

# Colorado Federal District Court Report of the Federal District Special Grand Jury 89-2 January 24, 1992

*Editors Note: Federal Judge Sherman Finesilver approved released of a redacted version of the Grand Jury report in January of 1993. The report published here is the complete report. Those portions that were not released in 1993 are in blue.*

Confidential Document-Not for Public Disclosure

## **PART ONE -- Table of Contents**

Table of Contents

**I.** Introduction

**II.** Scope of the Investigation

**III.** The Government Agencies Failed Repeatedly in their duty to protect the public's interest

**A.** CDH, DOE and EPA did not perform adequately. Their oversight and regulatory functions

**B.** DOE did not properly perform it's oversight duties

1. DOE did not emphasize to Rockwell the importance of operating the Rocky Flats Plant in compliance with environmental laws
2. Rockwell controlled DOE through the flow of information concerning environmental conditions at the Rocky Flats Plant
3. DOE prevented independent authorities from inspecting the Rocky Flats Plant
4. Regional DOE managers ignored evidence of environmental problems at the Rocky Flats Plant
5. DOE continues today to tolerate violation of environmental laws at the Rocky Flats Plant

**C.** The government agencies have established no deadline by which DOE and EG&G must stop breaking the law at the Rocky Flats Plant

**D.** CDH and EPA were lax and ineffective in their attempts to enforce environmental laws and regulations at the Plant

1. Before the FBI raided the Plant, CDH knew that DOE and Rockwell were violating environmental laws in their operation of the Plant
2. This investigation was prompted by evidence of criminal conduct that was found in CDH's files
3. EPA ignored environmental problems at the Rocky Flats Plant
4. CDH and EPA continue to tolerate the accumulation of beryllium dust in ventilation ducts at the Rocky Flats Plant

**E.** Government employees should be held responsible for their criminal acts at the Rocky Flats Plant

**IV.** DOE, EG&G, and Rockwell have violated RCRA by illegally storing, treating, and disposing of hazardous wastes and mixed wastes at the Rocky Flats Plant

**A.** EPA has statutory authority to regulate DOE facilities under RCRA

1. RCRA became effective in November of 1980
2. DOE claimed in 1983 that the Rocky Flats Plant was completely exempt from EPA's jurisdiction under RCRA
3. DOE asserted in 1984 that mixed wastes at the Rocky Flats Plant were exempt from RCRA regulations by EPA
4. DOE acknowledged in 1986 that some mixed wastes at the Rocky Flats Plant were subject to RCRA regulation
5. DOE argued in 1987 that mixed waste residues at the Rocky Flats Plant were exempt from regulation under RCRA
6. [Judge Babcock ruled in 1990 that the Rocky Flats Plant's residues are subject to RCRA regulation](#)
7. DOE has not requested nor received a Presidential proclamation exempting DOE from operating the Rocky Flats Plant in compliance with RCRA

**B.** DOE and Rockwell violated RCRA by illegally storing, treating, and disposing of residues at the Rocky Flats Plant from 1980 through 1989

1. DOE and Rockwell accumulated a 40-year inventory of residues at the Rocky Flats Plant
2. DOE has never applied to EPA or CDH for a RCRA Permit or interim status under RCRA to store, treat, or dispose of residues at the Rocky Flats Plant
3. DOE and Rockwell collected and stored a large volume of radioactive incinerator ash residues at the Rocky Flats Plant although no process has ever existed by which plutonium can be recovered from these residues
4. Rockwell established and operated a nonpermitted, mixed waste, permanent storage facility at the Rocky Flats Plant
5. Rockwell had several reasons to avoid disclosing the true status of the residues, which were stored at the Rocky Flats Plant
6. DOE did not want to pay for the residues to be stored at the Rocky Flats Plant in accordance with the requirements of RCRA
7. [DOE does not have to continue storing the residues at the Rocky Flats Plant](#)
8. DOE and Rockwell violated several provisions of RCRA by treating, storing, and disposing of residues at the Rocky Flats Plant without having appropriate RCRA permits

**C.** DOE and Rockwell violated RCRA by illegally treating and disposing of hazardous wastes and mixed wastes through use of a nonpermitted treatment facility at the Rocky Flats Plant

1. DOE and Rockwell concealed from EPA and CDH that Rockwell was using an incinerator at the Rocky Flats Plant to treat hazardous wastes and mixed wastes
2. DOE and Rockwell illegally used the incinerator in Building 771 to treat hazardous wastes and mixed wastes
3. DOE did not apply for a RCRA Permit for the 771 incinerator because DOE knew the incinerator could not meet RCRA's standards for a hazardous waste treatment facility

**D.** [DOE and EG&G have violated various provisions of RCRA subsequent to January 1, 1990](#)

1. [On January 1, 1990, EG&G assumed responsibility for operating the Rocky Flats Plant in compliance with applicable law](#)
2. [EG&G has violated and continues to violate RCRA in operating the Rocky Flats Plant](#)
3. [EG&G's clean-up efforts at the Rocky Flats Plant have violated RCRA](#)
4. [EG&G cannot restart operations at the Rocky Flats Plant without violating RCRA](#)

