

SAFE (Serving Alabama's Future Environment).

Complainants,

-VS-

Alabama Department of Environmental Management.

Respondent.

Complaint of Discrimination

1. This is a complaint of discrimination on account of race and poverty on behalf of people of African- American ancestry and of low income who will be disproportionately harmed as a consequence of the action of the Respondent Department in authorizing the operation of a chemical weapons incinerator at the United States Army's Anniston Army Depot near Anniston Alabama. This proposed facility poses a disproportionate risk of harm to human health among people of color and low income living nearby. This discrimination is contrary to the Equal Protection Clause of the Fourteenth Amendment to the United States Constitution, Title VI of the Civil Rights Act of 1964, Presidential Executive Order 12898 on Environmental Justice and EPA Regulations providing for nondiscrimination in programs receiving federal financial assistance, 40 C.F.R. Part 7B. Complainants ask that this matter be referred for investigation to the EPA Office of Civil Rights and that compliance be achieved through the denial of the

subject facility permits or that the discriminatory impact be avoided by requiring the use of an available alternative treatment technology which poses less risk of harm.

II. JURISDICTION

2. The Agency has jurisdiction to receive, investigate and remedy complaints of discrimination on account of race pursuant to 40 C.F.R. Section 7.120 and 7.130. Executive Order 12898 imposes a duty on the Agency to identify and address disproportionately high and adverse human health and environmental effects of its programs, policies and activities on minority populations and low-income populations.

III. PARTIES

3. SAFE (Serving Alabama's Future Environment) is a not-for-profit citizens organization which seeks to protect human health and the environment in the Anniston, Alabama area. SAFE has actively opposed plans by the United States Army to construct and operate an incinerator at the Anniston Army Depot for the purpose of burning stockpiled chemical warfare agents and munitions on the grounds that incineration poses unacceptably high risks to human health and the environment. SAFE has advocated the use of safer alternative technologies for treatment of these agents and munitions. [REDACTED] lives in Jacksonville, Alabama, about thirteen miles east of the proposed incinerator. She is a person of African-American ancestry and of low-income. She has authorized SAFE to represent her interests in this matter. [REDACTED] resides in Fort McClellan, Alabama, approximately nine miles east of the proposed incinerator. She is a person of African-American ancestry and of low-income. She has authorized

SAFE to represent her interests in this matter.

The Sierra Club is a national nonprofit organization of over 525,000 members dedicated to exploring, enjoying, and protecting the wild places of the earth; to practicing and promoting the responsible use of the earth's ecosystems and resources; to educating and enlisting humanity to protect and restore the quality of the natural and human environment; and to using all lawful means to carry out these objectives. The Alabama Chapter of the Sierra Club has over 2,200 members, including African American members and members in Anniston. The Sierra Club's concerns encompass environmental justice and equality.

The Chemical Weapons Working Group (CWWG) is a international coalition of citizens' organizations and individuals in the U.S. and Pacific advocating for safe disposal of the chemical weapons stored in their communities. The CWWG has members at all nine U.S. chemical weapon stockpile sites, including Anniston, Alabama. The CWWG is united in opposing incineration and advocating safer disposal methods.

4. The Alabama Department of Environmental Management (ADEM) is an agency of the State of Alabama which is responsible for, among other duties, administering the federally approved and federally assisted program to implement the federal Resource Conservation and Recovery Act (RCRA) including the licensing and regulation of facilities for the treatment, storage and disposal of hazardous wastes. As part of this federally assisted RCRA program the ADEM issued Hazardous Waste Facility Permit AL3 210 020 027 on June 19, 1997, to the United States Army, Anniston Army Depot for the Anniston Chemical Demilitarization Facility for the incineration of chemical weapons agents and

munitions.

IV. COMPLAINT OF DISCRIMINATION

5. The operation of the proposed chemical weapons incinerator at the Anniston Army Depot as authorized by the Respondent Alabama Department of Environmental Management (ADEM) will disproportionately and adversely harm people of African- American ancestry and low income living near the facility.

6. Contrary to law, the actions of the Respondent Alabama Department of Environmental Management (ADEM) have the effect of denying service, aid or other benefit to persons on the basis of race and income; have the effect of restricting the enjoyment of advantage and privilege enjoyed by others on the basis of race and income and by the use of criteria or methods of administering its program has the effect of subjecting persons to discrimination because of their race or income. In addition the Respondent ADEM has approved the selection of a site or location for the proposed incinerator facility which has the purpose or effect of discrimination because of race or income. Finally, upon information and belief the State of Alabama has long practiced official racial discrimination and, therefore, has a duty to take affirmative action to remedy the racially disparate impact of the permitting of this facility.

7. According to the U.S. Army's "Chemical Stockpile Disposal Program Final Programmatic Environmental Impact Statement," January 1988, Table 3.2.8, over 100,000 people live within 20 kilometers of the proposed Anniston incinerator. Within this distance of the facility lies the City of Anniston with a population of 26,623, 44% of whom are African-American most of whom are concentrated in

the predominately African-American west side nearest the proposed facility. According to the 1990 census Anniston has a disproportionate concentration of people of African-American ancestry, as compared to Calhoun County which is 19% African-American, the State of Alabama which is 25% African-American and the national average of only 12% African-American. 24% of Anniston's population live below the poverty level, a rate which is almost twice the national average of 13.2%.

Closer to the proposed incinerator, to the southeast, is the community of Hobson City, incorporated by ex-slaves after the Civil War. 97% of Hobson City's population of 794 people are African-American.

Fifteen miles to the south of the Anniston Army Depot is the city of Talledega with a 41% African-American population.

8. The Anniston Chemical weapons incinerator will routinely release low levels of unburned chemical warfare agents, heavy metals and other toxic substances which harm human health. Notable among these routine releases are the powerfully toxic family of dioxin-like substances which are known to cause harm to humans including cancers, reproductive damage, neurological damage and birth defects. The risk assessment for the Army's Utah chemical weapons incinerator disclosed that routine operations will expose particularly vulnerable breast-feeding infants living near the facility to risks of cancer exceeding the EPA's acceptable risk standard. Since the draft permit has no emission limits for 2,3,7,8-Tetrachlorodibenzo-p-dioxin or its congeners, it cannot protect the health of (Anniston residents or) nursing infants. Since nursing infants in the African American and low income communities of Anniston and Calhoun County have

already been subjected to high background levels of pollution, PCB and other chemicals, additional contaminants from the incinerator stacks will cause additional cumulative and synergistic health effects on such communities.

