factories at the Atlanta Penitentiary and Leavenworth, respectively. According to prison historian Paul Keve, “Both manu-

facturers and labor unions opposed prison-made products, especially during the depression years.”<sup>64</sup> The Hawes-Cooper Act and the Ashurst-Sumners Act “divested prison-made products of their status in interstate commerce and encouraged states to prohibit their entry...exert[ing] an enormously depressing effect on industries in state and federal prisons.”<sup>65</sup>

Federal Prison Industries (FPI) was founded in 1934 with over \$4 million in assets. “Emerging at a time when opposition to prison industries was strong,” FPI

## FEDERAL PRISON INDUSTRIES TIMELINE

**1934.** Federal Prison Industries (FPI) is founded with over \$4 million in assets.<sup>52</sup>

**1945.** FPI has net assets of more than \$23 million; war-related products were the primary source of growth.<sup>53</sup>

**1959.** FPI net assets begin to rise above World War II peak.<sup>54</sup>

**1968.** While the federal prison population had declined by approximately 2000 people over the previous decade, the number of prisoners employed by FPI increases, and net assets rise to \$56.1 million.<sup>55</sup>

**1974.** FPI undergoes a corporate reorganization and creates seven product divisions: automated data processing, electronics, graphics, metals, shoe and brush, textiles (the largest), and wood and plastics.<sup>56</sup>

**1977.** Federal Prison Industries begins to do business as “UNICOR.”<sup>57</sup>

**1979.** UNICOR grows to 81 factories in 37 institutions.<sup>58</sup>

**1988.** Congress authorizes UNICOR to borrow \$20 million from the U.S. Treasury. This loan is allocated for construction to keep pace with the rising federal prison population.<sup>59</sup>

**1991:** A study “could not find a single product under FPI’s current authority that would provide a significant number of additional inmate employment opportunities without negatively affecting private business and labor.”<sup>60</sup>

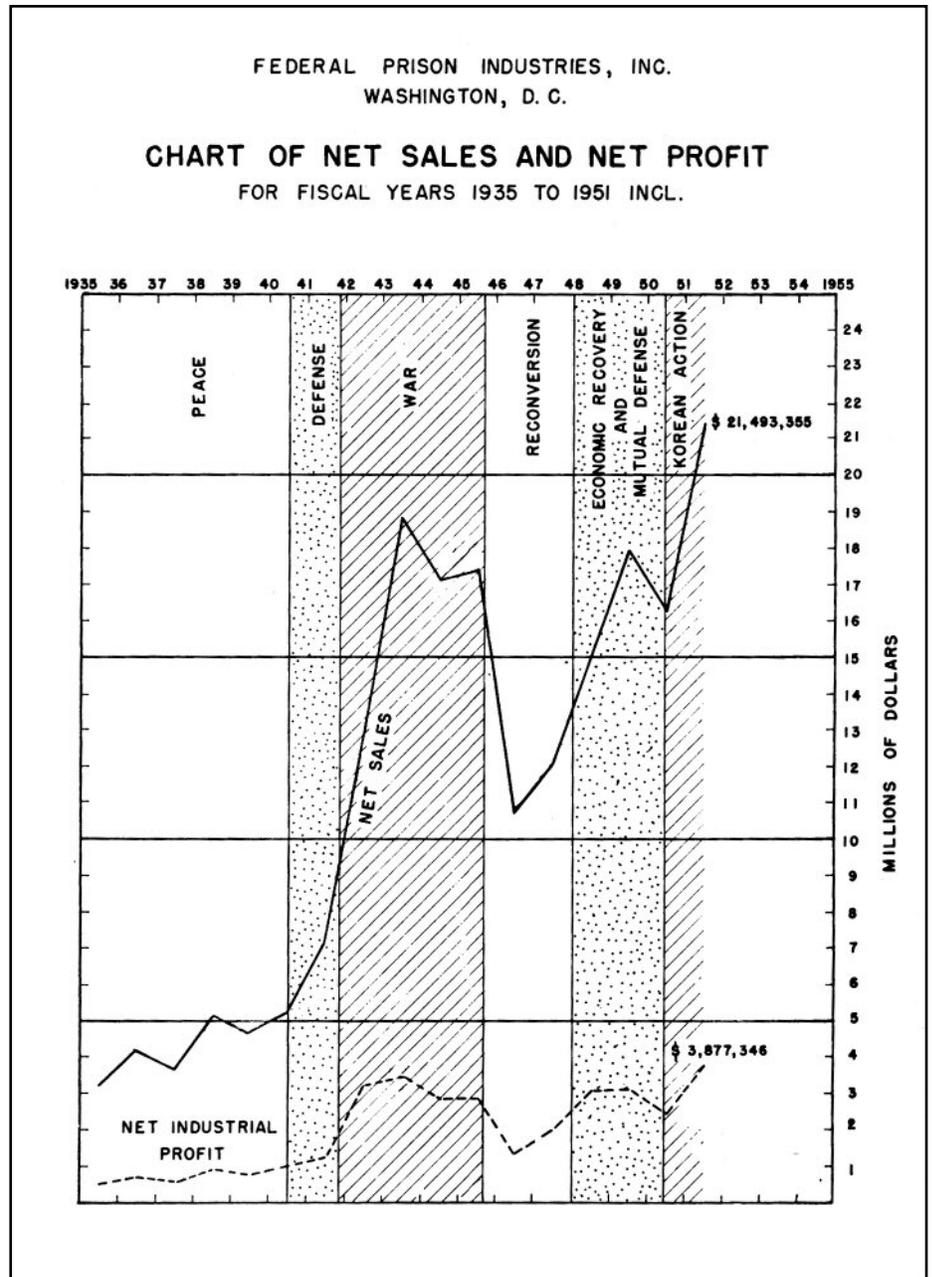
**1994.** UNICOR opens its first e-waste recycling factory at the federal prison in Marianna, FL.<sup>61</sup>

**2005.** UNICOR has 106 factories located at 73 prisons with almost 20,000 prison laborers including 7 e-waste recycling facilities.<sup>62</sup>

was designed to withstand business and labor complaints.<sup>66</sup> FPI was mandated to diversify its product line in order to minimize its impact on each industry and its board included labor and business representatives. A government-owned corporation, FPI operates under the authority of the Department of Justice and the Bureau of Prisons (BOP). In 1977, Federal Prison Industries began to do business under the trade name UNICOR.<sup>67</sup>

UNICOR tries to employ as many prisoners as possible. The corporation's Board of Directors wrote in 1993, "FPI is not a competitive business; rather, it is a management tool that the BOP relies on to control its overcrowded facilities."<sup>68</sup> During the 1980s and 1990s, the "War on Drugs" and "Tough on Crime" policies swelled the ranks of the federal prison population and the assets of UNICOR, which grew from \$112 million in 1980 to over \$383 million in 1996.<sup>69</sup> Growing from 52 factories at 23 prison "institutions" in 1975 to 103 factories at 68 institutions in 2000,<sup>70</sup> UNICOR tried to keep pace with the federal prison population, which almost quadrupled from 24,000 in 1980 to almost 95,000 in 1996, disproportionately impacting poor people and people of color.<sup>71</sup> Recent statistics indicate that approximately one in three black men will spend some time in prison.<sup>72</sup> Including state prisons and local jails, the U.S. has a total of over two million prisoners.<sup>73</sup>

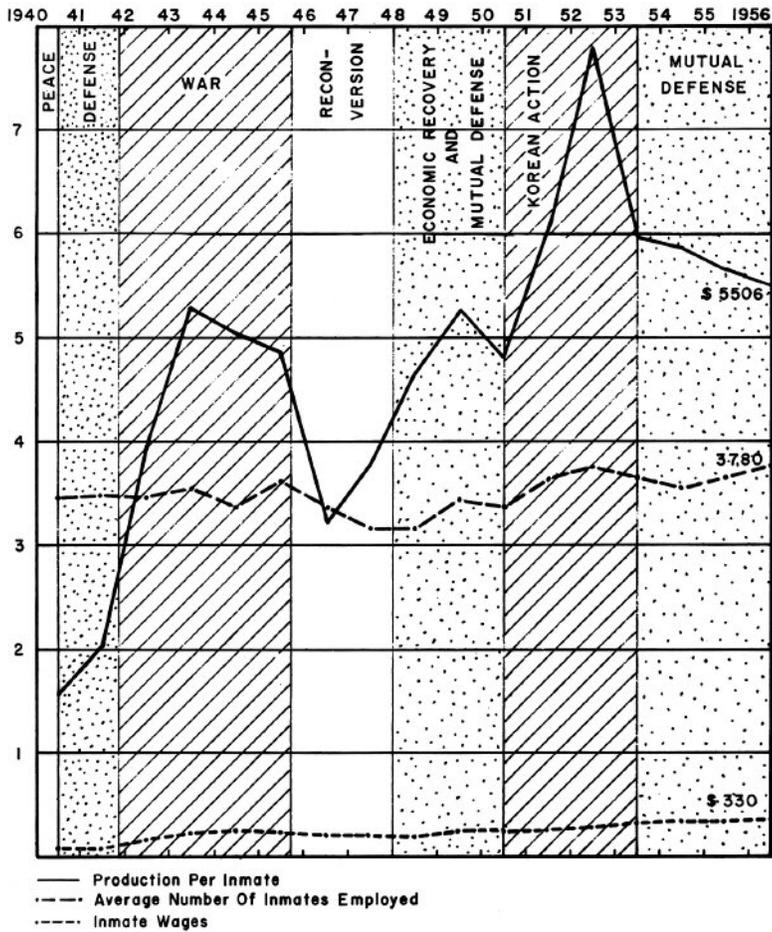
As UNICOR grew, business and labor concerns resurfaced. UNICOR benefited from preferential procurement policies for decades. Sole source rules essentially required government agencies to purchase goods from FPI, giving it a strategic advantage over its domestic competitors.



Despite its mandate to minimize its effect on industry, UNICOR reported in 1991 that a study "could not find a single product under FPI's current authority that would provide a significant number of additional inmate employment opportunities without negatively affecting private business and labor."<sup>74</sup> Business and labor both fought for over a decade to force UNICOR to give up the sole source requirement that guaranteed it a federal

*UNICOR's sales are significantly dependent upon militarization. Sales skyrocketed during World War II for example.*

**CHART OF AVERAGE ANNUAL INMATE  
PRODUCTION AND WAGES  
FOR FISCAL YEARS, 1940, THROUGH 1956**



*Production demands during military actions mean that each prisoner is required to produce more and more.*

agency market. Conservative Republican Congressman Pete Hoekstra, prompted by small and mid-sized furniture manufacturers in his Michigan district, conducted fiery Congressional hearings into UNICOR. Furniture manufacturers argued they had been devastated by UNICOR's ability to underbid them and to secure government procurement contracts.

While UNICOR howled at the beginning of the 1990s that it could not survive without sole sourcing, UNICOR later accepted the possibility of giving it up. In recent years, Congress has passed budget language allowing federal agencies to contract with the best available bidder while groups such as the U.S. Chamber of Commerce have continued to push for fundamental reform that would strip sole sourcing from UNICOR's statutory authority.<sup>75</sup> Meanwhile, UNICOR has pursued a number of other strategies, including expanding into services, "repatriating" work from sweatshops abroad, and seeking alleged "expanding pie" situations where the total domestic market, including both the commercial and the federal market, has growth opportunities [that] allow simultaneous growth by both UNICOR and the private sector.<sup>76</sup> It was in this context that UNICOR entered the e-waste recycling business.