**E.** Rockwell violated RCRA and the terms of DOE's NPDES Permit by spray irrigating chromic acid

and raw sewage

1. Rockwell used the STP to treat hazardous waste
2. The chromic acid spill destroyed the STP's ability to treat sewage
3. Rockwell spray irrigated the chromic acid to avoid adverse publicity
4. Rockwell acted too slowly in determining the identity of the unknown toxic liquid, which flowed into the STP
5. Rockwell failed to promptly advise the regulatory agencies and surrounding communities that the chrome spill had occurred
6. Rockwell violated RCRA and the Clean Water Act in several respects during the chrome spill incident

**F.** Rockwell illegally stored and treated liquid mixed wastes in a closed RCRA treatment facility

**G.** Rockwell violated RCRA by illegally storing thousands of pondcrete and saltcrete blocks outdoors

**H.** Rockwell violated RCRA and the Clean Water Act by engaging in inappropriate spray irrigation practices

**V.** Rockwell and EG7G have operated the plant in violation of the Clean Water Act with a deficient ground-water monitoring system

**VI.** DOE and Rockwell conspired to violate environmental laws.

## **PART TWO**

### **I. INTRODUCTION**

The Department of Energy ("DOE"), its contractors -- Rockwell International, Inc. ("Rockwell"), EG&G, Inc. ("EG&G"), and many of their respective employees have engaged in an on-going criminal enterprise at the Rocky Flats Plant ("the Plant"), which has violated Federal environmental laws. This criminal enterprise continues to operate today at the Rocky Flats Plant, and it promises to continue operating into the future unless our Government, its contractors, and their respective employees are made subject to the law.

When agents of the Federal Bureau of Investigation ("FBI") and the Environmental Protection Agency ("EPA") raided the Plant on June 6, 1989, they found compelling evidence that hazardous wastes and radioactive mixed wastes had been illegally stored, treated, and disposed of ("STD") at the Plant in violation of the Resource Conservation and Recovery Act ("RSCA"). These agents also discovered violations of the Clean Water Act and other environmental statutes through a variety of continuing acts, including the illegal discharge of pollutants, hazardous materials, and radioactive matter into the Platte River, Woman Creek, Walnut Creek, and the drinking water supplies for the Cities of Broomfield and Westminster, Colorado. These agents also uncovered a culture of criminal misconduct, which used illegal means to achieve corporate bonuses.

During the more than two and one-half years since the FBI raid, little has changed at the Rocky Flats Plant. DOE and EG&G employees continue to violate many Federal environmental laws at the Rocky Flats Plant. The continuing and pervasive nature of these criminal acts forms a pattern of behavior, which threatens to continue for an indefinite period of time into the future.

For 40 years, Federal, Colorado, and local regulators and elected officials have been unable to make DOE and the corporate operators of the Plant obey the law. Indeed, the Plant has been and continues to

be operated by government and corporate employees, who have placed themselves above the law and who have hidden their illegal conduct behind the public's trust by engaging in a continuing campaign of distraction, deception, and dishonesty.

The ongoing nature of the criminal enterprise at the Rocky Flats Plant has prompted this Grand Jury to take three actions. First, the Grand Jury has approved indictments against certain current and former Federal employees, corporate employees, and corporations. Second, the Grand Jury has made presentments to this Court of evidence of criminal conduct by certain corporations and persons. Third, this Grand Jury strongly recommends that the Rocky Flats Plant be closed as the only means to stop the continuing nature of these criminal acts.

## II. SCOPE OF THE INVESTIGATION

On August 1, 1989, this Court charged this Grand Jury with one principal function:

The best interests of the people of Colorado and the national interest has necessitated the summoning of this Special Grand jury to inquire into criminal activity, if any, at the Rocky Flats Nuclear Weapons Plant in Jefferson County, Colorado.

Information to Special Grand Jury 89-2, p.2 (D.Colo.Aug.1,1989). The members of the Grand Jury have taken this charge seriously and have completed their investigation.

The Grand Jury focused its attention during its term of two and one-half years on whether any person violated the criminal provisions of RCRA and the Clean Water Act. The limits of time and space prevent this Grand Jury from detailing each and every example of the criminal activity and misconduct at the Rocky Flats Plant, which has uncovered during the course of the Grand Jury's investigation. However, the Grand Jury now renders to the Court this Report, regarding ongoing organized criminal activity at the Rocky Flats Plant in this Federal Judicial District of Colorado. This Report is based on the preponderance of the evidence considered by the Grand Jury.

At the outset, it is important for this Court to understand what the Special Grand Jury did not investigate, although there may have been various media and other reports that suggested the Grand Jury would or should investigate such matters. Specifically, the Special Grand Jury did not attempt to determine:

- (a) whether the criminal and negligent acts at the Plant (including illegal STD of hazardous and radioactive mixed wastes) pose a serious health risk to employees of the Plant or area residents;
- (b) whether prior, current, or proposed activities (such as restarting production) at the Plant have been or will be safe;
- (c) whether DOE, Rockwell, EG&G, or any person violated the Clean Air Act;
- (d) if the Plant was and is illegally storing significant quantities of plutonium within certain ventilation ducts located within buildings at the Plant;
- (e) whether illegal wiretapping has occurred or is occurring at the Plant
- (f) whether beryllium dust, which has collected within various ventilation ducts throughout the plant, poses a significant health risk to employees at the Plant or area residents;
- (g) whether Rockwell or EG&G have filed false claims for payment under their contracts with DOE; and
- (h) whether DOE and EG&G have been storing radioactive wastes in gloveboxes at the Plant as a means to avoid exceeding storage limits at the Plant.