9. In addition to the risk posed by the proposed incinerator, African-Americans and poor people living near the Anniston Army Depot have been disproportionately and adversely impacted by pollution from other industries and the U.S. military. Respondent ADEM has failed to consider such cumulative and synergistic health effects of incinerator emissions on a community which has already had high levels of exposure. The African American and poor population residing near the ANAD incinerator site and down wind have been exposed to many other pollutants over their life times in the area. The Anniston Army Depot alone reported 548,073 pounds of toxic releases in its 1994 baseline data, which made ANAD number two in the nation for releases at Army facilities. Among the top chemicals released at Army installations were zinc compounds, Hexachloroethane, Methyl ethyl ketone, 1,1,1-Trichloroethane, Trichloroethylene, Dichloromethane, Ethylene glycol, Phosphoric acid, Chlorine, and Ethylbenzene.

The industrial west side of Anniston, where most African Americans reside due to historic segregation practices, includes other polluting companies such as various iron plants that operated from the 1880s to the 1960s and 1970s, chemical plants such as Swann Chemical established during World War I, Monsanto Company since 1939 (re-named Solucia in 1997) and Defense Research Corp. Methyl Bromide is sprayed at the Woerner Turf sod farm east of Anniston. Also, cotton farming, common in the area, is the most insecticide

intensive crop. During the spring and summer months, open spraying by truck of mosquito insecticides occurs throughout Calhoun County. Synergistic and cumulative effects of these pollutants, chemicals, pesticides, insecticides and herbicides combined with the agent and other pollutants emitted from the incinerator will deleteriously effect the health of the African American and poor population of the area.

ADEM fails to consider how additional exposures will impact low income people who may not have access to adequate health care or nutrition.

Unofficial health studies initiated by community residents in Cobbtown and Sweet Valley show the community is already experiencing high incidences of reproductive problems, skin rashes, cancers and respiratory problems.

Numerous accidents, fires, explosions, nerve agent leaks, and other mishaps at the Army's existing chemical weapons incinerators suggest that such an event at the Anniston facility may release toxic nerve or mustard agent causing death or severe injury to nearby populations. African-Americans and people of low income are threatened with disproportionately high and adverse human health and environmental effects from the Respondent Department's action in authorizing the operation of the chemical weapons incinerator at the United States Army's Anniston Army Depot near Anniston Alabama.

Safer non-incineration alternatives are readily available to effectively destroy the chemical weapons arsenal stockpiled at the Army's Anniston Army Depot which would avoid exposing people of African-American ancestry and low income to the disproportionately high and adverse human health and environmental effects posed by the incinerator. Recently the Army announced

that seven non-incinerator alternative technologies for destroying chemical warfare agents have passed the initial evaluation process required by Congress as part of its directive to identify non-incineration alternative technologies.

Respondent ADEM's granting of this permit in effect denies surrounding communities the benefit of safer technologies which are being used in other communities. It also reinforces a pattern of discrimination by the U.S. Army in which lower income communities of color are being asked to accept chemical weapons incinerators, while other communities move forward with safer technologies. Chemical weapons sites, like other hazardous waste sites, are located predominantly in communities of color and low income. As the disposal program moves forward, a pattern of discrimination continues. The Army's first incinerator was built in the Pacific on Kalamia Island in an area of the world which has suffered a history of severe abuse from hazardous government activities. The second incinerator was built in Tooele, Utah, in a Mormon community which has also suffered a long history of similar government abuse. The next three sites scheduled for incinerator construction are Anniston, Alabama, Pine Bluff, Arkansas, and Hermiston, Oregon. Anniston and Pine Bluff both have high populations of African American residents and low income people. In Oregon, the incinerator is to be built on land protected by treaty with the Confederated Tribes of the Umatilla Indian Reservation.

Meanwhile, the Army has abandoned chemical weapons incineration plans in Maryland and Indiana in favor of safer technologies. Last year President Clinton vowed to make alternative technologies the "highest priority" in the disposal program, and Congress placed a moratorium on incinerator

construction in Kentucky and Colorado until safer technologies can be demonstrated. Safer technologies should be made equally available to all communities regardless of race, income, or national origin.

In addition, the Army's recent request for Respondent ADEM's permission to transport out of state non-stockpile chemical weapons to ANAD adds further insult to injury, and reinforces local fears that once an incinerator is built it will be used for years to come for toxic and chemical waste from across the country.

RELIEF

11. FOR THE FOREGOING REASONS Complainants ask that this matter be referred for investigation to the EPA Office of Civil Rights and that compliance be achieved through the denial of the subject facility permits or that the discriminatory impact be avoided by requiring the use of an available alternative treatment technology which poses less risk of harm.

Respectfully submitted,

December , 1997

Robert Guild (ms)
Robert Guild
314 Pall Mall
Columbia, South Carolina 29201
(803) 252-1419
ATTORNEY FOR COMPLAINANTS

The New York Times

NEW YORK, FRIDAY, FEBRUARY 7, 1997

\$1 beyond the regular New York Times

Chemical Neutralization Is Gaining in War on Poison Gas

By JAMES BROOKE

DENVER, Feb. 5 — When President Clinton challenged Congress on Tuesday to "at last begin to outlaw poison gas from this earth," viewers of the State of the Union address may have envisioned conveyor belts feeding nerve gas rockets into furnaces.

But in the brewing fight over lucrative contracts to destroy the world's chemical weapons, chemical neutralization is moving to the front over incineration. With or without the Senate's ratification of the Chemical Weapons Convention, the destruction of chemical weapons is likely to become a multibillion-dollar business around the world.

Even if the Senate does not ratify the treaty, the United States, Russia and China are moving to destroy their aging stocks of chemical weapons. The public's fear that poison might escape from incinerator smokestacks has pushed politicians in the direction of using chemical baths to neutralize the nerve agents.

In Utah, malfunctions at a \$650 million prototype incinerator have forced the Army to close the plant six times in the six months since it opened at the Desert Chemical Depot, which holds 42 percent of the nation's stockpile of chemical arms.