## IV.

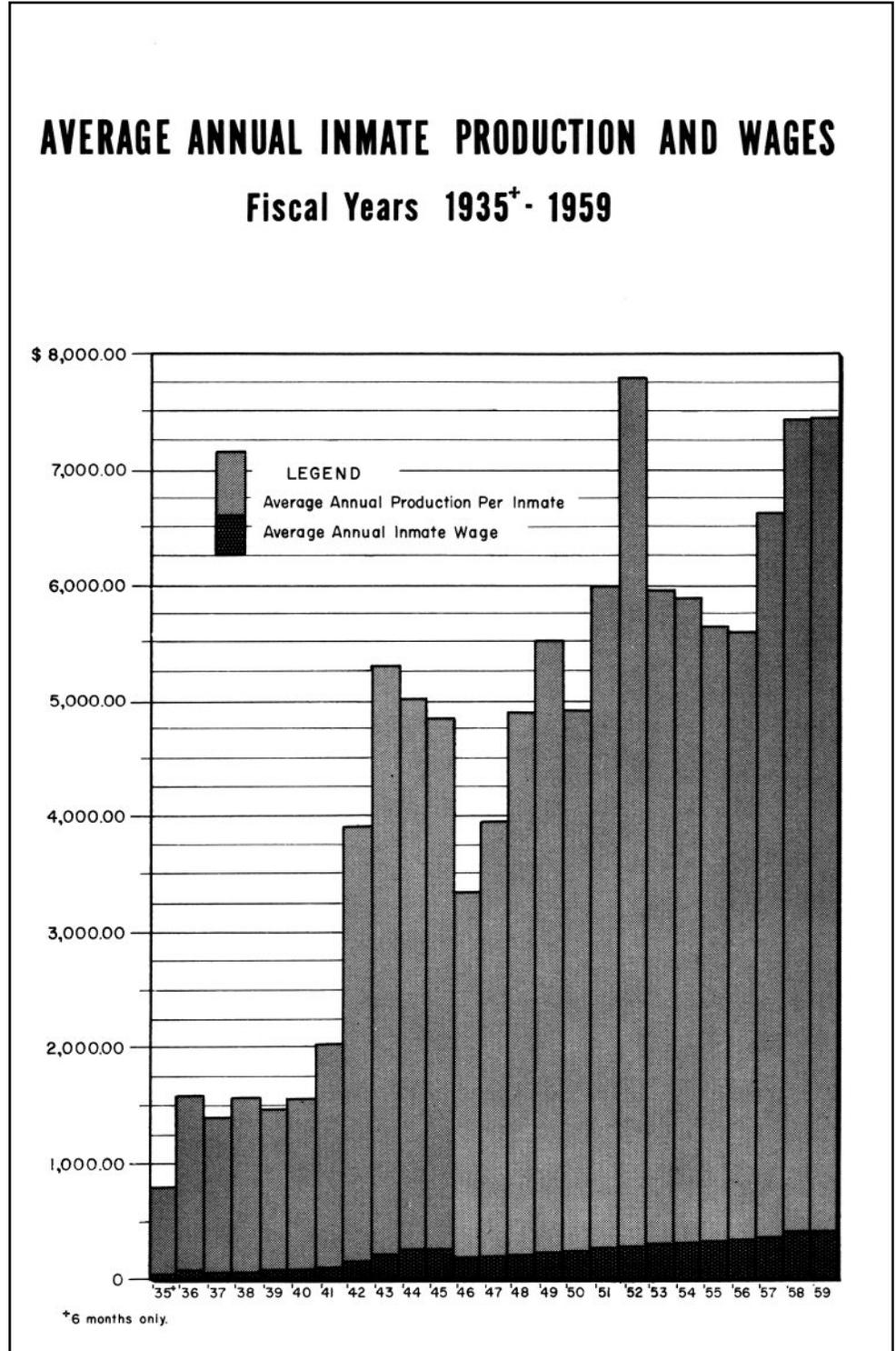
# GOVERNMENT SWEATSHOPS: AS CHEAP AS EXPORT DUMPING

The 1961 FPI Annual Report features a photo spread titled, “Rebuilding Men with an Electronics Industry.”<sup>77</sup> The photographs show men soldering and assembling cables, usually without gloves, eye, ear, or lung protection. A decade later, in 1972, FPI stated, “We are making a concerted effort in each of our industrial locations to comply with the new Occupational Safety and Health Act requirements.”<sup>78</sup>

UNICOR is effectively a government sweatshop for handling electronic waste. Like sweatshop workers in other countries, prisoners live and work within the control of the facility, do not have the right to organize or improve working conditions, and have few, if any, other options. By paying pennies more than other work available in the prison, UNICOR ensures itself a steady stream of “volunteers.” Similar conditions drive

“Now, you might be asking ‘why’ I would continue to work in this glass department knowing I had been poisoned. The reasons are simple. UNICOR pay is the best you can get here... Also I have restitution the court has ordered me to pay. So you see for every dollar UNICOR pays me they automatically take a dollar. I earn \$100 they take \$50. I live on \$50 a month, soap, shampoo, toothpaste.... wham, and it’s gone. Prison is not a good place to be without even a modest amount of \$\$\$! UNICOR exploits this; they always tell us you want to complain about the work conditions, quit, it’s an all volunteer work force, nobody is forced to work in UNICOR. They say to me there are [hundreds] of people on the waiting list to take your place. I truly believe my ‘cause of action’ lies in the fact that UNICOR opened this e-waste recycling facility knowing the dangers of processing CRTs and other waste, and having us inmates doing it in such a hazardous way that a lot of us have been poisoned, injured by lacerations, and God only knows what the long-term effects are going to be on us.”

—Prisoner D



*Increases in production per inmate far outweigh changes in wages.*

people from poor communities in countries such as India and China into the e-waste business and force people to make the unacceptable choice of working in places that poorly protect their health and human rights.<sup>79</sup>

Prisoners are excluded from protections other U.S. workers enjoy. The Thirteenth Amendment of the U.S. Constitution has a specific exemption for people convicted of a crime; it states, “Neither slavery nor involuntary servitude, except as a punishment for crime whereof the party shall have been duly convicted, shall exist within the United States, or any place subject to their jurisdiction.”<sup>80</sup>

Prison administrators take this exemption seriously. In a 1936 lesson plan for prison staff, James V. Bennett, the BOP’s Commissioner of Industries, explained:

When slavery was abolished in America through the adoption of the 13<sup>th</sup> Amendment a specific exception was made in the case of the criminal... [T]he drafters of this amendment ... obviously had in mind the long recognized principle that the state had a property right in the labor of its prisoners. A sentence to ‘hard labor’ was and still is imposed because it carries with it the idea that labor was punitive and helped deter crime.<sup>81</sup>

Bennett was promoted to Director of the Bureau of Prisons in 1937, and he remained there until 1964. More recent managers express a similar attitude. While serving as Attorney General in the first Bush Administration, Dick Thornburgh referred to “the Bureau’s long-standing policy of mandatory work for able-bodied inmates.”<sup>82</sup> The corpora-

tion’s Board of Directors wrote:

Every inmate who can, must work.... The federal prison system’s continued success in managing extremely overcrowded prisons is based on the ability to keep inmates productively busy.<sup>83</sup>

Sweatshop workers are sometimes forced to work to pay debts. Similarly, prisoners often need to earn money to pay court-ordered fines and fees. Many prisoners do not pocket their full wages. UNICOR mandates that 50% of the wages be used to pay for court-ordered fines and fees, victim restitution, or child support.<sup>84</sup> Prisoners also work to earn income to purchase essential items from the commissary.<sup>85</sup>

UNICOR attracts prisoners by paying slightly more than other available work programs, a tactic used in sweatshops around the world. Incarcerated people working in prison maintenance can expect to make between \$0.12 and \$0.40 per hour.<sup>86</sup> UNICOR’s pay scale goes from \$0.23 to \$1.15 per hour. Higher wages make UNICOR jobs more appealing to prisoners, but these wages are obviously lower than those paid by private sector recyclers.

Like other sweatshops, UNICOR seems to rely upon the expectation that voicing concern for health and safety, workplace protections, and the environment will be met with retaliation.

## UNICOR’s “Repatriation” Is Not Job Training

UNICOR has implicitly compared its factories to global sweatshops. “One way to

**“The next week [Prisoner 1] and the man next to him were removed from the cage where I worked. Later I noticed [Prisoner 1] was cleaning the men’s room, and the man who worked next to [him], who had also talked with the man from Washington D.C. was sweeping floors. They had both been retaliated against for whistle blowing.... [Prisoner 1] washed the warehouse walls, and had been told to use only his left hand, and that if he used his right hand he would be infraacted and placed in the hole. [Prisoner 1] was being messed with by UNICOR staff for talking with the man from Washington about safety issues. [Prisoner 1] told me that the factory was being operated in a very unsafe manner, and I listened to him...”**

—Prisoner K

**“The monitors we were breaking down were brought into the glass department on pallets with approximately 35 to 40 [CRTs] of various sizes [stripped of plastic housing] on the pallets.... My job this first day is to unload the monitors off the pallets onto a long table. The next step in the process was to use a small hammer, and hit the (gun) part of the monitor. That is the very back piece of the monitor. Once that piece was removed thrown in a box then the monitor was ready to be placed on a plastic chair that was down inside a large Gaylord cardboard box. The monitor was sat down on top of the chair then another guy would lean over into the box, and smash the glass down until the glass was broke down. When this monitor glass was being smashed with the small hammer this ash looking stuff (grey) would fly up into the face of the guy leaning over the box. This stuff would fly everywhere! It was all over everyone working in there.”**

—Prisoner D

avoid adverse impact on private sector workers,” the company mused in 2000, “is to have inmates perform tasks that cannot be economically performed domestically; i.e., providing products or services currently imported or provided by foreign countries.”<sup>87</sup> UNICOR defenders call this strategy “repatriation” of work and imply that utilizing prison labor will help create post-release jobs in the private economy. But the company has noted that repatriation “conflicts with [UNICOR’s] mandate of teaching marketable skills... since they will be in operations not currently performed in the U.S.”<sup>88</sup>

Several years earlier, UNICOR noted, “In contrast to the automation, technology, and equipment used for rapid production in private sector shops, factories, and plants, Federal Prison Industries must use labor-intensive methods of operation to keep the largest possible number of inmates in productive work programs.”<sup>89</sup> In statements to Silicon Valley Toxics Coalition, prisoners have described using hammers to smash leaded monitor glass and being told to make their own tools or to use provided tools in inappropriate ways. This increases the risk of toxic exposure and injury.

Researcher Dr. Gary Martin observed, “[UNICOR’s prisoner] idleness-combating function...can be seen as in conflict with preparation for work outside. UNICOR has a built-in excuse not to modernize with the latest labor-saving techniques.... In other words, it has little incentive to provide the sort of work experience that is transferable to the U.S. industrial sector as it exists in the 1990s....”<sup>90</sup> UNICOR tools and methods most resemble those of poorly protected migrant workers in the

informal sector.<sup>91</sup> In effect, prisoners are being trained for work in sweatshops. Instead of decreasing the quality of domestic recycling to compete with sweatshops in order to “repatriate” work, the U.S. should be raising the bar internationally and domestically to provide safer conditions for workers, communities, and the environment.