Although the Grand Jury heard testimony that radioactive material had been released from the Plant into

drinking water supplies of various urban users and downstream agricultural users, the Grand Jury was advised that it could not indict Rockwell or DOE officials for endangering the public in this manner. The Grand Jury was specifically advised by an Assistant U.S. Attorney that the United States Supreme Court had determined in *Train v. COPIRG*, 426 U.S.1 that no Federal law (specifically the Clean Water Act) prohibits DOE, Rockwell, or EGG from dumping radioactive wastes or other radioactive material directly into Standley Lake, the Great Western Reservoir, the South Platte, or any other river or tributary of the United States. Consequently, to the extent to which evidence was presented to the Grand Jury concerning the release of radioactive material into such waters, it could not be the subject of a criminal prosecution and such evidence is not discussed further herein.

**III.** The Government agencies failed repeatedly in their duty to protect the public's interest.

**A.** CDH, DOE, and EPA did not perform adequately their oversight and regulatory functions.

The pervasive nature of the illegal practices discussed in this report may leave the Court wondering how such extensive, illegal conduct could have continued for such a lengthy period of time. Four factors provide a substantial explanation of how these events occurred:

- (a) DOE managed the Plant with an attitude of indifference toward environmental laws;
- (b) DOE actively participated in and directed a conscious and ongoing effort to evade the application of certain environmental laws to the Plant;
- (c) the Colorado Department of Health ("CDH") and EPA were lax and ineffective in attempting to enforce environmental laws and regulations at the Plant; and
- (d) Rockwell and its successor (EG&G) - with the apparent knowledge of DOE - have excused their illegal conduct by asserting that they cannot operate the Plant without violating one or more environmental laws.

**B.** DOE managed the Plant with an attitude of indifference toward certain environmental laws.

DOE employees at the Plant followed a policy of minimum compliance with certain environmental laws during the period from November of 1980 through June of 1989. DOE did not review nor monitor Rockwell's budget to assure that the Plant was operated in compliance with environmental laws and regulations.

DOE exercised oversight at the Plant without displaying a sense of accountability to the public for compliance with environmental laws, particularly RCRA and the Clean Water Act. DOE managers at the Plant, Regional, and Headquarters offices engaged in a conscious course of conduct to avoid accepting responsibility for any operations at the Plant. DOE did not seek nor request any information that might have uncovered evidence of Rockwell's illegal conduct. During the period from November of 1985 through the date of the FBI raid of the Plant (June 6, 1989), the DOE Plant Manager never conducted a staff meeting, which focused solely on environmental compliance problems at the Plant.

DOE's Plant Manager made false written statements with knowledge of the falsity of his statements or with a disregard for knowing whether his statements were false. For example, when the Plant Manger signed DOE's 1985 RCRA Permit application for the Plant, he had been working at the Plant less than one week, he had read none of the Permit application, and he knew virtually nothing about RCRA. Nonetheless, he signed the Permit application, although it was a lengthy, complex document, without investigating the truth or falsity of any statement in the Permit application. Thereafter, he signed other permit applications, which Rockwell gave him to sign, although the applications were typically lengthy, complex documents, and he had insufficient personal knowledge to certify the statements made in the applications were true.

On those occasions when Rockwell advised DOE officials that Rockwell might be violating an environmental law or that its conduct could be challenged by regulatory agencies, DOE officials either ignored such notices from Rockwell, joined with Rockwell in rationalizing such conduct, or actively participated in plans to shield Rockwell from attack and conceal potentially damaging information from being disclosed to the public or regulatory agencies. Since this Grand Jury cannot indict a Federal agency for violating the laws, DOE is identified in this Report and the Grand Jury's presentments of evidence to this Court of criminal misconduct, as an unindicted co-conspirator with Rockwell, EG&G, and certain individuals in an ongoing conspiracy to violate certain environmental laws of the United States. If the Plant is not closed, the Grand Jury believes that DOE's involvement with this conspiracy to violate RCRA and other environmental laws in the operation of the Plant will continue.

Some of DOE's employees exploited one advantage of being employed by a Federal agency. They knew that one Federal agency (EPA) could not impose sanctions against another Federal agency (DOE) for violating environmental laws. Consequently, these DOE employees ignored EPA's administrative requests for RCRA compliance at the Plant. This pattern continues today with DOE still refusing to consent to the imposition of civil penalties against the Department, its contractor, or their respective employees for violating Federal environmental laws, which businesses, state governments, local governments, and private citizens must obey. In this sense, the DOE has become a self-regulating agency, which is above the law and without accountability, except to this Grand Jury.

### C. DOE did not properly perform its oversight duties.

1. DOE did not emphasize to Rockwell the importance of operating the Rocky Flats Plant in compliance with environmental laws.