In Russia this month, American technicians for the Morrison Knudsen Corporation started surveying a site for a \$600 million chemical neutralization plant that, beginning in the year 2001, is to destroy half of Russia's 40,000-ton stockpile of chemical weapons.

Next week another American company with patented chemical neutralization technology will send one sales team to Moscow and another to Tokyo. The Japanese want help in finally destroying the chemical stocks they abandoned in China at the end of World War II.

"It has no chimney stacks," said Kenneth L. Adelman, who directed the Arms Control and Disarmament Agency in the Reagan Administration and is a board member of the parent company, Commodore Applied Technologies.

"It works, it's relatively cheap and it's portable, so you don't have to ship the bad stuff around the coun-

try," Mr. Adelman added. "Without chimney stacks, Russian consumers and residents don't get excited about the bad stuff in the air."

Americans have also proved to be resistant to the sight of chimney stacks at chemical weapons sites.

On Friday in Oregon, the state Environmental Quality Commission is to vote on issuing the Army a permit to build an incinerator at the Umatilla Chemical Depot.

"There is absolutely no need to build that incinerator when there are safer alternative technologies available to chemically neutralize the weapons," said Craig Williams, spokesman for the Chemical Weapons Working Group, a coalition of groups from the nation's eight communities where the Army maintains stockpiles of chemical weapons.

Indeed, citizen opposition to incinerators has become so great that Congress last year indefinitely banned the construction of incinerators at two sites, in Colorado and Kentucky. Congress also earmarked \$88 million to test eight alternative disposal technologies, virtually all using some form of chemical neutralization process.

Responding to strong opposition to incineration, the Army announced in December that it would build neutralization plants at two nerve agent storage sites, in Indiana and Maryland. With these moves and with the Congressional action, chemical weapons incinerators can now be built only at three munitions sites in the United States: Umatilla, Ore., Pine Bluff, Ark., and Anniston, Ala.

Over the next 20 years, the Government expects to spend about \$10 billion to destroy weapons at the eight chemical weapons depots and an additional \$17 billion on cleaning up 215 "non-stockpile" sites in 36 states — largely abandoned production plants and training grounds.

Worldwide, an additional \$50 billion could be spent by countries seeking to comply with the Chemical Weapons Convention, Mr. Williams estimates. The treaty, which has been signed by 161 countries and goes into effect on April 29, mandates the destruction of all chemical weapons within 10 years.

In recent months international vis-

itors have flocked to Tooele, Utah, where the first chemical weapons incinerator in the continental United States finally started last August, almost 20 years after the original designs were drawn up. In the last six months the incinerator has burned 11,471 sarin-filled M-55 rockets, about one-third of the depot's stocks. Over the last month it has destroyed 53 bulk containers, each filled with nearly a ton of sarin.

But the incinerator has had a series of minor malfunctions and has been accused of lax safety practices, made by three high-ranking employ-

Public opposition to incinerators spurs an interest in good alternatives.

ees who were dismissed from the project in the last two years.

"We see it as part of the normal process we go through when we shake down a facility," Marilyn Tischblin, the Army's spokesman for chemical demilitarization, said today about the shutdowns. Referring to environmentalists' accusations that nerve agent was twice released from the incinerator, she said, "There have been no releases from that facility."

In December, in response to the criticism, an Army safety team and a Utah regulatory board declared the incinerator safe. The United States Court of Appeals for the Tenth Circuit, in Denver, refused to grant an injunction to halt operations. But even if the incinerator operates until its scheduled termination date, 2003, it appears to be losing in the court of public opinion.

"People are stepping forward, saying there are alternatives," said Lisa Kirk Puchner, director of a new Utah group, Families Against Incinerator Risk. Noting that 300 people had joined the group since October, when it was formed, she added, "In

the event of a large nerve-agent release, the counties around here are not prepared."

"Chemical neutralization is a terrific idea," she continued, estimating that Utah's nerve agent stocks could be chemically neutralized for about \$75 million. "We don't want to be the only state in the Union that has an incinerator."

One convert is Maj. Gen. Gerald Watson, who built a nerve agent incinerator at an Army production plant near Denver in the 1970's and was commander of the Army Chemical Corps in the late 1980's. "We now have a really good alternative to incineration," he said today.

General Watson, now retired, is a business associate of Mr. Adelman. They are promoting a process, patented as SET, for solvated electron technology. The process, which involves a low temperature bath of sodium and anhydrous ammonia, has successfully destroyed M-55 rockets containing sarin, like those that have been burned in Tooele.

"It destroys the agent, destroys the explosives, destroys the rocket — and you can take the waste to a landfill," General Watson said. "And you avoid all the cost of incinerator pollution abatement equipment."

Chemical neutralization offers another advantage: the possibility of mobile laboratories traveling to far-flung stockpiles. In contrast, the construction of an expensive incinerator requires shipping weapons to a central site. In China, Russia and the United States, civil defense experts worry about aging chemical munitions — many built to have a shelf life of 20 years.

"The Russians are particularly sensitive after Chernobyl," Mr. Adelman said. "If I am a politician in Russia, I don't want chemical weapons going around on trains."

He was referring to the fire and explosions that occurred on April 26, 1986, at the Chernobyl nuclear power plant near Kiev, Ukraine, which was then part of the Soviet Union. The accident, the worst in the history of the nuclear power industry, left at least 31 people dead in the immediate aftermath, caused 135,000 people to be evacuated and spewed radioactive material over much of Europe.

For chemical weapons destruction

SEVEN INCINERATION ALTERNATIVES PASS FIRST TEST FOR ASSESSMENT

Seven alternatives to incineration for the destruction of assembled chemical weapons have passed threshold assessment criteria, and the companies proposing their use have until the end of the year to fill data gaps before the military determines which technologies move forward to demonstration.

The Army announced the names of the companies Oct. 7, and representatives from the companies will provide an overview of their technologies at a meeting of military officials, citizens, state and federal regulators and scientists this week. A DOD technical team and a citizens technical team together chose the technologies. The decision was based on criteria developed by the Dialogue on Assembled Chemical Weapons Assessment, a group comprised of representatives from the military, citizen groups near each of the nine chemical weapons stockpile sites and state and federal regulators. The technologies were chosen, primarily based on their stage of development — that they were ready for demonstration — and on their ability to offer a process to demilitarize whole munitions and not just the agent.