## V.

# E-WASTE, ENVIRONMENTAL JUSTICE, AND THE EPA

Environmental Justice (EJ) is grounded in the simple assertion that all people and communities have the right to a healthy environment where they live, work, learn, and play.<sup>92</sup> The modern EJ movement first drew national attention in 1982 when residents of rural, predominantly African-American Warren County, North Carolina refused to accept the siting of a polychlorinated biphenyl (PCB) landfill in their community. Today, there are thousands of grassroots, community-based efforts fighting for a healthy environment and against disproportionate pollution of poor communities and communities of color. See

the inset for an EJ timeline that highlights connections between environmental justice and the prisoner rights and anti-prison movement.

Environmental justice gained federal recognition in 1994, the year that UNICOR began to recycle e-waste.

Presidential Executive Order 12898 mandated that all federal agencies incorporate an EJ framework into their operations.<sup>93</sup>

The Executive Order added an important tool to the strategic arsenal of grassroots movements across the U.S. and around the world.

## KEY MOMENTS IN THE ENVIRONMENTAL JUSTICE MOVEMENT<sup>94</sup>

**1982.** Residents of Warren County in North Carolina protest the siting of a polychlorinated biphenyl (PCB) landfill in their community. Dr. Benjamin Chavis of the NAACP coins the term “environmental racism” during the protests. Today, the Warren County events are recognized by many as foundational to the modern environmental justice movement.

**1987.** United Church of Christ Commission for Racial Justice publishes “Toxic Wastes and Race in the United States.”<sup>95</sup> The report is the first national study to correlate race and the siting of waste facilities. One of its major findings is that race is a stronger predictor of the siting of hazardous waste facilities than either income or housing value.

**1991.** The First National People of Color Environmental Leadership Summit was held in Washington, DC, attracting over 1,000 participants. The Principles of Environmental Justice are defined at the summit.

**1994.** February: President Bill Clinton issues Executive Order 12989, “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations.”

**1998.** EPA issues Interim Guidance for Investigating Title VI Administrative Permits Challenging Permits.

**2000 - to the present.** Critical Resistance brings together anti-prison and environmental justice movements through its campaign on the environmental impacts of prison construction and operation.<sup>96</sup>

**2001.** Joining Forces: Environmental Justice and the Fight Against Prison Expansion conference is held in Fresno, California.

**2002.** Second National People of Color Environmental Leadership Summit convened in Washington, DC. The Principles of the Youth Environmental Justice Movement, Principles of Working Together, and Principles of Collaboration are developed at the summit, known throughout the movement as “Summit II.”

**2003:** AXT, Inc closes its semiconductor plant in Fremont, California under pressure from environmental justice and social justice organizations.<sup>97</sup>

**2005.** The Prison Moratorium Project integrates environmental justice into the curriculum for its internship program.<sup>98</sup>

## Prisoners Are an Environmental Justice Community of Concern

Seventeen principles of environmental justice were adopted in 1991 at the First National People of Color Environmental Leadership Summit. Several principles are particularly relevant to UNICOR's recycling programs.

*EJ Principle:* “Environmental justice affirms the right of all workers to a safe and healthy work environment, without being forced to choose between an unsafe livelihood and unemployment. It also affirms the right of those who work at home to be free from environmental hazards.”<sup>99</sup>

UNICOR's prisoner workers are a captive labor force on a high-tech chain-gang. They are insufficiently protected by the Occupational Safety and Health Administration (OSHA); inspectors are not at liberty to do unannounced inspections at UNICOR facilities, one of their most basic tools of enforcement.<sup>100</sup>

Prisoners are completely outside the Fair Labor Standards Act.<sup>101</sup> Unlike prison guards, prisoners are not considered employees, are not allowed to organize, and are not protected against retaliatory acts by bosses under labor law. When prisoners question UNICOR's health and safety practices, they fear being fired, punished, or moved to another prison—all of which has been detailed in statements received by Silicon Valley Toxics Coalition.

*EJ Principle:* “Environmental justice protects the right of victims of environmental injustice to receive full compensation and reparations for damages as well as quality health care.”<sup>102</sup>

Prisoners know that something is wrong when they blow their nose and their mucus is black, when work means shards of glass lodged permanently in their hands or causing gruesome cuts, and when the electronics they are dismantling carry tags warning, “This product contains lead in solder and certain electrical parts which are known...to cause cancer, birth defects, or other reproductive harm.” However, prisoners' efforts to obtain quality information on the risks and to educate themselves and others are severely curtailed by the prison and may subject them to retaliation.

Prisoners are particularly vulnerable because their ability to seek recourse is limited. In the 1980s and 1990s, prisoners' rights were eroded by a series of new laws and Supreme Court rulings that denied prisoners the right to form labor unions, limited prisoners' ability to sue, and required prisoners to prove not just that “the totality of circumstances” of prison conditions was cruel and unusual punishment, but that prison officials acted with “deliberate indifference” to their needs.<sup>103</sup> It is difficult for prisoners to make their voices heard.

*EJ Principle:* “Environmental justice considers governmental acts of environmental injustice a violation of international law, the Universal Declaration on Human Rights, and the United Nations Convention on Genocide.”<sup>104</sup>

Federal Executive Order 12898 requires all federal agencies (including the Bureau of Prisons) to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States and

**“Prisoners were receiving literature about all the toxic material in the computers and the computer monitors, and they were sharing it. When prisoners left these reports on the bulletin boards in the living units, the counselors and case managers ripped them down and threatened to infract anyone caught posting the educational literature. We were beginning to collectively fear for our safety as we recalled how we shattered hundreds of pallets with no protection afforded us—and that we had been told that we were safe and that we had believed them.”**

—Prisoner D

its territories. Over 70% of the people in the federal prison system are people of color.<sup>105</sup> Using federal prisoners to recycle and disassemble hazardous electronic waste exemplifies the type of environmental discrimination the Executive Order was designed to prevent.

## EPEAT Rejected Banning Use of Prison Labor

Despite the Executive Order, the U.S. Environmental Protection Agency recently oversaw the development of the Electronic Product Environmental Assessment Tool (EPEAT), which completely fails to incorporate environmental justice considerations. EPEAT is a procurement tool to help public and private sector institutional purchasers evaluate computer equipment.<sup>106</sup> The tool includes fifty-one environmental criteria. Although criteria that would prohibit prison labor and address worker safety and health were proposed, these criteria were rejected. EPEAT notes that “a primary consideration was that federal agency representatives reported that if this criterion [on prison labor] was included, it would make it difficult, or perhaps impossible, for federal agencies to use EPEAT,”<sup>107</sup> citing preferential contracting rules with UNICOR although it is not clear whether these rules truly apply here. EPEAT references the EPA Plug-In To E-cycling Guidelines, a short document which focuses specifically on evaluating e-waste facilities.<sup>108</sup> Prison labor is a significant and growing part of the U.S. e-waste management industry, but both these guidelines fail to mention prison labor.

In its 1997 Annual Report, UNICOR’s ombudsman noted the importance of

another Executive Order (12873) in making “environmental concerns...key factors in federal customers’ purchasing decisions, specifically, whether FPI products were ‘environmentally preferable.’”<sup>109</sup>

This suggests that incorporating environmental justice concerns into environmentally preferable purchasing guidelines is essential, and that the contract decisions of institutions and individual consumers can make a real difference for worker and community health and safety. Prison labor must be directly addressed as a substantial threat to responsible recycling and refurbishing operations and to the health of workers and the environment. The Computer TakeBack Campaign will issue procurement guidelines that include worker health and safety and labor standards in fall 2006. The Development Team for EPEAT has “noted that prison labor in recycling programs may be considered for future EPEAT versions.”<sup>110</sup>

## A Long Toxic Legacy Creates Costs for Everyone

Prisoners with long sentences are more likely to be assigned to UNICOR. This reduces worker turnover, improving factory efficiency, but it also means workers’ exposures to toxic chemicals are sustained over a longer period of time, increasing their chances of bioaccumulating hazardous levels of toxics.

When released from prison, prisoners bring their health issues home with them. The insidious nature of toxic exposure is that it often goes unnoticed or unreported until serious health complications appear. At that point, families and communities are left to figure out the cause of the disease and to deal with the aftermath.

**“Even when I wear the paper masks, I blow out black mucus from my nose every day.... The black particles in my nose and throat look as if I am a heavy smoker who works uncovered in a coal mine and who just made it through a house fire inhalation.... Cuts and abrasions happen all the time. Of these, the open wounds are exposed to the dirt and dust, and many do not heal as quickly as normal wounds. I and other inmates have noticed increased sinus problems, scratchy throats, headaches, unexplained fatigue, and burning skin, eyes, noses, and throats.... We can get bandages, but all we get to clean an injured area with is cold water and 20 mule team Boraxo soap.”**

—Prisoner A

**“We was getting showers of glass and the whole chemicals out of the tube. We was cutting ourselves. I only went to the hospital twice, but one of them was a serious injury... They even took pictures of it at the hospital.”**

—Prisoner C

Unfortunately, workers in prison, both captive workers and guards, are not given adequate access to information about, or protection from, the many potentially hazardous materials they come in contact with. The rise in complaints logged by prison guards at Marianna, Florida; Elkton, Ohio; and Atwater, California raise questions and concerns about conditions for prisoners inside.<sup>111</sup>

Stories emerging from UNICOR recycling factories suggest UNICOR fell far short of its 1972 goal of “set[ting safety] standards in our industrial operations which can be used as an example for other federal agencies and commercial concerns.”<sup>112</sup> Prisoner D, who experienced a disfiguring injury, writes, “I asked about filing a claim for redress, and the safety manager gave me a pamphlet saying I couldn’t file a workers compensation claim until I was 45 days from my release date which is [many years away]!” The implication that UNICOR will not bear the full cost of workplace injuries because its captive workers are essentially locked away, beyond effective oversight by OSHA, and without adequate access to redress for injuries and the long-term effects of toxic exposure is unacceptable. Special Counsel Scott Bloch stated, “The Bureau of Prisons took a technical view of the health risks and essentially acted as if actual harm would have to occur before they would make safety changes. I hope you will agree with both Leroy Smith and [the Office of Special Counsel] that the standard for safety should be a *little* higher than that.”<sup>113</sup> Reducing toxic exposures, and thus preventing disease, can benefit prisoners, prison staff, communities, and taxpayers. It is responsible social policy.



# VI.

## ALTERNATIVES: RESPONSIBLE ELECTRONICS RECYCLING

### **The Pledge of True Stewardship for Electronics Recyclers**

Comparing the commercial electronics recycling sector and UNICOR yields insights into the problems posed by prison recycling. Global Investment Recovery (GIR) provides an excellent example of private small business e-waste recycling. GIR adheres closely to environmental regulations and standards, has been recognized by the EPA as a responsible, environmentally-friendly electronics

recycler, and has signed the Basel Action Network Pledge of True Stewardship for Electronics Recyclers.<sup>114</sup> The Pledge is a useful indicator of the depth of GIR's commitment to environmental and social responsibility because signatories agree to not export, landfill, incinerate, or send to prisons any hazardous materials. This eliminates several "short-cuts" to profit from prison labor, export dumping, or incineration of e-waste.