DOE acted as a dependent endorser of Rockwell's illegal conduct from 1985 through 1989. When DOE appointed a new Plant Manager in November of 1985, approximately 55 DOE employees worked at the Plant. Only two of those 55 DOE employees concerned themselves with environmental and safety issues, and they only worked part-time in those areas.

2. Rockwell controlled DOE through the flow of information concerning environmental conditions at the Rocky Flats Plant.

DOE lacked the capability between 1985 and 1989 to gather sufficient information to confirm independently whether Rockwell was complying with applicable environmental laws while Rockwell was operating the Plant. DOE did not attempt to review critically, verify independently, or evaluate systematically any data, information, analysis, recommendation, or conclusion, which Rockwell provided to DOE on environmental matters.

DOE relied exclusively on Rockwell as the source of all information which DOE provided to the public on environmental matters. Although DOE was charged with responsibility for independent oversight of Rockwell's conduct operating the Plant, DOE acted often as the "puppet" of Rockwell. For example, if Rockwell wanted to communicate a specific message to EPA, CDH, a news reporter, or some citizen or public interest group, Rockwell would usually prepare a "draft" letter for signature by an appropriate DOE employee, and the DOE employee would have the "draft" retyped on DOE letterhead and mailed to the person to whom Rockwell wished to convey its message.

3. DOE prevented independent authorities from inspecting the Rocky Flats Plant.

From January of 1985 through the date of the FBI raid, DOE routinely denied - on the grounds of

"national security" or lack of jurisdiction - virtually all requests that EPA or CDH made for their respective employees to inspect the Plant. By using DOE in this manner, Rockwell was able to shield its operations from independent inspections to determine its compliance with applicable environmental laws and to verify the accuracy of information, which DOE and Rockwell provided to regulatory agencies in support of various applications for RCRA, the National Pollutant Discharge Elimination System ("NPDES"), and other permits. For example, when DOE applied in 1987 for a RCRA permit to operate a fluidized bed incinerator to burn radioactive wastes, hazardous wastes, and mixed wastes at the Plant. DOE refused to allow EPA to inspect the incinerator to determine the accuracy of statements that Rockwell had made in the permit application concerning design, performance, and operational characteristics of the incinerator.

#### 4. Regional DOE managers ignored evidence of environmental problems at the Rocky Flats Plant.

Regional DOE managers in Albuquerque played bureaucratic games with Rockwell and local DOE officials. Although DOE's regional employees instructed Rockwell to obey the laws, they failed to budget the amounts necessary to comply with RCRA and other laws, when Rockwell advised them specifically of many of these needs. Likewise, employees at DOE's regional and headquarters offices did not follow up on their instructions to assure that the Plant was operated in compliance with applicable environmental laws. Quite the contrary, they explicitly discouraged Rockwell from complying with environmental laws by omitting environmental compliance from the list of criteria on which the award of large performance bonus fees were paid to Rockwell during the period from 1985 through 1989. Significantly, these large financial incentives (which ranged in the millions of dollars) could be earned most easily if Rockwell ignored environmental compliance in striving to meet weapons production goals.

#### 5. DOE continues today to tolerate violation of environmental laws at the Rocky Flats Plant.

DOE continues today to practice devious techniques of mass communication. DOE's officially announced policy is that the "obeying the law is our No. 1 priority." However, DOE is violating with EG&G numerous environmental laws at the Plant. As discussed elsewhere in this Report, DOE and EG&G are presently operating the Plant with full knowledge that a presidential exemption has not been issued to allow the Plant to continue to:

- (a) violate the groundwater monitoring requirement of the Clean Water Act;
- (b) continue to store radioactive, mixed waste residues at the Plant without a RCRA permit or RCRA interim status;
- (c) continue to store RCRA wastes at the Plant without fully complying with the procedural requirements for storage of RCRA wastes at a permitted facility;
- (d) violate RCRA by generating mixed wastes in a clean-up effort at the Plant although there is no permanent storage site for such wastes; and
- (e) related environmental crimes as discussed elsewhere in this Report.

**D.** The government agencies have established no deadline by which DOE and EG&G must stop breaking the law at the Rocky Flats Plant.

The headquarters offices of DOE and EPA in Washington, D.C. have been involved directly or indirectly in the negotiation of each of the three environmental Federal Facility Compliance Agreements for the Plant. These agreements were signed respectively in July of 1986, September of 1989, and May of 1991.

DOE has consistently refused to sign any compliance agreement for the Plant, which contains stipulated

finer to be imposed for specific continuing environmental violations. DOE learned from its experience before the FBI raid that EPA and CDH are very reluctant to initiate enforcement proceedings against DOE or its contractor because such proceedings are labor intensive and expensive to prosecute. Instead of pursuing DOE on Rocky Flats, EPA and CDH prefer to dedicate their resources to other matters, where the opposition to compliance is not so intense, expensive, or politically charged.