The effectiveness of the technologies will ultimately be evaluated by the Dialogue group, the military and the National Research Council.

A state source says seven technologies is about the number the dialogue group was expecting. The military is under a congressional mandate to evaluate at least two alternatives to incineration for assembled chemical weapons. Alternatives for bulk chemical agent disposal have already been identified.

A citizen source praised the announcement of the seven technologies as proof that incineration alternatives can be found, and on schedule. The chemical weapons incineration program is significantly behind schedule, is over budget and has faces numerous legal challenges from anti-incineration groups.

Each of the seven companies will receive a \$50,000 grant to address "data gaps" identified during the initial evaluation of their written proposals. At the beginning of 1998, a panel of experts, including Dialogue members, will evaluate the technologies against demonstration criteria that include tests of process efficacy, safety, protection of human health and the environment, and business factors such as cost and the companies' ability to meet the rapid demonstration time frame.

The highest-ranked companies will then demonstrate their proposed approaches during the summer of 1998. The demonstration results will again be evaluated, this time including in the equation, the potential for implementation. A final report to Congress is scheduled for December 1998.

The companies and technologies are as follows.

ARCHTECH of Chantilly, VA, would use reverse assembly to access the chemical agent. The agent, energetics, metal parts and dunnage would be treated through hydrolysis combined with humic acid and a strong base at 80 to 90 degrees Celsius. The dunnage would be shipped to a landfill.

AEA Technology Inc., of Bethel Park, PA, proposes to use a modified reverse assembly to reach the agent, which would then be treated through electrochemical oxidation using silver ions in nitric acid at 90 degrees Celsius. The energetics would be treated with the silver process. The metal parts would be treated via a high-pressure acid wash, thermal treatment and shipped to the Army's Rock Island Arsenal in Illinois. The dunnage would be shredded and treated with the silver process.

Burns and Roe Enterprises Inc., of Oradell, NJ, plans to use reverse assembly with minor modifications to access the agent. The agent, energetics and metal parts would all be treated with plasma arc in inert argon. The dunnage would be shredded and processed in plasma arc.

General Atomics of San Diego, CA, would use a modified reverse assembly and cryofracture to reach the agent, then use hydrolysis with a caustic and supercritical water oxidation to treat it. The energetics, metal parts and dunnage would be treated similarly, with the dunnage shredded and destroyed in supercritical water oxidation.

Lockheed Martin Advanced Environmental Systems Inc. of Albuquerque, NM, proposes to use a modified reverse assembly to access the agent, which would then be treated by hydrolysis with a caustic at 90 degrees Celsius, supercritical water oxidation and Eco Logic gas phase chemical reduction. The energetics would be treated similarly, while the metal parts and dunnage would be washed in caustic, treated in a thermal reactor and put through gas phase chemical reduction.

Parsons Infrastructure and Technology Group Inc., of Pasadena, CA, would use a modified reverse assembly to access the agent. The agent and energetics would be treated through hydrolysis with a caustic biotreatment. The metal parts and dunnage would be treated through thermal treatment.

Telodyne-Commodore of Huntsville, AL, would access the agent through fluid jet cutting, then remove the non-agent components of the munition and drain the agent. The agent itself and the energetics would be treated with a solvated electron process and chemical oxidation. The metal parts would be washed in a solvated electron process followed by oxidation to treat residues. Dunnage would be crushed or shredded, treated in a solvated electron process and shipped to a landfill.

Incineration opponents hail new attitude

By ANDY MEAD

HERALD-LEADER STAFF WRITER

RICHMOND — The long, often acrimonious struggle over getting rid of the chemical weapons stored in Madison County took a sharp turn toward cooperation yesterday.

The head of a new program to look for alternatives to burning the weapons was in town, talking about reaching out to people who think they were ignored when the Army decided to build an incinerator.

Listening to those people is the "first and most critical" part of his job, Michael Parker said.

And some who have been most critical of the Army seemed inclined to meet him halfway.

"I'm hoping we'll be on the same team," said Craig Williams of the Chemical Weapons Working Group, which has fought incinerators at Blue Grass Army Depot in Richmond and at other sites where the country's aging chemical weapons stockpile is stored.

The Army decided years ago that incineration was the only safe, practical way to get rid of the deadly weapons. Opponents say burning is too dangerous. Even if it worked right, they say, smokestacks would release small but potentially dangerous amounts of nerve agent.

The Army was prodded by Congress into finding alternative destruction methods for two sites where only bulk chemical agent is stored. But officials said those methods wouldn't work at sites where the agent was already in weapons. That's because the weapons contain explosives and propellants that complicate the

SEE WEAPONS, B4

WEAPONS: Incineration foes welcome open attitude

FROM PAGE B1

picture.

But last year Sen. Mitch McConnell, a Kentucky Republican, got \$40 million into the Defense Authorization Act for finding and demonstrating at least two alternatives for disposal.

The act also put incinerators at the Blue Grass Army Depot and the Pueblo Depot Activity in Colorado on hold until 180 days after Congress gets a report on how the demonstration worked.

Last month Parker, 51, was put in charge of the Assembled Weapon Assessment Program.

He declined yesterday to speculate on how long the program might take, but suggested it could last two to four years. It will involve some sort of pilot destruction facility, but Parker said it has not yet been determined whether that will be built at Blue Grass Army Depot or elsewhere.

The Army plans had called for starting construction on an incinerator at Richmond in 1998, with burning to last about 22 months

around the turn of the century. That schedule is now in limbo.

Parker met with state regulators, local officials, depot employees and the Kentucky Citizens' Chemical Demilitarization Advisory Commission.

He said he expected to be greeted with some skepticism because of years of distrust of Army officials, but said that "we will demonstrate in actions that this will be a full and open program."

Williams, the incineration opponent, said that's the kind of attitude

the Army should have demonstrated before it announced at a Richmond meeting 13 years ago that it planned to build an incinerator.

Williams said his group wants to work closely with Parker in the search for alternatives to incineration. The group hopes that whatever Parker comes up with can be used at all chemical-weapons sites.

At the same time, the Chemical Weapons Working Group is fighting to close one incinerator operating in the Utah desert and trying to stop construction of four others.

Lexington Herald-Leader

1-10-97

On Page B4

■ Activists will try in federal court today to close a chemical weapons incinerator in Utah.

■ Two groups plan a news conference near the Utah incinerator.