GIR's founder and CEO, David Ritter, is a strong advocate of small business compe-

tion for government contracts, environmental compliance, and worker rights. GIR's corporate policies require both employees and contractors to strictly adhere to environmental regulations and GIR provides training for employees. GIR also stays in dialogue with regulatory bodies and customers to improve its environmental management. Pollution prevention is explicitly included in GIR's corporate planning and decision-making.<sup>115</sup>

In contrast, UNICOR has a “no landfill” policy for electronic materials,<sup>116</sup> but exporting waste is considered acceptable. UNICOR's stated “restrictive export policy” is motivated by national security concerns, not protecting people's health and safety. Its certification process requires vendors to pledge not to ship materials to countries considered state sponsors of terrorism such as Iran, Syria, and North Korea and not to use products to aid the development of weapons of mass destruction.<sup>117</sup> The policy says nothing about restricting e-waste exports to countries like China, India, the Philippines, or Nigeria, which receive a heavy toxic burden of obsolete electronics.<sup>118</sup>

## Workers' Rights Are the First Line of Defense

Many private sector electronics recyclers understand that a well-paid, well-trained workforce is a safer, more committed workforce. These recyclers provide the best available technologies and abide by worker health and safety policies. In contrast, UNICOR's captive labor model prioritizes security while protecting health and the environment takes a back seat. Security is both the reason why UNICOR exists (to keep prisoners occupied) and

the justification by management for denying workers proper tools and health and safety information.

Security constraints put workers and staff at greater risk for toxic exposure. Materials are handled up to three times more than at private sector facilities in the packing and unpacking processes alone.<sup>119</sup> The use of inadequate tools also increases the risk of exposure.<sup>120</sup> Years after Silicon Valley Toxics Coalition began receiving affidavits from prisoners detailing the improper use of tools, BOP National Hygienist Matthew Korbelak documented the following:

I observed, and numerous workers reported, the improper use of tools and techniques due to the lack of appropriate tools to more safely dismantle monitors. Specifically, security screws in some monitors had to be broken out because no tip was available (these screws and tips are not the type used in the institution). Another type of monitor had deep set screws and the screw drivers could not reach them. *Forced breaking of monitor housing when an easier dismantling is an option increases the potential for injuries and [the need for] the use of additional personal protective equipment.* It is recommended that the appropriate tools be provided and used correctly to minimize the hazards from dismantling monitors.”(italics added)<sup>121</sup>

UNICOR claims its programs “rehabilitate” those in prison and provide valuable work experience they can use upon release. Yet the methods used in UNICOR's e-waste recycling programs rely upon force, rather than skills applicable to recycling operations outside prison walls.

## Clean, Secure, and Efficient Demanufacturing Processes

GIR's processes include both manual and automated demanufacturing. A manual tear-down line recovers reusable components. According to GIR, proper manual recovery also ensures proper removal of hazardous waste. Metals are separated from components and grouped according to type, then sent through GIR's automated shredding and separation systems, which prevents excessive worker exposure to toxic materials. Further, GIR's combination of manual disassembly with dual shredding and separation systems ensures complete destruction and proper recycling of electronic equipment. Due to the importance of data security in electronic recycling, GIR maintains high security, limited-access facilities that meet strict standards for government and corporate contracts.

By contrast, UNICOR's website states its "program is a labor-intensive program, so there are few capital machinery and equipment expenses, which keeps costs down."<sup>122</sup> In 2000, then-Board Chairman Joseph Aragon explained to Congress, "In the private sector, if I own a factory that manufactures textiles, my interest is going to be in making sure that I can get maximum production from one person.... In prisons, we downplay that so we can employ more people. Our technology in prisons is often much older as it was generations ago in the private sector."<sup>123</sup> Small businesses like GIR have set a high standard of technical performance with regard to methods of demanufacture, employee training, environmental and human health protection, and data destruction that UNICOR's labor-intensive methods based on exploiting captive workers simply cannot meet.

**"I've witnessed several inmates lacerate themselves. Some of them never come back to UNICOR; many are hospitalized. Virtually every injury is caused by broken Cathode Ray Tubes. The tubes get broken because several of the screws require an extension to reach them but we don't have an extension in our tool kits.... Therefore the mini ballpeen hammer is used to bash the monitors apart, and as one might guess CRTs are shattered periodically."**

**—Prisoner B**



# VII.

## UNDERCUTTING RESPONSIBLE RECYCLERS

By competing for government and private contracts to manage electronic waste, UNICOR undercuts responsible recyclers through ultra-cheap labor and the special privileges and inside connections afforded by its quasi-governmental status. UNICOR was intended to be self-sustaining; for instance, an annual report claims that “UNICOR receives no appropriated funds. All expenses for its operations are paid from revenue generated by sales to federal

agencies.”<sup>124</sup> However, there is evidence of expenses subsidized by taxpayers. U.S. General Accounting Office<sup>125</sup> and UNICOR reports issued in the 1990s indicate that the Bureau of Prisons invested tens of millions of dollars in building construction and improvements for UNICOR.<sup>126</sup> Researcher Dr. Gary Martin testified to Congress, “the Federal Bureau of Prisons provides UNICOR its buildings and land [and] utilities.”<sup>127</sup> In 2006, the U.S.

**“We were told that a guy would be coming in to do some tests. The day before we cleaned up real good. The foreman [a prison employee] told us these tests were very important, and he told us to slow the process way down. He said he didn’t care if we processed 1/2 of our normal output, just to take our time, and go slow...This [air quality] test I witnessed and participated in was absolutely manipulated from start to finish. We had changed, and put all new filters in the air handler... We changed our normal routine, slowed everything way down, all took our breaks together... The orderlies “janitors” were told to constantly be cleaning the day of the tests.”**

—Prisoner D

House Judiciary Committee added one more to the list of taxpayer subsidies—access to “[surplus] industrial equipment without cost from other Departments and agencies”—while noting that proposed reform legislation “does not alter a broad array of competitive advantages that FPI enjoys with respect to private sector firms.”<sup>128</sup>

Subsidies and low labor costs enable UNICOR to underbid conscientious commercial recycling operations. In 1998, UNICOR welcomed a study by the Inspector General for the Department of Defense which found that “for nearly 80% of procurements, UNICOR’s prices were lower than those provided by the private sector for identical products.”<sup>129</sup> Reporter Elizabeth Grossman has described one Pennsylvania case in which the UNICOR bid was approximately one-quarter of those from commercial recyclers.<sup>130</sup> Some contractors who received bids from the UNICOR recycling program have told Silicon Valley Toxics Coalition that UNICOR bids were one-third to one-quarter the price of private bidders.<sup>131</sup> These low bids come at the expense of captive prison workers, and they hurt all workers by driving down standards.

Despite its advantages, UNICOR has not accepted that a small slice of the large federal pie should be set aside for small businesses and competes with them to win contracts. According to the EPA, “[t]he U.S. government buys seven percent of the world’s computers. In fiscal year 2005 alone, EPA expects federal agencies to spend almost \$60 billion on information technology equipment, software, infrastructure, and services.”<sup>132</sup> Nine million dollars were set-aside for small businesses through the EPA’s Recycling Electronics

and Asset Disposition (READ) services.<sup>133</sup> Although READ comprises a very small share of federal electronics spending, these contracts are extremely valuable to private small business recyclers. Grossman reported, “A [2004] survey of electronics recyclers in the U.S. and Canada found that 70% of these companies had less than 49 employees and that over half had less than 25”, whereas UNICOR’s recycling operations employed nearly 1,000 prisoners at its seven factories in 2004.<sup>134</sup>

UNICOR submitted a bid for READ, which was accepted in December 2004. Initially, Global Investment Recovery shared with UNICOR the distinction of being named one of just eight small businesses awarded a government-wide acquisition contract (GWAC) for the EPA’s Recycling Electronics and Asset Disposition (READ) services.<sup>135</sup> GIR and another recycler, Creative Recycling Solutions Inc., successfully challenged UNICOR’s contract.<sup>136</sup> Ruling against UNICOR, the Small Business Administration (SBA) noted, “Besides exceeding the applicable size standard, FPI does not even qualify as a ‘business concern’ eligible to bid on set asides for small business concerns.”<sup>137</sup> SBA’s letter of their determination to the General Manager of UNICOR’s Recycling Business Group, Lawrence M. Novicky, warns of “severe criminal penalties for knowingly misrepresenting the small business size status of a concern in connection with procurement programs.”<sup>138</sup> After this ruling, the federal Environmental Protection Agency pulled its contract with UNICOR. *Government Executive* magazine noted that UNICOR had contracts worth over \$460 million with the Department of Defense in 2005, and quoted Chris Jahn,

President of the Contract Services Association, saying, “To consider them somehow a small business just doesn’t pass the straight face test.”<sup>139</sup>

David Ritter of Global Investment Recovery told Silicon Valley Toxics Coalition, “Commercial recyclers lose significant amounts of business to UNICOR every day because they have access to U.S. Government Agencies that is denied to commercial recyclers .... When UNICOR misrepresented themselves as Small Business for the EPA READ Contract, their bid was 75% less than the legitimate Small Business competitors who were selected. This bid significantly undercut commercial recyclers in a manner that could be viewed as predatory pricing in any industry.”<sup>140</sup>

In 2005, the U.S. Chamber of Commerce wrote:

Even with reform, FPI would still have an enormous competitive advantage over the private sector. FPI pays its inmates \$.23-\$1.15 per hour and is not required to provide any employee benefits like Social Security, unemployment compensation or insurance. In addition, as a [g]overnment-owned corporation, FPI is exempt from [f]ederal and state income taxes, gross receipts taxes, excise tax and state and local sales taxes on purchases. FPI does not have to pay for utilities or equipment and has a special statutory line-of-credit from the U.S. Treasury for \$20 million at 0% interest. FPI is also exempt from standards, inspections, or fines by various [f]ederal, state or local enforcement agencies, such as OSHA, that regulate all private sector suppliers to the [f]ederal [g]overnment.<sup>141</sup>

## Responding to the E-Waste Crisis: Making a Just Choice

The decisions public and private institutions make regarding whether to send their e-waste to a responsible U.S. recycler or to UNICOR affect the future health and safety of communities worldwide. More and more institutions are deciding to steer clear of the Federal Prison Industries and instead to promote a safe, clean, and green domestic electronics recycling industry.

Dell Inc. of Austin, Texas, the largest seller of personal computers, used UNICOR to handle their e-waste recycling program until pressure from the Computer TakeBack Campaign (CTBC) and Silicon Valley Toxics Coalition exposed the practice. Activists from CTBC affiliate Texas Campaign for the Environment dressed in prisoner uniforms, called themselves the “Dell Recycling High Tech Chain Gang,” and demonstrated at the January 2003 Consumer Electronics Show, generating international publicity about Dell’s partnership with FPI.<sup>142</sup> In July 2003, immediately after SVTC released a report comparing UNICOR’s recycling program with a commercial California recycler,<sup>143</sup> Dell ended their UNICOR contract.<sup>144</sup> Dell cited, in part, concerns from customers.