During the negotiation of the 1991 Federal Facilities Compliance Agreement, DOE employees at the regional and national levels insisted that DOE would not sign a compliance agreement, which contained any enforcement penalties for noncompliance with RCRA and other environmental laws. Throughout these negotiations, DOE implied that EG&G would resign as the operator of the Plant if the Agreement contained any such penalties. Consequently, when EPA's Denver Regional Administrator refused in the spring of 1991 to sign a proposed agreement for the Plant because it lacked any stipulated penalties for noncompliance, EPA's national Deputy Administrator relieved the Regional Administrator of responsibility for approving the Agreement.

EPA's Deputy Administrator subsequently negotiated and signed during the spring of 1991 a two-year Federal Facilities Compliance Agreement for the Plant. He negotiated the terms of this Agreement with the White House Counsel and high-ranking political appointees in Washington, D.C., in the Department of Defense, Department of Justice, EPA and DOE.

The 1991 Federal Facility Compliance Agreement for the Plant contains no deadlines by which the Plant must be operated in compliance with the law. Likewise, the 1991 Agreement lacks any civil penalties or enforcement mechanisms if DOE and EG&G fail to remedy the environmental noncompliance problems at the Plant.

**E.** CDH and EPA were lax and ineffective in their attempts to enforce environmental laws and regulations at the plant.

In many respects during the 1980's and through this date, those government employees who were and are charged with the duty to protect the public's interest, did not act responsibly. Unless the government's inspectors and regulators change their focus and act more aggressively to enforce the law, it is unlikely that the culture of environmental indifference will change at Rocky Flats.

### **PART THREE**

#### **E. CDH AND EPA WERE LAX AND INEFFECTIVE IN THEIR ATTEMPTS TO ENFORCE ENVIRONMENTAL LAWS AND REGULATIONS AT THE PLANT.**

In many respects during the 1980's and through this date, those government employees who were and are charged with the duty to protect the public's interest, did not act responsibly. Unless the government's inspectors and regulators change their focus and act more aggressively to enforce the law, it is unlikely that the culture of environmental indifference will change at Rocky Flats.

1. Before the FBI raided the Plant, CDH knew that DOE and Rockwell were violating environmental laws in their operation of the Plant.

CDH knew as early as November of 1985 that DOE and Rockwell had violated and were continuing to violate RCRA and the Clean Water Act. However, CDH did not publicize this information nor pursue

criminal charges. If CDH had acted then, it may have not been necessary for the FBI to raid the Plant subsequently and fewer environmental crimes may have been committed thereafter at the Plant.

The shortcomings of CDH's regulatory efforts were also demonstrated by the manner in which CDH exercised its oversight of the 904 Pad, where thousands of Pondcrete blocks, which contained radioactive and hazardous wastes, were stored outdoors. Rockwell first gave CDH notice in December of 1987 through its revised RCRA Part A Permit application that Rockwell was storing the Pondcrete blocks on the 904 Pad at the Plant. However, the CDH employee, who was charged with supervisory responsibility for this aspect of the Plant, did not become aware that these thousands of very large Pondcrete "blocks" were there until May of 1988, when radioactive and hazardous liquids first spilled from a Pondcrete container.

When CDH first became aware that Rockwell was spray irrigating massive volumes of treated wastewater effluent onto a buried solid waste management unit ("the east trenches"), which contained a substantial volume of leaking hazardous and radioactive wastes, CDH responded in an inappropriate, ineffective method. Instead of filing criminal charges against Rockwell for this continuing violation of RCRA and the Clean Water Act, CDH responded administratively with an exchange of letters of inquiry.

CDH, likewise, did not threaten to start an administrative, noncompliance proceeding against Rockwell for the continuing commission of this obvious environmental crime and threat to the public's health. Instead, CDH's employees placed the information on this practice in an internal file containing a list of issues, which CDH intended to discuss with DOE when it applied for a new NPDES Permit for the Plant. Moreover, the CDH employee, who was charged with responsibility for regulating this important matter that could potentially effect Westminster's drinking water, he did not bother to visit the spray field to determine if Rockwell's spray irrigation practices complied with the conditions set forth in the NPDES permit for the Plant.

2. This investigation was prompted by evidence of criminal conduct that was found in CDH's files.

The FBI initiated its criminal investigation of the Plant in May of 1987, after DOE and Rockwell submitted to CDH a RCRA Part B Permit application for the Plant. Although there was substantial information included and excluded from that application to show that DOE and Rockwell were operating the Plant in violation of RCRA, CDH did nothing about it. When the FBI subsequently decided to raid the Plant, the FBI relied primarily on that Permit application and other documents, which had been and were subsequently filed with CDH to show that there was probable cause to believe that criminal acts had been committed by DOE and Rockwell at the Plant.

3. EPA ignored environmental problems at the Rocky Flats Plant.

EPA's employees, likewise, failed to always act responsibly in exercising their regulatory authority over the Plant. For example, EPA learned during the summer of 1988 that Rockwell was spraying massive volumes of treated wastewater effluent onto the east trenches. However, EPA waited 18 months (until January of 1990, when EG&G began to operate the Plant) before EPA bothered to inquire about the appropriateness or legality of this practice.

EPA made no attempt to stop spray irrigation at the Plant before or after the FBI raid in June of 1989. Although EPA wrote to DOE in January of 1990 to request that EG&G discontinue spray irrigation above the east trenches, EPA did not object to spray irrigation in the remainder of the east spray field until later in 1990.