TECHNOLOGY DESCRIPTIONS FOR THE ASSEMBLED CHEMICAL WEAPONS ASSESSMENT PROGRAM

Offeror	Munitions Access	Agent Treatment	Energetics Treatment	Metal Parts Treatment	Dunnage Treatment
AEA Technology CH2M HILL	Modified reverse assembly (high-pressure wash, new rocket shearing)	Electrochemical oxidation using silver ions in nitric acid at 90°C (SILVER II)	Treated with SILVER II process	High-pressure acid wash, thermal treatment to 3X, shipped to Rock Island Arsenal (RIA)	Shredded and treated with SILVER II process
ARCTECH & ICF Kaiser, Inc.	Reverse assembly	Hydrolysis with a-HAX (humic acid and strong base, KOH) at 90°C	Hydrolysis with dilute a-HAX at 80°C	Hydrolysis with dilute a-HAX at 90°C	Hydrolysis with dilute a-HAX at 90°C, shipped to landfill. Metal parts to 10C for 5X
Burns and Roe Foster-Miller Startech	Minor modifications to reverse assembly	Plasma arc in inert argon	Plasma arc in inert argon	Plasma arc in inert argon	Shredded and processed in plasma arc
General Atomics	Modified reverse assembly, cryofracture	Hydrolysis with caustic, supercritical water oxidation (SCWO)	Hydrolysis with caustic, SCWO	Hydrolysis with caustic, thermal treatment to 5X	Shredded and destroyed in SCWO
Lockheed Martin SAIC Kvaerner John Brown Foster Wheeler Corporation Elf Eco Logic International El Dorado Engineering, Inc Aerjet General Corporation Illinois Institute of Technology Research	Modified reverse assembly (multiple lines, compact layout, new drain and wash)	Hydrolysis with caustic at 90°C, SCWO, Eco Logic gas phase chemical reduction (GPCR)	Hydrolysis with caustic, SCWO, GPCR	Washed in caustic, treated in thermal reactor to 5X, GPCR	Washed in caustic, treated in thermal reactor to 5X, GPCR
Parsons and Allied Signal	Modified reverse assembly (jet washout and cutting)	Hydrolysis with caustic biotreatment	Hydrolysis with caustic biotreatment	Thermal treatment to 5X	Thermal treatment to 5X
Teledyne Commodore Mason & Hanger Stone & Webster Southwest Research Institute University of Kentucky	Fluid jet cutting Remove, initiate fuzes and capture residues in SET Access and drain agent Wash energetics out in ammonia	Solvated electron process achieves 99.99999%+ destruction Chemical oxidation destroys Schedule 2 products	Solvated electron process achieves 99.99999%+ destruction Chemical oxidation destroys residual toxicity of product	Wash in SET followed by oxidation treats residues and heels to 3X. Shipped to RIA for government disposal	Crush or shred Charcoal, PPE, wood, fiberglass Treat in SET, shipped to landfill Destroys contamination on dunnage

* Offerors listed above in alphabetical order propose to apply these technologies to all munitions.

Army decides not to burn nerve agent at Newport

■ Next, the Defense Department must OK the alternative method that the military has recommended.

STAR 12-11-96 (B-1)

By George Stuterville
WASHINGTON BUREAU

WASHINGTON — A decision by the Army has nearly extinguished long-burning plans to incinerate tons of deadly VX nerve agent in Newport, Ind., state officials said Tuesday.

The recommendation came despite Army officials' long-held support of incineration as a safe and effective method of such disposal, and left environmentalists celebrating.

"If I lived in Indiana, I would be jubilant," said Craig Williams, leader of a Kentucky-based group that has protested incineration of chemical weapons.

The alternative method adopted, neutralization and mineralization, Williams added, is better than incineration because it is a closed system that does not expose nearby residents to toxic by-products.

Melvin J. Carraway, director of the State Emergency Management Agency, expressed relief at the Army's decision. It affects the disposal of more than 1,300 tons of lethal material stored at the Army munitions depot in Vermillion County near the Illinois line.

"We felt that the chances for incineration were slimmer and slimmer as time has passed. It became more and more obvious that the incineration question was to have a slow death," said Carraway, co-chairperson of the nine-member Indiana Citizens Advisory Commission.

The important thing is the Army's decision was

Disposal method

The Army has decided to destroy 1,300 tons of the deadly VX nerve agent stored at the Army munitions depot in Vermillion County near the Illinois line using neutralization and mineralization. Here's how the process works:

■ The 1-ton steel tanks that hold the syrupy VX are drained.

■ The VX is diluted and broken down chemically to produce a liquid.

■ That liquid is further diluted with water and mixed with oxygen.

■ When the water is evaporated, a waste is produced that Army officials claim is similar to salt.

■ When the process is done, the 190 gallons of VX in a 1-ton tank have been reduced to about two 55-gallon drums.

NEWPORT

Continued from Page 1

based on input from the citizens. It was a good strategy for the Army to buy into," he added.

Carraway was referring to opposition by residents in Vermillion County to the Army's original plans to construct a facility that would burn the nerve agent — a substance so lethal that a single drop can kill.

That opposition turned into a groundswell last July when Gov. Evan Bayh and several members of Indiana's congressional delegation informed the Army that incineration would not be an acceptable option.

After a daylong meeting last week reviewing recommendations from Carraway, the National Research Council and other military officials, the Army decided to adopt the alternative method of destroying the nerve agent called neutralization and mineralization, said Mickey Morales, a spokesman for the Army.

Under current law, any waste product derived from VX is considered a hazardous waste. Army officials believe the material that will be produced by neutralization is not hazardous, and they will seek a reclassification.

Morales said the next step is for the Defense Department to review, approve and fund the Army's recommendation. Estimates are that construction of facilities to destroy the VX would cost upward of \$200 million. Morales offered no timetable for when the Defense Department would take action.

Actual destruction of the nerve agent probably won't begin until after 2000. Congress has ordered that all chemical weapons be destroyed by 2004, Morales said.

Although neutralization/mineralization has been successfully tested in laboratory conditions, any large-scale applications of the method still must undergo massive research, Morales said.

Williams, director of the Chemical Weapons Working Group, an environmental organization based in Berea, Ky., said the Army's decision for Newport shows that the military has abandoned the environmentally suspect incineration strategy.