Johns Hopkins University has also stopped its UNICOR electronic waste contract. As one employee put it, “Using prison labor was not looked at very favorably.”<sup>145</sup>

**“Boy, were they pissed off when Dell dropped them for recycling. Took it out on inmates!”**

**—Prisoner L**

**“To get around this problem [of inadequate tools], we must do one or two things: hit the case with the small, ineffective hammer in the general area of where the screw holds the case to the inner screw stanchions, or misuse the air-gun to “drill” the plastic away from the screw/stanchion area to free the case. This can/does cause MANY problems: the plastic can break and/or shatter, which releases dust/particles into the air, or we can accidentally [sic] break the lead-encased glass CRT. NOT good. If we ‘drill’ the case, fumes are caused by the heat/friction; thus we smell the toxic fumes as we try to open up each monitor case.”**

**—Prisoner A**

**“Just wanted to take a minute to tell all those active in the SVTC and other activists that we prisoners are grateful [sic] for your efforts on our behalf. Have no doubt—your protests are making the bastards feel the heat! Every time I talk to a UNICOR employee about the recent inspections, they mention the word protests as the reason for the changes and the concern among the bosses at UNICOR.”**

**—Prisoner E**

In August 2003, the state of California also pulled its contract with UNICOR and sought the services of private recyclers. Mark Murray, director of Californians Against Waste, told the Los Angeles Times that by choosing to direct the state’s e-waste—370 tons accumulated over 12 months—to private industry, California would help the private sector “make the investments they need [to meet demand] for the future.”<sup>146</sup> In the same article, a representative from the Machinists Union said, “[W]hen we have jobs leaving the state, going across the border, we need to promote an industry that provides good jobs like recycling.”<sup>147</sup>

In spite of these setbacks, UNICOR continues trying to expand its electronics recycling business. UNICOR represents itself as a “true green solution”<sup>148</sup> to the e-waste problem and proclaims its “environmental sensitivity”<sup>149</sup> on its website without acknowledging well-documented cases of toxic exposure in its facilities. These marketing efforts underscore the importance that UNICOR places on e-waste recycling, a business that produces approximately \$8-10 million in revenue per year.

A clear example of UNICOR’s ambition is Project GREEN-FED. In August 2005, two months after the BOP report documenting toxic exposure, UNICOR contracted with the state Office of Environmental Quality in Arkansas to handle its glut of e-waste and called this pilot program Project GREEN-FED. Arkansas residents can dial a 1-800 number and FedEx their old electronics, free of charge, to the nearest federal prison for recycling. In the foreword to its 2005 Annual Report, UNICOR declared, “We anticipate building on the success of this

pilot [Project GREEN-FED] and partnering with others to expand this program to households throughout the country.”<sup>150</sup>

Insisting on environmental justice is essential to counter UNICOR’s efforts to represent itself as a green business.

Choosing prison labor will not create green jobs or the infrastructure needed to meet the toxic e-waste crisis. Instead, such policies displace the burden onto the least empowered communities, where enforcing health and safety regulations is most difficult. When done properly, e-waste recycling can contribute to community economic development and environmental protection by providing stable “green” jobs. The proper way to address electronic waste recycling is through efficient, transparent, modern facilities staffed by free labor, possessed of their rights as employees, and able to protect themselves and nearby communities from harm. UNICOR is a closed, unregulated world of poor people and people of color condemned to dangerous work for little pay under backward conditions. Now is the time to draw a line.

## VIII.

# CONCLUSION

UNICOR represents the worst in domestic electronic recycling. The serious concerns raised in this report regarding the exposure of captive workers and prison employees to toxics; the disproportionate impact of UNICOR operations on poor people and people of color who comprise the growing ranks of the prison population; the lack of workers' rights; and the unfair negative impact of UNICOR on responsible recyclers demand only one

response: get UNICOR out of e-waste recycling, and fully investigate all their operations to ensure that the rights of workers behind prison walls are protected.

Because workers in UNICOR factories are a largely hidden population, they are particularly vulnerable. Because people in prison are viewed as disposable by many, their health and safety is easily ignored. However, the ramifications of such gross

**“You are quite right the method of handling this equipment is primitive. Because it has affected many of us who are here in [prison]...can you provide more details as to the problems associated with improper handling of the materials?... It would be very helpful to us and would put an end to the use of what amounts to the use of slave labor to avoid compliance with safety and health regulations that affect many inmates. Some who have worked directly in this program have suffered some illnesses which are unexplained; maybe this will help clear up the mystery.”**

—Prisoner G

**“What I would really like to see is an attorney file against this UNICOR for reckless disregard of human rights.... I and many other inmate workers know we are being contaminated, slowly sterilized, and permanently damaged in insidious ways, and we need someone with true energy to help us. Many here will resent this treatment.”**

—Prisoner B

disregard for their health and safety, as well as the ability of UNICOR to expand its share of the recycling market negatively impact all of us. We hope this report amplifies the voices of those workers within these government sweatshops trying to protect their rights, their health and safety, and the environment. We hope that it sheds some light on the hidden world of captive labor in the United States and supports efforts to build a responsible, domestic electronic recycling infrastructure.

In 1998, UNICOR declared “while there are no stockholders [in UNICOR], each and every member of the public is a stakeholder.”<sup>151</sup> In its 1999 annual report, titled “Paying Dividends to America,” Chairman of the Board Joseph Aragon bragged, “What if there was a corporation that paid billions of dollars in dividends and cost its shareholders nothing to own? What an investment! What a price to earnings ratio!”<sup>152</sup> Aragon is right; while UNICOR is the one minting money on the backs of poor people and people of color, we are all “stakeholders” and are responsible for the consequences of this government corporation.

As Special Counsel Scott Bloch said:

Federal employees and prisoners inhaling poisons due to the neglect of their superiors, and federal agencies whitewashing the investigation. It sounds like a Hollywood dramatization like *Shawshank Redemption*, or a John Grisham novel with wild conspiracy theories. In this case, however, workers and inmates were exposed to hazardous materials without protection... and the Bureau of Prisons

and Federal Prison Industries did nothing to stop it, and indeed frustrated attempts to investigate the matter. These are powerful arms of the United States Department of Justice. Even if the problem is less a wholesale coverup and simply a cabal of self-interested bureaucrats, challenging it is a formidable task.<sup>153</sup>

The task is for all of us to pick up the challenge.

# APPENDIX A: THINGS YOU CAN DO TO STOP UNICOR RECYCLING

1. **Write the President and House Judiciary Committee members,** and demand that your tax dollars stop undermining responsible recycling and stop putting the health and safety of prisoners and prison guards, and their families, at risk. Demand to know what these political leaders are doing to stop UNICOR's expansion in this industry and to make UNICOR pay for the damage already caused (including medical testing and health care). The President can be contacted at the White House, 1600 Pennsylvania Avenue NW, Washington DC 20500. For a list of Judiciary Committee members, see <http://judiciary.house.gov/CommitteeMembers.aspx>
2. **Tell the EPA to get real about environmental justice.** Make environmental justice a part of all environmentally preferable purchasing guidelines by implementing standards that protect worker health and safety and forbid prison labor and dumping outside the U.S. Information about environmental justice at the EPA is available at <http://www.epa.gov/compliance/environmentaljustice/>. Call the EPA at 202-564-2515 or 800-962-6215.
3. **Stop Project GREEN-FED.** Contact your state offices of environmental quality and county waste management districts, and ask how they handle e-waste. Tell them that companies that exploit prisoner labor or dump electronics outside the U.S. are not green solutions. Demand meaningful, effective, and just e-waste recycling laws in your state. For more info on legislative solutions, see [http://www.computertakeback.com/legislation\\_and\\_policy/index.cfm](http://www.computertakeback.com/legislation_and_policy/index.cfm)
4. **Tell the University Surplus Property Administration you disagree** with their decision to host UNICOR at its annual conference and that UNICOR is not a responsible recycler. UNICOR is wooing the college market through the trade association the University Surplus Property Administration. Write the USPA (1344 S. Harrison Rd., East Lansing, MI 48823).
5. **Take Action to ensure that your campus is not recycling with UNICOR.** If you are a student, teacher, or campus worker, and are interested in figuring out how your school is disposing of its electronic waste, contact Silicon Valley Toxics Coalition at [studentaction@svtc.org](mailto:studentaction@svtc.org) or 408-287-6707 ext 323.
6. **Use only recyclers who have signed the Electronics Recycler's Pledge of True Stewardship.** Do you know how the institutions and professional associations you belong to dispose of their electronic waste? For more information on the Pledge, see <http://www.ban.org/pledge1.html>, and to find a responsible recycler in your area, see [http://www.computertakeback.com/the\\_solutions/recyclers\\_map.cfm](http://www.computertakeback.com/the_solutions/recyclers_map.cfm).
7. **Support organizations that empower prisoners, their friends, family members and communities** to advocate for themselves and their rights. For more information, contact Prison Activist Resource Center at [pare@prisonactivist.org](mailto:pare@prisonactivist.org) or P.O. Box 339 Berkeley, CA 94701.
8. **Write or call the International Association of Electronics Recyclers** at P.O. Box 16222 Albany, NY 12212-6222, 1-888-989-4237. Tell them that prison

labor programs do not provide environmentally preferable recycling and that you oppose their decision to certify UNICOR factories.

**9. Demand that the Electronic Product Environmental Assessment Tool (EPEAT) require that prison labor is not used for electronics recycling.** Contact the Green Electronics Council at [info@greenelectronicscouncil.org](mailto:info@greenelectronicscouncil.org) or 503-279-9383. For more information, see <http://www.epeat.net/>.

**10. Educate yourself and others about electronics recycling and prison labor.** The Office of Special Counsel has delivered a report to the President and the Chairs of the House and Senate Judiciary Committees on UNICOR's recycling program. In the past, U.S. Congressman Pete Hoekstra has led hearings on UNICOR and undercutting the private sector. For more information, follow updating coverage of this issue at <http://www.svtc.org> and PARC's "Prisons Poison" page at [http://www.prisonactivist.org/?q=taxonomy\\_menu/9/59/96](http://www.prisonactivist.org/?q=taxonomy_menu/9/59/96).



# APPENDIX B: UNICOR'S ELECTRONIC RECYCLING'S CLAIMS AND FACTS

UNICOR's recycling program has posted videos on its website promoting itself as "a true green solution"<sup>154</sup> to the growing problem of electronic waste (e-waste). You would never know from these videos that the federal Bureau of Prisons (BOP) confirmed in 2005 that prisoners and staff in at least three UNICOR recycling factories were exposed to toxics.<sup>155</sup> Or that federal Special Counsel Scott Bloch has accused the BOP and UNICOR of "neglect," "whitewashing the investigation," and "essentially act[ing] as if actual harm would have to occur before they would make safety changes."<sup>156</sup> Or that Leroy Smith, named the 2006 Public Servant of the Year by Bloch for whistleblowing on conditions in UNICOR recycling, has stated, "My concern is that the dangers that I identified go un-remedied to the continuing detriment of my colleagues who work in the Federal Bureau of Prisons and the inmates working in those prison industry factories."<sup>157</sup>

What else don't you know about UNICOR's recycling operations? The following are some claims from UNICOR's videos, and some facts.

**CLAIM: "Our factories are regulated, and operate in accordance with all applicable federal, state, and local EPA regulations: with full-time safety managers..."<sup>158</sup>**

**FACT:** Federal prisons have full-time safety managers who are responsible for the entire institution. UNICOR factories do *not*. The story of Leroy Smith is an example of one safety manager who ran afoul of UNICOR. Smith's story, documented in the SVTC report "Toxic Sweatshops," is corroborated by sworn statements from prisoners, one of whom writes, "We at that time believed that we weren't in dan-

ger of toxicity poisoning and that all the hoop la about danger to us was being exaggerated by 'tree huggers and alarmists'—as [the UNICOR factory manager] refers to them.... If the safety officer told us to do one thing and [the factory manager] told us to do something else we followed [the factory manager]'s orders."<sup>159</sup>

**CLAIM: "third party inspections by OSHA, state, federal, and the EPA..."<sup>160</sup>**

**FACT:** Private industries can be inspected at any time by regulatory agencies such as the Occupational Safety and Health Administration (OSHA) and the Environmental Protection Agency (EPA); prison industries *cannot*. OSHA and the EPA must give advance notice to the prison. Sworn statements from prisoners detail UNICOR staff ordering major clean-ups of their factories prior to inspection and ordering prisoners to work slowly on the day of inspection. Regulatory agencies cannot document actual work conditions and guarantee that test results for air quality reflect actual work conditions without having the right to conduct surprise inspections of UNICOR factories.