EPA has followed a double standard in enforcing RCRA laws in Colorado. Under direct examination, EPA's regional RCRA supervisor admitted that EPA would not have permitted a private enterprise to violate RCRA to the extent and for the duration of the violations, which have occurred at the Plant. He stated that EPA would have been substantially more aggressive in seeking injunctive relief and fines to force a prompt conclusion of such illegal conduct. However, he asserted that EPA's "enforcement hands" were effectively tied because EPA was not permitted to pursue RCRA enforcement through the courts against DOE.

4. CDH and EPA continue to tolerate the accumulation of beryllium dust in ventilation ducts at the Rocky Flats Plant.

CDH and EPA have focused their regulatory attention with regard to beryllium dust at the Plant on a single sealed bag of material, which contained some beryllium dust. The CDH and EPA regulators took exception to this bag - and only this bag - in December of 1988 because it was discovered in a closet for which Rockwell did not have a beryllium storage permit. However, the regulators from CDH and EPA have not attempted to force DOE and its contractors to remove the substantial quantity of beryllium dust, which they know is resident in the air ventilation duct work throughout the 400-series and 800-series buildings in the Plant.

In a classic illustration of bureaucratic form over substance, CDH and EPA have elected not to argue with DOE's position on the beryllium, which remains in the air ducts. Although beryllium dust is extremely hazardous to human health, DOE has argued that the beryllium dust in the Plant's ventilation system is exempt from RCRA regulation because the beryllium has not "been generated" as a "waste" within the meaning of RCRA. It is therefore in DOE's opinion, not subject to RCRA regulation, although it is possible that workers may be breathing the dust and it is possible that the dust may escape to the atmosphere outside of the Plant.

The negligent treatment by CDH and EPA of the beryllium dust in the Plant's ventilation duct system illustrates one reason that DOE and Rockwell were so successful in violating so many environmental laws for such a long period of time. The government's inspectors have tended to overlook obvious health hazards and environmental crimes committed at the Plant because their focus has been too narrow.

5. DOE can ship to Idaho some of the wastes which are presently stored illegally at the Rocky Flats Plant.

Subsequent to the FBI raid in June of 1989, the Governor of Idaho advised DOE that Idaho would no longer permit DOE to ship additional radioactive mixed waste from Rocky Flats to the Idaho National Experimental Laboratory ("INEL"), which could legally store such material and to which Rockwell had shipped such wastes before the FBI's raid. DOE, EPA, and CDH did not challenge this unilateral embargo on waste shipments.

When the Governor of Idaho attempted to impose the same embargo on the shipment of similar radioactive waste from the Public Service Company's nuclear plant in Platteville, Colorado, the Public Service Company sued the Governor of Idaho and the Public Service Company won. The federal judge in the Public Service Company case held - as the DOE had advised the Governor of Colorado during 1989 with regard to Rocky Flats - that the Governor of Idaho did not have any authority to stop such shipments of the radioactive waste from Colorado to INEL. Despite the decision in the Public Service Company case and the continuing illegal storage of mixed wastes at the Plant, DOE, EG&G and CDH have made no effort to force INEL to again begin accepting waste shipments from the Plant.

F. GOVERNMENT EMPLOYEES SHOULD BE HELD RESPONSIBLE FOR THEIR CRIMINAL

## ACTS AT THE ROCKY FLATS PLANT.

Employees of DOE and other government departments and agencies defended themselves at various times before this Grand Jury by asserting four arguments. First, some government employees asserted that they were immune from prosecution for their criminal acts. Second, some claimed that they did not personally direct the illegal STD operations at the Plant and, therefore, they should not be held accountable for criminal conduct. Third, some government employees suggested that their incompetent and negligent mismanagement of the Plant were not crimes. Fourth, many of them told the Grand Jury that they were ignorant of the law or relied on faulty legal advice and, therefore, they should not be held accountable for their criminal acts. The Grand Jury rejects each of these defenses.

The sovereign immunity of the Federal Government does not immunize individual government employees from prosecution for their criminal conduct. Employees of the Federal Government should be and are subject to the criminal laws of this Nation. Criminal conduct should never be a part of a government employee's work. If the government's employees do not obey the law, we cease to be one nation under the law.

The Grand Jury heard at length from government employees who said it was not their job to see that the private contractors operated the Plant in conformance with applicable law. Surprisingly, no DOE employee was disciplined for any reason after the FBI raided the Plant. These bureaucrats placed their emphasis on form or process over substance. However, the evidence is uncontested that they ignored repeated warnings from multiple sources that the Rocky Flats Plant was being operated in violation of numerous environmental laws. Since these government employees were in charge of the Plant, and since they took virtually no action to comply with environmental laws in operating the Plant, they must be held accountable for their complicity with and toleration of criminal acts at the Plant.

The root of the problem at the Plant was and continues to be the negligent mismanagement of wastes at the Rocky Flat Plant. The negligent STD of wastes at the Plant originated with the DOE's aggressive efforts to place the Plant and its operators above the environmental laws by which all other companies must abide. The Grand Jury believes that DOE feared the regulators would discover Rockwell's mismanagement of hazardous wastes and radioactive mixed wastes at the Plant. Yet, the Congress enacted criminal penalties in RCRA, the Clean Water Act, and other Federal environmental laws, which have been violated at the Rocky Flats Plant, with the expressed intent to stop negligent environmental practices.