The organization has led protests and is suing to stop VX destruction at the Tooele Chemical Agent Disposal Facility, located at a desert site 60 miles southwest of Salt Lake City.

That facility has been plagued with numerous problems, including leaks and the recent resignation and firings of safety personnel since it began burning its chemical stockpile on Aug. 22.

The other chemical weapon incineration site is at Johnston Atoll, about 700 miles southwest of Hawaii.

Indianapolis STAR
12-11-96

Toxic burn plans off

Army backs off on plan for burning at Aberdeen

Army OKs proposal
to destroy chemical
by boiling, mixing

Victory for residents ←

Aberdeen's stockpile
of mustard agent was
to be incinerated

By TOM BOWMAN
BUNESTAFF

Some 1,600 tons of dangerous mustard agent stored at Aberdeen Proving Ground are expected to be destroyed by a method favored by residents: boiled and mixed with sludge until the blister agent turns into a byproduct less toxic than beer.

Army officials are backing this process, known as neutralization-biodegradation, over an incineration option they favor. But Aberdeen-area residents fear incineration poses long-term health and safety risks.

"It's the Army's position to neutralize and biodegrade," said Mickey Morales, a spokesman for Aberdeen's stockpile disposal program. "The Army has settled on this process and stopped the funding for incineration."

Morales said a team of Army officials endorsed the process, with final approval expected within the next week by Paul G. Kaminski, an undersecretary of defense. Army officials could not be reached for comment last night.

The proposal calls for the destruction of only those chemical agents already stored at Aberdeen. No other agents would be shipped in from other facilities.

Meanwhile, these same Army officials also have scrapped plans to incinerate tons of nerve agent stored at a depot in Newport, Ind., backing a different neutralization process that will turn the re- [See Aberdeen, 10A]

[Aberdeen, from Page 1A]

sulting effluent into mineralized salts, Morales said.

Destruction of the aging chemical stockpile at Aberdeen is still years away. After securing the necessary state and federal permits and completing an environmental impact statement, plans call for a series of buildings — in which the mustard agent will be destroyed — to be constructed at a remote site near the Bush River.

Building to start in 1999

Morales said construction of the buildings, totaling 130,000 square feet, would begin in 1999 and reach completion in 2002. A yearlong pilot project would then begin and all the mustard agent would be destroyed by 2004.

Under the process, the mustard agent is neutralized by add-

ing it to a reactor containing near-boiling water; that mixture is then mixed with sewer sludge from the Back River wastewater treatment plant for biodegradation.

In September, a National Research Council scientific panel endorsed the neutralization-biodegradation process. The 14-member panel decided after evaluating five technologies that could be alternatives to incineration.

"Only neutralization technologies have been tested on a large scale to destroy chemical agents," said Richard Magic, executive director of the Center for Environmental Engineering and Science at New Jersey Institute of Technology in Newark, who chaired the panel. "The processes are simple and safe and the systems also meet the technology criteria expressed by citizens in the surrounding communities."

"Neutralization seems to be a simple process that a lot of people can understand," said John E. Nunn III, chairman of a citizens' advisory commission on chemical weapons disposal after that announcement. Nunn's panel has recommended since 1993 that the Army pursue the neutralization technique, which he said results in an end product "five times less toxic than beer."

Orders from Congress

Although the Army says incineration is a safe method to destroy the chemical weapons at Aberdeen and seven other sites around the country, Congress ordered the Pentagon to look into alternative technologies to destroy the stockpile — some dating to World War I — by a 2004 deadline.

Alternative methods of destruction also are being considered for chemical weapons facilities in Colorado and Kentucky. But those stockpiles stored at facilities in Alabama, Oregon and Arkansas are all slated to be destroyed by incineration.

So far, the Army has begun some incineration of chemical agents and weapons at Johnston Atoll in the Pacific and Tooele, Utah. Those facilities have disposed more than 2 million pounds of chemical warfare agents through incineration, according to the Army.

But last month, a former top executive at the Tooele plant said the Army incinerator was riddled with safety defects and was operated by managers who were not qualified to recognize those risks.

The Army said it was beginning a safety evaluation of the plant and Utah officials said they would look into the allegations.

Days after the Tooele facility began operating in August, the Army was forced to shut down the plant after nerve agent was detected in portions of the plant's ventilation system that were supposed to be free of poison gas. Army officials later said that a seal on a ventilation purification chamber needed to be improved but no nerve gas had escaped into the environment.

BALTIMORE SUN
12/10/96

JUL 29 1998

Melissa Tuckey
Chemical Weapons Working Group
P.O. Box 467
Berea, Kentucky 40403

Re: Denial of Request for Good Cause Waiver of 180-day Deadline for Filing Title VI
Administrative Complaints (EPA File No. 15R-97-R4)

Dear Ms. Tuckey:

I am writing in response to your January 26, 1998, letter requesting that the Office of Civil Rights (OCR) grant a good cause waiver from the 180-day time limit for filing a Title VI administrative complaint. As you know, OCR rejected your complaint January 22, 1998, because it was filed 186 days after the alleged discriminatory act (issuance of an air permit for the U.S. Army's Anniston chemical weapons incinerator by the Alabama Department of Environmental Management). Based on the information and circumstances outlined in your January 26, 1998, letter, OCR is denying your request for a good cause waiver.

Under EPA's Title VI regulations, EPA may grant a waiver of the 180-day time limit for good cause. 40 C.F.R. § 7.120(b)(2) (1998). EPA's *Interim Guidance for Investigating Title VI Administrative Complaints Challenging Permits* (Interim Guidance) indicates that waivers will be granted on a case-by-case basis. OCR does not believe that the administrative mix up on the part of the Chemical Weapons Working Group (CWWG) constitute sufficient grounds to grant a good cause waiver in this case. Granting a good cause waiver on such grounds would render EPA's 180-day filing deadline meaningless.

EPA's Interim Guidance also provides that "it is appropriate to consider in making a good cause determination a complainant's pursuit of its Title VI concerns through the recipient's administrative appeal process." OCR staff has reviewed the appeal submitted by CWWG and has determined that the appeal does not raise Title VI concerns. Therefore, OCR can not grant a

M.Mattheisen/mdm:1201:260-4587/07-28-98/anniston

CONCURRENCES							
SYMBOL	1201	1201	2301				
SURNAME	Mattheisen	Shults	Shults				
DATE	7/28/98	7/29/98	7/29/98				

EPA Form 1320-1A (1/90) Printed on Recycled Paper OFFICIAL FILE COPY

good cause waiver on the ground that CWWG pursued its Title VI concerns through ADEM's administrative appeal process.