**CLAIM: "ISO and IAER certified; state permitting, and annual complete environmental compliance testing..."<sup>161</sup>**

**FACT:** Leroy Smith calls UNICOR's pursuit of certification "a paper chase."<sup>162</sup> Certification and compliance testing does not mean that air samples and wipe samples were taken to measure for possible toxic exposure. UNICOR does not acknowledge that its belated pursuit of certification follows official complaints by prison staff and prisoners, and investigations by the BOP and the Office of Special Counsel. Jeff Ruch, director of Public

Employees for Environmental Responsibility, has suggested that UNICOR and the BOP's claims should be received with skepticism, noting in 2005, "the Federal Bureau of Prisons insists that the problems it initially had vehemently denied now have been magically resolved by the same managers who created them in the first place."<sup>163</sup>

**CLAIM:** "All staff attend outside OSHA compliance and workplace safety training. Additionally, we provide our workers with medical testing to insure their health and safety."<sup>164</sup>

**FACT:** Prisoners are not considered "employees" under U.S. labor law and do not have the same rights and protections as prison guards. While prison guards are free to seek medical testing from private doctors at their own expense, prisoners must rely on UNICOR and the prison medical staff. Silicon Valley Toxics Coalition has received sworn statements from prisoners complaining about being misinformed about the health and safety risks of electronics recycling, threatened with punishment for receiving independent information on them, being denied medical testing, or denied the results to their tests if UNICOR allowed them to be tested. The rise in complaints about UNICOR recycling from current and former guards at Marianna, Florida; Elkton, Ohio; and Atwater, California should raise concerns about conditions for prisoners.

**CLAIM:** "Our facilities have trained workers that clean and resurface CRT monitors for re-use, burn tests for quality assurance, and rebuild."<sup>165</sup>

**FACT:** A 1997 article by Government Executive magazine stated, "[UNICOR] uses only labor-intensive practices, so an

ex-convict is likely to feel like a 19<sup>th</sup>-century cobbler walking into a Nike factory when he looks for work in his trade."<sup>166</sup>

In 2000, UNICOR's former Chairman of the Board Joseph Aragon told Congress, "Our technology in prisons is often much older as it was generations ago in the private sector."<sup>167</sup> Using appropriate, industry-standard technology such as automated shredders would conflict with UNICOR's goal to keep the maximum number of prisoners busy in its make-work programs. According to sworn statements from prisoners, UNICOR's labor-intensive practices have meant such things as breaking monitors apart because prisoners are denied the proper screwdriver and breaking leaded CRT glass with hammers. Such practices increase the risk of injury and toxic exposure.

A "true green solution" to the problem of e-waste means acknowledging the industry's toxic legacy and taking steps to repair it, through such steps as making electronics producers responsible for their products so they have an incentive to remove toxics from production, passing environmentally preferable purchasing guidelines that incorporate environmental justice, and contracting with responsible recyclers who have signed the Pledge of True Stewardship.<sup>168</sup>

**PICK A TRUE GREEN SOLUTION . . .  
STOP USING UNICOR!**



# ENDNOTES

- 1 Computer Reuse and Recycling Coalition, "100 Percent Day," <http://www.pcsforschools.org/100percentday>, last accessed 9/29/06.
- 2 Elizabeth Grossman, *High Tech Trash : Digital Devices, Hidden Toxics, and Human Health* (Washington: Island Press/Shearwater Books, 2006), p 248.
- 3 United States Office of Special Counsel, "OSC Names Recipient of 2006 Public Servant Award," 9/7/06. [http://www.osc.gov/documents/press/2006/pr06\\_16.htm](http://www.osc.gov/documents/press/2006/pr06_16.htm), last accessed 9/13/06.
- 4 For the full list of allegations, see Dryovage and Ruch's letter to Glenn Fine, Inspector General of the Department of Justice, dated 4/5/06, at [http://www.peer.org/docs/osc/06\\_5\\_4\\_letter.pdf](http://www.peer.org/docs/osc/06_5_4_letter.pdf), last accessed 4/30/06. They include lack of environmental impact assessments, noncompliance for lead and cadmium, lack of proper protective equipment, and improper handling of hazardous metals, including disposal at county landfills and into the city waste water treatment system.
- 5 Commission on Safety and Abuse in America's Prisons, *Confronting Confinement* (New York, NY: Vera Institute of Justice, 2006), p 2. [http://www.prisoncommission.org/pdfs/Confronting\\_Confinement.pdf](http://www.prisoncommission.org/pdfs/Confronting_Confinement.pdf), last accessed 9/15/06.
- 6 Basel Action Network (BAN) et al., *Exporting Harm: The High-Tech Trashing of Asia* (Seattle, WA: Basel Action Network, Silicon Valley Toxics Coalition with Toxics Link India, SCOPE (Pakistan) and Greenpeace China, 2002). See also Jim Puckett et al., "The Digital Dump: Exporting Re-Use and Abuse to Africa," (Seattle, WA: Basel Action Network, 2005).
- 7 Bureau of Prisons, *Report to the Office of Special Counsel*, 6/13/05. [http://www.peer.org/docs/ca/05\\_24\\_8\\_prisonltr.pdf](http://www.peer.org/docs/ca/05_24_8_prisonltr.pdf), last accessed 9/18/06. See also PEER press release, "Federal Prisons Admit Toxic Exposure of Staff & Inmates," 8/24/05. [http://www.peer.org/news/news\\_id.php?row\\_id=580](http://www.peer.org/news/news_id.php?row_id=580).
- 8 Letter from Matthew Glover, Disclosure Unit, Office of Special Counsel, to Leroy Smith, "Re: OSC File # D1-04-2815," 4/3/06. [http://www.peer.org/docs/osc/06\\_5\\_4\\_smith\\_letter.pdf](http://www.peer.org/docs/osc/06_5_4_smith_letter.pdf), last accessed 9/21/06.
- 9 "Beacon of False Hope": Remarks by Leroy Smith Upon Receiving Public Servant Award for 2006," 9/7/06. [http://www.peer.org/docs/osc/06\\_7\\_9\\_lsmith\\_smt.pdf](http://www.peer.org/docs/osc/06_7_9_lsmith_smt.pdf), last accessed 9/13/06.
- 10 For more information, see Silicon Valley Toxics Coalition, *System Error: A Resource for Student Activism on Environmental, Labor, and Human Rights Problems Associated with the High-Tech Industry*, 2006. [http://www.svtc.org/cleancc/pubs/system\\_error\\_2006.pdf](http://www.svtc.org/cleancc/pubs/system_error_2006.pdf), last accessed 9/23/06.
- 11 Op. cit. 6 (BAN, et. al. 2002; Puckett, 2005).
- 12 Californians Against Waste et al., *Poison PCs and Toxic TVs : California's Biggest Environmental Crisis That You've Never Heard Of* (Sacramento, CA: Californians Against Waste Foundation, 2001). <http://www.svtc.org/cleancc/pubs/poisonpc.htm>, last accessed 9/15/06. Silicon Valley Toxics Coalition, "System Error: A Resource for Student Activism on Environmental, Labor, and Human Rights Problems Associated with the High-Tech Industry," (San Jose: SVTC, 2006). [http://www.svtc.org/cleancc/pubs/system\\_error\\_2006.pdf](http://www.svtc.org/cleancc/pubs/system_error_2006.pdf), last accessed 9/21/06.
- 13 These TVs and monitors use Cathode Ray Tubes (CRTs). Californians Against Waste et al., *Poison Pcs and Toxic Tvs : California's Biggest Environmental Crisis That You've Never Heard Of*.
- 14 United States Agency for Toxic Substances and Disease Registry, *Toxicological Profile for Lead : Draft* (Atlanta, Ga.: U.S. Dept. of Health and Human Services Public Health Service Agency for Toxic Substances and Disease Registry, 2005).
- 15 Quotations from prisoners B, D, K describe these practices more extensively later in this report.
- 16 Quotations are taken from letters and affidavits collected by Silicon Valley Toxics Coalition.
- 17 United States White House Task Force on Recycling, "Stepping into the Winner's Circle: Federal Prison Industries," *Closing the Circle News*, Spring 2001. <http://www.ofee.gov/ctc/spring01.pdf>, last accessed 9/23/06.
- 18 UNICOR, *Annual Report, Fiscal Year 2005*, p6.
- 19 Bruce Geiselman, "Electronics Recycler's Use of Prison Labor Makes Waves," *Waste News*, 2/1/02. <http://www.wastenews.com>.
- 20 Federal Electronics Challenge, "Federal Facilities Recycling of Electronic Equipment: Options Available to Federal Facilities," 05/16/2006, [http://www.federalelectronicschallenge.net/resources/docs/recycling\\_5.pdf](http://www.federalelectronicschallenge.net/resources/docs/recycling_5.pdf), last accessed 9/21/06.
- 21 Bureau of Prisons, *Report to the Office of Special Counsel*, 6/13/05, p19. [http://www.peer.org/docs/ca/05\\_24\\_8\\_prisonltr.pdf](http://www.peer.org/docs/ca/05_24_8_prisonltr.pdf), last accessed 9/18/06.
- 22 Ibid.
- 23 "Electronics Recycler's Use of Prison Labor Makes Waves," Bruce Geiselman, 2/1/02, *Waste News*, <http://www.wastenews.com>, last accessed 9/21/06 and Perry, Tekla S., "Recycling Behind Bars," June 2005, *IEEE Spectrum*,