It is an elementary principle of law that ignorance of the law is no excuse for criminal conduct. The Grand Jury specifically rejects the notion that government employees should be allowed to hide behind the ill-reasoned logic of a government attorney at the Plant and other DOE attorneys in Washington, D.C., whose objective seemed to be to thwart attempts to subject the Rocky Flats Plant to the rule of law.

## **PART FOUR**

**IV. DOE, EG&G, AND ROCKWELL HAVE VIOLATED RCRA BY ILLEGALLY STORING, TREATING AND DISPOSING OF HAZARDOUS WASTES AND MIXED WASTES AT THE ROCKY FLATS PLANT.**

**A. EPA HAS STATUTORY AUTHORITY TO REGULATE DOE FACILITIES UNDER RCRA.**

1. RCRA became effective in November of 1980.

The Resource Conservation and Recovery Act ("RCRA") prohibits the storage, treatment, and disposal of hazardous wastes at private and governmental facilities without a permit issued by EPA or an authorized state government, such as Colorado. 42 U.S.C S6925(a). See 42 U.S.C. S6961. RCRA allows existing facilities, such as the Plant, to be treated as having been issued a permit pending issuance or denial of an actual permit in accordance with certain procedures, which the statute characterizes as "interim status." 42 U.S.C. 26925(e)(1). To obtain a RCRA Permit or RCRA interim status, a facility must submit a RCRA Part A Permit application and, subsequently a RCRA Part B Permit application, which must be approved by Federal and/or Colorado authorities.

"Hazardous wastes" are those substances, which may be solid or liquid, that are listed or otherwise identified as "hazardous wastes" in the Colorado Hazardous Waste Code. "Mixed wastes" or "mixed-hazardous wastes" are wastes, which contain both radioactive wastes and nonradioactive hazardous wastes. "Low level, mixed wastes" are radioactive wastes containing transurancic material at or below 100 noncuries per gram, together with hazardous wastes.

From November 19, 1980 (the effective date of RCRA), DOE has been obligated on behalf of its operator of the Plant to apply for a RCRA Permit for all hazardous waste STD operations at the Plant. However, DOE has failed to do so.

2. DOE claimed in 1983 that Rocky Flats Plant was completely exempt from EPA's jurisdiction under RCRA.

DOE has attempted in various ways to thwart the direct application of RCRA to the Plant. DOE claimed initially that all hazardous wastes at the Plant were exempt from the RCRA permit requirements. Subsequently, DOE narrowed its jurisdictional objection to argue that RCRA did not apply to mixed radioactive and hazardous wastes, which are commonly known as "mixed wastes" and which were stored, treated, and disposed of at the Plant. Finally, during the period from 1987 through 1990, DOE asserted that RCRA did not apply to "residues," which are one category of mixed wastes at the Plant.

From the outset, DOE challenged the jurisdiction of EPA to inspect and regulate DOE's facilities under RCRA. In 1982, DOE promulgated DOE Order No. 54,880.2 by which DOE attempted to establish a hazardous waste management program within DOE, which would parallel and conform to the requirements of RCRA, except that it would be a self-regulating program that was exempt from EPA's oversight. In December of 1983, DOE's general counsel issued an opinion letter in which he expressed his view that RCRA did not apply to DOE's weapons facilities, including the Plant, because in his view, they were expressly exempted by certain provisions of the Atomic Energy Act. However, when an environmental organization tested DOE's position on EPA's jurisdiction over hazardous wastes at DOE's Y-12 Plant, which is located near Oak Ridge, Tennessee, a judge held in the case of LEAF v. Hodel, 586F.Supp. 1165 (E.D. Tenn. 1984) that purely hazardous wastes at DOE facilities were regulated by RCRA and! subject to EPA's jurisdiction.

3. DOE asserted in 1984 that mixed wastes at the Rocky Flats Plant were exempt from RCRA regulation by EPA.

When EPA and CDH attempted in 1984 and 1985 to use the holding in LEAF v. Hodel as authority for them to exercise regulatory powers at the Plant, DOE and Rockwell refused to permit them to inspect or regulate the STD of the hazardous component of mixed wastes at the Plant because mixed wastes contain some radioactive matter. In DOE's view, the Atomic Energy Act gave DOE exclusive jurisdiction over any material, which contained a radioactive substance, including radioactive wastes that had been mixed with hazardous wastes. Consequently, Rockwell and DOE did not disclose to EPA or CDH that mixed wastes were stored at the Plant, when DOE submitted its RCRA Part B Permit

application to CDH in November of 1985.

4. DOE acknowledged in 1986 that some mixed wastes at the Rocky Flats Plant were subject to RCRA regulation.

CDH responded to DOE's 1985 Permit application by issuing a Notice of Deficiency. CDH issued this Notice in December of 1985 because DOE had withheld in its Permit application all information regarding the STD of mixed wastes at the Plant. During the following seven months, DOE, CDH, EPA, and Rockwell engaged in a series of negotiations, which ultimately produced a compliance agreement in July of 1986. Under the terms of the 1986 Compliance Agreement among CDH, DOE and EPA, DOE did not submit to the jurisdiction of CDH or EPA the storage treatment, or disposal of transuranic mixed wastes at the Plant. However, DOE agreed that EPA and CDH had authority to regulate the STD of low-level, mixed wastes and hazardous wastes at the Plant.