If you have any questions, please contact Mike Mattheisen on my staff at 202-260-4587.

Sincerely,

/s/

Ann E. Goode
Director

cc: James W. Warr, Director
Alabama Department of Environmental Management

Elizabeth Bartlett
EPA Region 4

Rafael DeLeon
Office of General Counsel

Robert Knox
Office of Environmental Justice

Anniston Army Depot
Attn: Ron Grant
Director of Risk Management
SIOAN-RK-E
7 Frankford Avenue
Anniston, Alabama 36201-4199

Cmdr. Anniston Army Depot
Attn: Legal Office
7 Frankford Ave.
Bldg. 220
Anniston, Alabama 36201-5005

PM for Chemical Demilitarization
Attn: SFAE-CD-Z (Mr. James Bacon)
5179 Hoadley Road
APG-EA, Maryland 21010-5401

Chemical Weapons Working Group

P.O. Box 467; Berea, KY 40403

606-986-0868

Carol Browner, Administrator
Environmental Protection Agency
401 M Street SW
Washington, D.C. 20460

15 R-97-R4

December 15, 1997

Dear Carol Browner:

We write in support of the citizens of Calhoun County, Alabama in their environmental justice complaint against the chemical weapons incinerator in Anniston. The proposed facility will be an unnecessary health and safety hazard for people of color and low income in a community with a long history of environmental abuse. There are safer disposal technologies available. We ask that you fulfill President Clinton's Executive Order on Environmental Justice by requiring Alabama regulators to implement safer technologies.

Citizens of Anniston and surrounding communities have already suffered more than their share of toxic pollution. The Army's toxic release inventory ranks the Anniston Army Depot second in the nation for emitting over 581, 000 pounds of toxic chemicals in 1994 alone. The African-American communities of Cobbtown and Sweet Valley have sued Monsanto for PCB-poisoning. Their toxic neighborhoods were bulldozed in 1997. The residents who were evacuated have high levels of PCBs in their blood. Additional PCBs, along with nerve agent, dioxin, heavy metals and other unknown and unanalyzed chemicals, will be emitted from the smokestacks of the proposed incinerator.

There has been no assessment of the impact of releasing these additional chemicals on the health of those who have already been exposed to toxic chemicals. Nor has there been an assessment of the increased burden on people of low income who may not have access to adequate health care and nutrition or who may work in toxic environments. Moreover, no adequate assessment of the impact of chemical emissions has been done for the most vulnerable population of all--the infants and children in Anniston.

If there were to be an accident at the proposed Anniston chemical weapons incinerator, African-American and low-income populations who live closest to the depot would suffer the most. Emergency preparedness plans do not provide full protection if an incinerator accident involving nerve agent were to occur.

There are safer disposal technologies available! The Army has abandoned chemical weapons incineration plans in Maryland and Indiana in favor of safer technologies. Last year, President Clinton vowed to make alternative technologies the "highest priority" in the chemical weapon disposal program and Congress placed a moratorium on incineration in Kentucky and Colorado until safer technologies can be considered. Unfortunately, as alternatives move forward, so does a pattern of discrimination.

We ask that you intervene to ensure that alternative technologies are equally available to all communities regardless of race, income, or national origin.

Sincerely,

[REDACTED]
Jacksonville, AL

[REDACTED]
Anniston, AL

Serving Alabama's Future Environment (SAFE)

[REDACTED]
[REDACTED]
[REDACTED]

Anniston, AL

Alabama Sierra Club
[REDACTED]
Birmingham, AL

Chemical Weapons Working Group (CWWG)
Melissa Tuckey
Berea, KY

[REDACTED]
Sweet Valley/Cobbtown Environmental Justice Task Force
Anniston, AL

[REDACTED]
Burnbusters
Jacksonville, AL

[REDACTED]
Jacksonville, AL

[REDACTED]
Families Against Nerve Gas Incineration
Anniston, AL

[REDACTED]
Anniston, AL

[REDACTED]
Auburn, AL

[REDACTED]
Alabama Environmental Council
Birmingham, AL

[REDACTED]
Project Awake
Coatopa, AL

[REDACTED]
Espes, AL

[REDACTED]
Acmar Moody Environmental Justice Society
Moody, AL

[REDACTED]
Tuscaloosa, AL

[REDACTED]
WE CAN
York, AL

[REDACTED]
Alaska Community Action on Toxics
Anchorage, AK

[REDACTED]
Arkansas Public Policy Panel
Little Rock, AR

[REDACTED]
Pine Bluff for Safe Disposal
Pine Bluff, AR

[REDACTED]
Presbyterians for Restoring Creation
Phoenix, AZ

[REDACTED]
Desert Citizens Against Pollution
Lancaster, CA

[REDACTED]
Palo Alto, CA

[REDACTED]
California Communities Against Toxics
Rosamond, CA

[REDACTED]
San Francisco, CA

[REDACTED]
Pacific Studies Center
San Francisco, CA

[REDACTED]
Boulder, CO

[REDACTED]
Worldworks I
Broomfield, CO

[REDACTED] Group Chair
Sangre De Cristo Sierra Club
Westcliffe, CO

[REDACTED]
Gulf War Veterans of Delaware
Wilmington, DE

[REDACTED]
Washington, DC

[REDACTED]
Washington, DC

[REDACTED]
Washington, DC

Richard Condit, Esq.
Washington, DC

[REDACTED]
Washington, DC

[REDACTED]
Friends of the Earth
Washington, DC

[REDACTED]
Vietnam Veterans of America Foundation
Washington, DC

[REDACTED]
Greenpeace
Washington, DC

[REDACTED]
Physicians For Social Responsibility
Washington, DC

[REDACTED]
Gulf War Research Foundation
Washington, DC

[REDACTED]
Presbyterians for Restoring Creation
Orlando, FL

The Concerned Citizens League of America
Florida

[REDACTED]
Project South: Institute for the Elimination of Poverty and Genocide
Atlanta, GA

[REDACTED]
Clark Atlanta University
Atlanta, GA

[REDACTED]
Environmental Justice Project
Southern Organizing Committee
Atlanta, GA