- <http://www.spectrum.ieee.org/jun05/1230>, last accessed 9/21/06.
- 24 Sheila Davis and Ted Smith, "Corporate Strategies for Electronic Recycling: A Tale of Two Systems," (San Jose: Silicon Valley Toxics Coalition and the Computer TakeBack Campaign, 2003).  
[http://www.svtc.org/cleance/pubs/prison\\_final.pdf](http://www.svtc.org/cleance/pubs/prison_final.pdf)
- 25 Ibid.
- 26 Laurie J. Flynn, "Dell Stops Hiring Prisoners For Its Recycling Program," *New York Times*, 7/4/03.
- 27 Public Employees for Environmental Responsibility (PEER), "Computer Recycling Exposes Prison Staff and Inmates to Toxics," 3/7/05.  
[http://www.peer.org/news/news\\_id.php?row\\_id=490](http://www.peer.org/news/news_id.php?row_id=490), last accessed 9/21/06.
- 28 Op. cit. 7 (BOP 6/05, PEER 8/05)
- 29 Arkansas Department of Environmental Quality, "ADEQ Sponsoring Recycling of E-Scrap," 8/22/05.  
[http://www.adeq.state.ar.us/ftproot/Pub/pa/News\\_Releases/2005-08-22\\_ADEQ\\_Sponsoring\\_Recycling\\_of\\_E-Scrap.mht](http://www.adeq.state.ar.us/ftproot/Pub/pa/News_Releases/2005-08-22_ADEQ_Sponsoring_Recycling_of_E-Scrap.mht), last accessed 9/23/06.
- 30 Office of Special Counsel, summary case file #DI-04-2815, 4/3/06, p14.  
[http://www.peer.org/docs/osc/06\\_5\\_4\\_smith\\_letter.pdf](http://www.peer.org/docs/osc/06_5_4_smith_letter.pdf), last accessed 4/06.
- 31 PEER, "Justice Probe Of Prison Computer Recycling Operations," 5/15/06,  
[http://www.peer.org/news/news\\_id.php?row\\_id=687](http://www.peer.org/news/news_id.php?row_id=687), last accessed 9/21/06.
- 32 Op cit. 3 (OSC 9/06).
- 33 Leroy Smith, testimony in Leroy Smith vs. Department of Justice, Merit Systems Protection Board hearing, 7/15/05, p167-8.
- 34 Richard Luna, testimony in Leroy Smith vs. Department of Justice, MSPB hearing, 7/12/05, p133.
- 35 *ibid.*, p131.
- 36 Prisoner B and Prisoner K, affidavits.
- 37 Prisoner C, affidavit.
- 38 Bureau of Prisons report to the Office of Special Counsel, 6/13/05, p7, available at [http://www.peer.org/docs/ca/05\\_24\\_8\\_prisonltr.pdf](http://www.peer.org/docs/ca/05_24_8_prisonltr.pdf), last accessed 9/18/06.
- 39 *Ibid.*, p8.
- 40 Leroy Smith, letter to the Office of Special Counsel, response to the BOP report, 10/27/05, p14.
- 41 Abdul Hamid Beig, "Summary of Observations at UNICOR/Federal BOP Atwater," Department of Toxic Substances Control, California Environmental Protection Agency, 6/23/03.
- 42 Mary Dryovage, attorney for Leroy Smith, in Leroy Smith vs. Department of Justice, MSPB hearing, 7/29/05 p134.
- 43 PEER, "Attorney General Investigates Prison Computer Recycling," 3/31/05.  
[http://www.peer.org/news/news\\_id.php?row\\_id=503](http://www.peer.org/news/news_id.php?row_id=503), last accessed 10/2/06.
- 44 PEER, "Computer Recycling Exposes Prison Staff and Inmates to Toxics: Prison Industry Safety Concerns Censored from OSHA Investigation", 3/7/05.  
[http://www.peer.org/news/news\\_id.php?row\\_id=490](http://www.peer.org/news/news_id.php?row_id=490), last accessed 9/21/06. See also Phil Rodriguez, memorandum for Paul M. Schultz, Atwater Warden, 2/13/05.  
[http://www.peer.org/docs/ca/2005\\_7\\_3\\_rodriguez\\_memo.pdf](http://www.peer.org/docs/ca/2005_7_3_rodriguez_memo.pdf), last accessed 9/21/06.
- 45 OSC, "Introduction to the OSC."  
<http://www.osc.gov/intro.htm>, last accessed 9/29/06.
- 46 OSC, "Scott J. Bloch: Special Counsel."  
<http://www.osc.gov/bloch.htm>, last accessed 9/29/06.
- 47 Op. Cit. 30 (OSC 4/06).
- 48 *Ibid.*, p13 and 14.
- 49 Public Employees for Environmental Responsibility, "Federal Prisons Admit Toxic Exposure of Staff & Inmates: Discipline of Officials Promised for Ignoring Computer Recycling Safety Warnings", 8/24/05.  
[http://www.peer.org/news/news\\_id.php?row\\_id=580](http://www.peer.org/news/news_id.php?row_id=580), last accessed 9/21/06.
- 50 Op. Cit. 4 (Dryovage and Ruch letter to Fine, 4/06).
- 51 Shogren, Elizabeth. "Prison Work Recycling Computers Poses Health Risks," National Public Radio, 4/8/06. <http://www.npr.org/templates/story/story.php?storyId=5331970>, last accessed 9/13/06.
- Zernike, Kate. "Report Faults Prison Bureau on Chemicals," *New York Times*, 4/5/06.  
<http://www.nytimes.com> (registration required), last accessed 9/13/06.
- 52 Federal Prison Industries, *Annual Report, Fiscal Year 1960*, p1.
- 53 Federal Prison Industries, *Annual Report, Fiscal Year 1945*.
- 54 Op. Cit. 52 (FPI 1960), p3.
- 55 Federal Prison Industries, *Annual Report, Fiscal Year 1968*.

- 56 Federal Prison Industries, *Annual Report, Fiscal Year 1975*, p2 and 6-7.
- 57 UNICOR, *Factories with Fences: The History of Federal Prison Industries* (May 1996), p29.
- 58 Federal Prison Industries, *Annual Report, Fiscal Years 1970* (p3) and *1979* (p3).
- 59 UNICOR, *Annual Report, Fiscal Year 1989*, p4.
- 60 UNICOR, *Annual Report, Fiscal Year 1994*, p18.
- 61 Op. Cit. 20 (Federal Electronics Challenge, 5/06).
- 62 UNICOR, *Annual Report, Fiscal Year 2005*, p6 and 23.
- 63 Paul W. Keve, *Prisons and the American Conscience: A History of U.S. Federal Corrections*, Carbondale: Southern Illinois University Press, 1995.
- 64 Ibid., p166.
- 65 Ibid.
- 66 UNICOR, *Annual Report, Fiscal Year 1984*, p6.
- 67 For more background, see FPI's Annual Reports from the mid-to-late 1970s, starting with the Industrial Designers Society of America's survey of FPI, sponsored by the National Endowment for the Arts, as described in FPI's *Annual Report, Fiscal Year 1975*, p2.
- 68 UNICOR, *Annual Report, Fiscal Year 1993*, p3.
- 69 UNICOR, *Annual Reports, Fiscal Years 1980* (p8) and *1996* (p67).
- 70 UNICOR, *Annual Reports, Fiscal Years 1975* (p1, 7) and *2000* (p36).
- 71 UNICOR, *Annual Reports, Fiscal Years 1982* (p7) and *1998* (p7). See also "Marketing the Product and Selling the Program: UNICOR Since 1980", [http://www.UNICOR.gov/about/organization/history/UNICOR\\_1980.cfm](http://www.UNICOR.gov/about/organization/history/UNICOR_1980.cfm), last accessed 6/1/05.
- 72 Silja J. A. Talvi, "The New Plantation," *The Gadflyer*, 7/7/04. <http://gadflyer.com/articles/?ArticleID=158>, last accessed 9/12/06.
- 73 Bureau of Justice Statistics, "Prison Statistics," <http://www.ojp.usdoj.gov/bjs/prisons.htm> last accessed 9/29/06.
- 74 Op. cit. 60 (UNICOR Annual Report 1994).
- 75 "Language enacted in the FY02 and FY03 Defense Authorization bills, the FY04 Consolidated Appropriations Act, and the FY05 Omnibus Appropriations Act provided partial interim relief from FPI's monopoly by allowing federal agencies to decide how to best meet their procurement needs by examining existing marketplace opportunities and purchasing products on a competitive basis." U.S. Chamber of Commerce, statement on "Federal Prison Industries Contracting," prepared for the House Committee on the Judiciary, Subcommittee on Crime, Terrorism, and Homeland Security, 7/1/05, downloadable at <http://www.uschamber.com/issues/index/govt-contracting/fpi.htm>, last accessed 9/23/06. For reporting on the aforementioned spending bills, see *Government Executive*, <http://www.govexec.com>, particularly articles by Peckenpaugh (12/19 and 21/01), Glover (4/12/04), and Gruber (7/15/05).
- 76 UNICOR, *Annual Report, Fiscal Year 1998*, p13.
- 77 FPI, *Annual Report, Fiscal Year 1961*, p6-8.
- 78 FPI, *Annual Report, Fiscal Year 1972*, p9.
- 79 Basel Action Network (BAN) et al., *Exporting Harm: The High-Tech Trashing of Asia*. <http://www.svtc.org/cleancec/pubs/techno-trash.pdf>.
- 80 U.S. Constitution, , [http://www.archives.gov/national-archives-experience/charters/constitution\\_amendments\\_11-27.html](http://www.archives.gov/national-archives-experience/charters/constitution_amendments_11-27.html), last accessed September 23, 2006.
- 81 James V Bennett. "Lesson #6: Prison Industries," in *United States Prison Service Study Course*, 1936, p1.
- 82 UNICOR, *Annual Report, Fiscal Year 1990*, p2.
- 83 Ibid., p5.
- 84 United States Senate Committee on Governmental Affairs, 2004, "Amending The Office Of Federal Procurement Policy Act To Establish a Governmentwide Policy Requiring Competition in Certain Executive Agency Procurements, and for Other Purposes", 11/18/04. <http://thomas.loc.gov/cgi-bin/cpquery/T?&report=sr415&dbname=108> &, last accessed 9/15/06.
- 85 Association of Federal Defense Attorneys, "Counseling Your Client To Do Federal Time: Key BOP Policies / Procedures, And Advice From Former Federal Inmates", <http://www.afda.org/afda/news/counseling-clients.pdf>, last accessed 9/15/06.
- 86 William Quigley, "Prison Work, Wages, and Catholic Social Thought: Justice Demands Decent Work for Decent Wages, Even for Prisoners", *Santa Clara Law Review*, 2004, Vol. 44, p. 1159, <http://law.loyno.edu/~quigley/prisonwork-wages.pdf>, last accessed 9/15/06.
- 87 UNICOR, *Annual Report, Fiscal Year 2000*, p11.
- 88 UNICOR, *Annual Report, Fiscal Year 2000*, p11.
- 89 UNICOR, *Annual Report, Fiscal Year 1997*, p5.

- 90 Dr. Gary Martin, testimony to “Prison Industry Programs: Effects on Inmates, Law-Abiding Workers, and Business,” hearing of the Subcommittee on Oversight and Investigations of the House Committee on Education and the Workforce, 8/5/98. <http://commdocs.house.gov/committees/edu/hedo&rsi5-139.000/hedo&rsi5-139.htm>, last accessed 9/23/06.
- 91 Op. Cit. 79 (BAN, 2002)
- 92 For a list of definitions related to environmental justice, see the Coalition Against Environmental Racism, “Environmental Justice Definitions,” [http://gladstone.uoregon.edu/~caer/ej\\_definitions.html](http://gladstone.uoregon.edu/~caer/ej_definitions.html), last accessed 9/21/06.
- 93 Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, 2/11/94. <http://www.epa.gov/federalregister/eo/eo12898.htm>, last accessed 8/13/06.
- 94 This timeline draws from the “Environmental Justice Timeline – Milestones” prepared by the Environmental Justice Resource Center for the Second National People of Color Environmental Leadership Summit.
- 95 United Church of Christ Commission for Racial Justice, *Toxic Wastes and Race in the United States: A National Report on the Racial and Socioeconomic Characteristics of Communities with Hazardous Wastes Sites* (New York: United Church of Christ, 1987).
- 96 Cody Sisco, “Building a Critical Resistance,” *WireTap*, 2/26/01, <http://www.alternet.org/wiretap/10517/>, last accessed 9/21/06.
- 97 Chris Thompson, “Biting the Hand That Poisoned Them,” *East Bay Express*, 9/7/05, <http://www.eastbayexpress.com/Issues/2005-09-07/news/cityofwarts.html>, last accessed 9/21/06.
- 98 Adrienne Maree Brown, “Jail Spin: An interview with activists at the Prison Moratorium Project,” *Grist Magazine*, 6/21/05, <http://www.grist.org/news/maindish/2005/06/21/brown-prison>, last accessed 9/21/06.
- 99 First National People of Color Environmental Leadership Summit. “Principles of Environmental Justice,” adopted 10/27/91. <http://www.ejrc.cau.edu/princej.html>, last accessed 9/20/06.
- 100 “Federal Agency Safety and Health Programs With the Bureau of Prisons, U.S. Department of Justice”, directive FAP 01-00-002 - FAP 1.2A, Occupational Safety & Health Administration. [http://www.osha.gov/pls/oshaweb/owadisp.show\\_document?p\\_table=DIRECTIVES&p\\_id=1678](http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=DIRECTIVES&p_id=1678), last accessed 8/22/06.
- 101 See, for instance, “Technical Assistance—Fair Labor Standards Act,” Division of Human Resources, Colorado Department of Personnel and Administration, 11/05. <http://www.colorado.gov/dpa/dhr/comp/docs/flsa.pdf>, last accessed 9/23/06.
- 102 Op. cit. 99 (Principles of Environmental Justice, 1991).
- 103 John Midgley, “Prison Litigation 1950-2000,” in *Prison Nation : The Warehousing of America’s Poor*, Tara Herivel and Paul Wright, eds., New York ; London: Routledge, 2003.
- 104 Op. Cit. 99 (“Principles of Environmental Justice,” 1991).
- 105 Federal Bureau of Prisons, “Inmate Breakdown,” *Quick Facts about the BOP*, 8/26/06. <http://www.bop.gov/news/quick.jsp>, last accessed 9/21/06.
- 106 Electronic Product Environmental Assessment Tool, “Welcome to EPEAT.” <http://www.epeat.net>, last accessed 9/21/06.
- 107 “Did EPEAT consider a criterion prohibiting the use of prison labor in recycling programs?”, EPEAT Frequently Asked Questions, <http://www.epeat.net/FAQ.aspx>, last accessed September 23, 2006.
- 108 U.S. Environmental Protection Agency, *Plug-in to eCycling: Guidelines for Materials Management*, 5/04. <http://www.epa.gov/epaoswer/osw/consERVE/plugin/pdf/guide.pdf>, last accessed 9/21/06.
- 109 UNICOR, *Annual Report, Fiscal Year 1997*, p15.
- 110 Op. Cit. 107 (EPEAT FAQ).
- 111 PEER press conference, 9/7/06.
- 112 Op. Cit. 78 (UNICOR Annual Report 1972).
- 113 Op. Cit. 3 (OSC 9/06).
- 114 *The Electronics Recycler’s Pledge of True Stewardship*, Basel Action Network. <http://www.ban.org/pledge1.html>, last accessed 8/22/05.
- 115 Global Investment Recovery, Inc. “Environmental Policy,” 10/10/03. <http://www.girpm.com/environment/enviropolicy.asp>, last accessed 9/21/06.
- 116 UNICOR. “Recycling Facts,” <http://www.UNICOR.gov/recycling/facts.cfm>, last accessed 9/21/06.
- 117 UNICOR Recycling, “Customer Certification and Letter of Assurance,” [http://www.UNICOR.gov/information/publications/pdfs/recycling/vendor\\_registration\\_packet.pdf](http://www.UNICOR.gov/information/publications/pdfs/recycling/vendor_registration_packet.pdf), last accessed 9/14/06.
- 118 Op. Cit 6 (BAN, 2002; Puckett, 2005).
- 119 Op. Cit. 24 (Davis and Smith, 2003).

- 120 Ibid. and reports from prisoner workers.
- 121 These observations were made after a September 2004 inspection Maryellen Thomas, Assistant Director, Health Services Division, Bureau of Prisons memo to Paul Schultz, Warden, USP Atwater. Exhibit J in Office of Special Counsel report, 4/3/06, page 4.
- 122 UNICOR, "Stewards of the Environment." <http://www.UNICOR.gov/recycling/stewards.cfm>, last accessed 9/23/06.
- 123 Joseph Aragon, testimony in "Federal Prison Industries: Proposed Military Clothing Expansion: Assessing Existing Protections for Workers, Business, and FPI's Federal Agency 'Customers'", hearing of the Subcommittee on Oversight and Investigations of the House Committee on Education and the Workforce, 10/5/00, <http://commdocs.house.gov/committees/edu/hedo&ri6-133.000/hedo&ri6-133.htm>, last accessed 9/23/06.
- 124 UNICOR, *Annual Report, Fiscal Year 1998*, p9.
- 125 U.S. General Accounting Office, "Government Corporations", December 1995, p 83.
- 126 UNICOR *Annual Report, Fiscal Year 1998*, "Note 9: Planned Construction."
- 127 Op. Cit. 90 (Martin testimony, 1998).
- 128 U.S. House Committee on the Judiciary, "Report on the Federal Prison Industries Competition in Contracting Act of 2006," report 109-591, 109th Congress, second session, p25. [http://thomas.loc.gov/cgi-bin/cpquery/?&dbname=cp109&sid=cp109O D42V&refer=&r n=hr591.109&ritem=&sel=TOC\\_139975&](http://thomas.loc.gov/cgi-bin/cpquery/?&dbname=cp109&sid=cp109O D42V&refer=&r n=hr591.109&ritem=&sel=TOC_139975&), last accessed 9/30/06.
- 129 UNICOR, *Annual Report, Fiscal Year 1998*, p15.
- 130 Elizabeth Grossman. "Toxic Recycling," *The Nation*, 11/21/05.
- 131 This is based on limited phone interviews by Silicon Valley Toxics Coalition. In some cases, UNICOR bids may be more expensive, or clients may choose to go with the more expensive private sector bids, citing other factors.
- 132 U.S. EPA, "First Contracts Issued for Environmentally Responsible Computer Disposal throughout Federal Government," EPA, 12/29/04. <http://yosemite.epa.gov/opa/admpress.nsf/b1ab9f485b098972852562e7004dc686/1f4b1e4878c5b06085256f79006fcc7b!OpenDocument>, last accessed 9/8/05.
- 133 Information about the READ program is available at <http://www.epa.gov/oam/read/index.htm>, last accessed September 21, 2006.
- 134 Grossman, *High Tech Trash : Digital Devices, Hidden Toxics, and Human Health*, 237-8, 247.
- 135 Op. Cit. 132, (U.S. EPA 12/04).
- 136 Jenny Mandel, "SBA: Federal Prison Industries Not Small for Services," *Government Executive*, 8/4/06, <http://www.govexec.com/dailyfed/0806/081406m1.htm>, last accessed 9/23/06.
- 137 Small Business Administration, Office of Government Contracting, Area 2. Size Determination Case no: 2-2005-23&24, Feb. 3, 2005.
- 138 Small Business Administration, Office of Government Contracting, Area 2. Size Determination Case no: 2-2005-23&24, Feb. 3, 2005.
- 139 Op. Cit. 136, (Mandel 2006).
- 140 Interview with Ted Smith, Silicon Valley Toxics Coalition, 2006.
- 141 U.S. Chamber of Commerce, statement on "Federal Prison Industries Contracting," prepared for the House Committee on the Judiciary, Subcommittee on Crime, Terrorism, and Homeland Security. 7/1/05. <http://www.uschamber.com/issues/index/govt-contracting/fpi.htm>, last accessed 9/23/06.
- 142 Associated Press, "Environmentalists at Vegas Trade Show Protest Dell's Recycling," *Reno Gazette-Journal*, 1/9/03. [http://www.rgj.com/news/stories/html/2003/01/09/31622.php?sp1=rgj&sp2=News&sp3=Local+News](http://www.rgj.com/news/stories/html/2003/01/09/31622.php?sp1=rgj&sp2=News&sp3=Local+News;), last accessed 9/29/06.
- 143 Op. Cit. 24 (Davis and Smith, 2003).
- 144 Laura J. Flynn, "Dell Stops Using Prison Workers," *New York Times*, 7/4/03. [http://www.svtc.org/media/articles/2003/dell\\_stops\\_nyt.htm](http://www.svtc.org/media/articles/2003/dell_stops_nyt.htm).
- 145 Elizabeth Grossman. "Toxic Recycling," *The Nation*, 11/21/05.
- 146 Miguel Bustillo., "Prison-Based Recycling Effort to End," *Los Angeles Times*, 8/6/03.. [http://www.computertakeback.com/news\\_and\\_resources/archives/ca\\_stops\\_prisonerlabor.cfm](http://www.computertakeback.com/news_and_resources/archives/ca_stops_prisonerlabor.cfm), last accessed 8/14/06.
- 147 Ibid.
- 148 UNICOR, "Recycling Business Group" video, <http://www.UNICOR.gov/recycling/>, last accessed June 2006.
- 149 UNICOR, "Respecting the Environment Is Just Good Business," [http://www.UNICOR.gov/about/environmental\\_sensitivity/](http://www.UNICOR.gov/about/environmental_sensitivity/), last accessed 9/19/06.
- 150 UNICOR, *Annual Report, Fiscal Year 2005*, p2.
- 151 UNICOR, *Annual Report, Fiscal Year 1998*, p14.
- 152 UNICOR, *Annual Report Fiscal Year 1999*, p9.

- 153 Op. Cit. 3 (OSC 9/06).
- 154 UNICOR's videos on its "Recycling Business Group" and "Demanufacturing and Reconditioning Process" are available on its website at <http://www.UNICOR.gov/recycling/>, last accessed June 2006. All claims are drawn from these videos.
- 155 The BOP report is available from the website of Public Employees for Environmental Responsibility at [http://www.peer.org/docs/ca/05\\_24\\_8\\_prisonl-tr.pdf](http://www.peer.org/docs/ca/05_24_8_prisonl-tr.pdf), last accessed 9/19/06.
- 156 Scott Bloch, "OSC Names Recipient of 2006 Public Servant Award," 9/7/06, [http://www.osc.gov/documents/press/2006/pr06\\_16.htm](http://www.osc.gov/documents/press/2006/pr06_16.htm), last accessed 9/19/06.
- 157 Leroy Smith, "Beacon of False Hope," 9/7/06, [http://www.peer.org/docs/osc/06\\_7\\_9\\_lsmith\\_smt.pdf](http://www.peer.org/docs/osc/06_7_9_lsmith_smt.pdf), last accessed 9/19/06.
- 158 Op. Cit. 154 (UNICOR video).
- 159 Prisoner D affidavit. For more quotes from prisoners working in UNICOR factories, see Silicon Valley Toxics Coalition's September 2006 report, "Toxic Sweatshops."
- 160 Op. Cit. 154 (UNICOR video).
- 161 Op. Cit. 154 (UNICOR video).
- 162 Interview with author Aaron Shuman, 2006.
- 163 Public Employees for Environmental Responsibility, "Federal Prisons Admit Toxic Exposure of Staff & Inmates: Discipline of Officials Promised for Ignoring Computer Recycling Safety Warnings", 8/24/05. [http://www.peer.org/news/news\\_id.php?row\\_id=580](http://www.peer.org/news/news_id.php?row_id=580), last accessed 9/19/06.
- 164 Op. Cit. 154 (UNICOR video).
- 165 Op. Cit. 154 (UNICOR video).
- 166 Jeff Erlich, "Competing with Convicts," *Government Executive Magazine*, 6/1/97, [http://www.govexec.com/story\\_page.cfm?articleid=15579](http://www.govexec.com/story_page.cfm?articleid=15579), last accessed 4/21/06.
- 167 Joseph Aragon, testimony in "Federal Prison Industries: Proposed Military Clothing Expansion: Assessing Existing Protections for Workers, Business, and FPI's Federal Agency 'Customers'", hearing of the Subcommittee on Oversight and Investigations of the House of Committee on Education and the Workforce, 10/5/00, <http://commdocs.house.gov/committees/edu/hedo&i6-133.000/hedo&i6-133.htm>, last accessed 9/23/06.
- 168 For more information, see SVTC's January 2006 report, "System Error," downloadable at [http://www.svtc.org/cleancc/pubs/system\\_error\\_2006.pdf](http://www.svtc.org/cleancc/pubs/system_error_2006.pdf)."