North Georgia Afro-American Environmental Justice Action Network
Atlanta, GA

[REDACTED]
National Gulf War Resource Center
Atlanta, GA

[REDACTED]
Save the People
Brunswick, GA

[REDACTED]
Tifton, GA

[REDACTED]
African American Environmental Action Network

[REDACTED]
Pacific Asian Council of Indigenous People
Wainae, HI

[REDACTED]
Carbondale, IL

[REDACTED]
Citizens Against Incineration at Newport
Newport, IN

[REDACTED]
Newport Study Group
Newport, IN

[REDACTED]
Iowa City, IA

[REDACTED]
Sand Gap, KY

[REDACTED]
Baton Rouge, LA

[REDACTED]
Baton Rouge, LA

[REDACTED]
North Baton Rouge Environmental Association
Baton Rouge, LA

[REDACTED]
St. James Citizens for Jobs and the Environment
Convent, LA

[REDACTED]
Military Toxics Project
Norway, ME

[REDACTED]
Environmental Research Foundation
Annapolis, MD

[REDACTED]
Aberdeen Proving Ground Superfund-Citizen's Coalition
Aberdeen, MD

[REDACTED]
Coalition for Safe Disposal
Worton, MD

[REDACTED] President
Maryland Conservation Council
Mariotsville, MD

[REDACTED]
Healthcare Without Harm
Jamaica Plains, MA

[REDACTED]
Public Policy Communications
Boston, MA

[REDACTED]
National Citizens' Alliance
Huron Environmental Activist League
Ossineke, MI

[REDACTED]
Indigenous Environmental Network
Minneapolis, MN

[REDACTED]
2020 Network, Inc.
Waveland, MS

[REDACTED]
Dioxin Incineration Response Group
Eureka, MO

[REDACTED] Co-founder
Times Beach Action Group
St. Louis, MO

[REDACTED]
Helena, MT

[REDACTED]
New Jersey Environmental Justice Network
Asbury Park, NJ

[REDACTED] Editors
Waste Not
Canton, NY

[REDACTED]
CEC International
New York, NY

Cherokee Defense League
Cherokee, NC

[REDACTED]
Durham, NC

[REDACTED]
Warrenton, NC

[REDACTED]
Windsor, ND

[REDACTED]
Save Our County, Inc.
East Liverpool, OH

[REDACTED]
Hermiston, OR

[REDACTED]
Oregon Clearinghouse for Pollution Reduction
Portland, OR

[REDACTED]
Arrest the Incineration Remediation (AIR)
Lockhaven, PA

[REDACTED]
Philadelphia, PA

South Carolina Environmental Watch
Gadsen, SC

[REDACTED]
Chattanooga, TN

[REDACTED]
Defense Depot Memphis Tennessee-CCC
Memphis, TN

[REDACTED]
Mid-South Peace and Justice Center
Memphis, TN

[REDACTED]
Foundation for a Compassionate Society
Austin, TX

[REDACTED]
West Desert HEAL
Grantsville, UT

[REDACTED]
Utah Sierra Club
Salt Lake City, UT

[REDACTED]
Families Against Incinerator Risk
Salt Lake City, UT

[REDACTED]
Center for Health and the Environment
Falls Church, VA

[REDACTED]
Appalachian Women's Alliance
Floyd, VA

[REDACTED]
Washington Toxics Coalition
Seattle, WA

[REDACTED]
Charleston, WV

[REDACTED]
Citizens for Safe Water Around Badger
Merrimac, WI



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Washington, D.C. 20460

JAN 22 1998

OFFICE OF
CIVIL RIGHTS

RETURN RECEIPT REQUESTED

IN REPLY REFER TO:

Robert Guild, Esq.
314 Pall Mall
Columbia, South Carolina 29201

OCR File No.
15R-97-R4

Re: Anniston Army Depot Title VI Complaint

Dear Mr. Guild:

The Office of Civil Rights (OCR) has received the Title VI complaint that Richard Condit filed with the U.S. Environmental Protection Agency (EPA) against the Alabama Department of Environmental Management (ADEM). The complaint was filed on behalf of Serving Alabama's Future Environment (SAFE), [REDACTED], the Sierra Club, and the Chemical Weapons Working Group (CWWG) concerning ADEM's issuance of a Hazardous Waste Facility Permit for a chemical weapons incinerator at the Anniston Army Depot near Anniston, Alabama.

This letter is to notify you that OCR cannot accept this complaint for investigation. EPA's Title VI regulations require that a complaint be filed within 180 days of the alleged discriminatory act. 40 C.F.R. 7.120(b)(2). The complaint, dated December 18, 1997, was received by EPA December 22, 1997, 182 and 186 days, respectively, after ADEM issued the Anniston permit.

EPA's Title VI regulations, however, also provide that EPA may waive the 180-day time limit for good cause. If you would like to apply for a waiver, you may direct your request in

OPTIONAL FORM 99 (7-90)

FAX TRANSMITTAL

of pages **2**

To <i>Capt. Chin-zan Aldner</i>	From <i>Mike Mattheisen</i>
Dept./Agency	Phone # <i>202-564-7272</i>
Fax # <i>703-696-2940</i>	Fax #

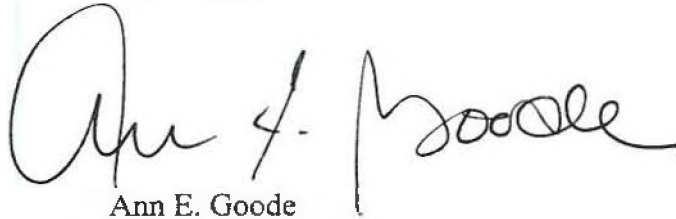
NSN 7540-01-317-7388

5099-101

GENERAL SERVICES ADMINISTRATION

writing to this office. If you have any questions, please contact Sharon Holmes in OCR at this address or by phone on (202) 260-4575.

Sincerely,

A handwritten signature in black ink, appearing to read "Ann E. Goode". The signature is fluid and cursive, with the first name "Ann" being the most prominent part.

Ann E. Goode
Director

cc: Alabama Department of Environmental Management
Office of the Executive secretariat
EPA Region 4
Office of General Counsel
Office of Environmental Justice
Anniston Army Depot