In partial response to DOE's argument on mixed wastes, EPA subsequently issued a notice, which expressed EPA's view that RCRA applied to all mixed wastes, as well as hazardous wastes. 51 Fed. Reg. 24504 (July 3, 1986). On May 1, 1987, DOE revised its position on EPA's authority to regulate RCRA wastes, when DOE issued its "By-Product Rule." 10 C.F.R. S962.3(b). Under this Rule, DOE acknowledged that EPA had authority under RCRA to regulate the STD of the hazardous portion of all mixed wastes at DOE facilities, including the storage, treatment, and disposal of transuranic, mixed wastes at the Plant.

5. DOE argued in 1987 that mixed waste residues at the Rocky Flats Plant were exempt from regulation under RCRA.

Shortly after DOE announced the By-Product Rule, a decision was announced in *American Mining Congress v. EPA*, 824 F.2d 1177 (D.C. Cir. 1987). The attorneys for DOE and Rockwell at the Plant used this decision to deny CDH and EPA access to inspect the Plant. Instead of following the By-Product Rule, these attorneys persuaded the DOE and Rockwell plant managers during the summer of 1987 to assert that the mixed waste residues, which were stored at the Plant, were exempt from RCRA regulation. These attorneys argued that, since the residues were being held for reprocessing and since they were not being "discarded," the residues at the Plant were not subject to RCRA regulation. "Residues" are wastes that contain a mixture of some radioactive material and some hazardous constituents that Rockwell had stored (and EG&G continues to store) at the Plant at least in theory on the premise that the plutonium in the residues could be separated from the mixed waste at some future date and! that the recovered plutonium could thereafter be recycled into a new weapon.

In advancing this interpretation of the *American Mining Congress* decision, the local DOE counsel and Rockwell's attorneys ignored the controlling facts in the court's written opinion. Unlike the situation in *American Mining Congress*, the residues at the Plant were not being immediately reused in a continuous manufacturing process to extract plutonium for reuse. However, DOE officials at the Plant in Albuquerque were so obsessed with secrecy and avoiding any regulation of the Plant's operations by EPA that DOE's Regional Deputy Manager authorized DOE's Plant Manager to submit DOE's revised RCRA, Part A Permit application to CDH during October of 1987 without disclosing any information about the residues, which Rockwell was then storing at the Plant. DOE and Rockwell specifically refused to provide CDH with the most basic information regarding these residues, including: (a) the number of barrels of residues which were stored at the Plant; (b) how long any of the residues had been stored at the Plant; and (c) what hazardous materials (if any) were mixed with the radioactive component of the residues.

6. Judge Babcock ruled in 1990 that the Rocky Flat's residues are subject to RCRA regulation.

Judge Lewis Babcock of the Colorado Federal District Court held in *Sierra Club v. DOE* 734 F. Supp.946 (D.Colo. 1990) that residues at the Plant are subject to EPA's authority to regulate the STD of RCRA wastes. Judge Babcock specifically rejected DOE's argument under American Mining Congress that Plant's residues were exempt from RCRA.

Judge Babcock distinguished the facts in *American Mining Congress* from the circumstances under which residues were (and continue to be) stored, treated, and disposed of at the Plant. He noted that the residues at the Plant were not in-process, secondary materials passing in a continuous stream from one production process to another in an ongoing manufacturing process. He found that neither the hazardous waste component nor the plutonium mixed in the residues was destined for immediate reuse. Instead, the mixed waste residues at the Plant were (and continue to be) stored for treatment at some future date when processing may allow for ultimate recovery of the plutonium.

7. DOE has not requested nor received a Presidential proclamation exempting DOE from operating the Rocky Flats Plant in compliance with RCRA.

DOE and its contractors have stated frequently that it is impossible for them to operate the Plant in compliance with the applicable provisions of RCRA. In contemplation of such a situation arising, the Congress provided in the most recent amendments to RCRA that DOE and other government agencies could apply to the President for an exemption from RCRA in the interest of national security. However, DOE and its contractors have not applied for nor received a Presidential proclamation to exempt them from the criminal sanctions, which flow as a matter of law from violations of certain provisions of RCRA.

## **PART FIVE**

### **B. DOE AND ROCKWELL VIOLATED RCRA BY ILLEGALLY STORING, TREATING AND DISPOSING OF RESIDUES AT THE ROCKY FLATS PLANT FROM 1980 THROUGH 1989.**

1. DOE and Rockwell accumulated a 40-year inventory of residues at the Rocky Flats Plant.

When FBI raided the Plant in June of 1989, the Plant had an existing backlog of approximately 4,500 drums of residue. Some of these residues had been "temporarily" stored at the Plant for plutonium "recovery" for more than 20 years, and the most optimistic projections suggested that it would then take at least 20 years to process the accumulated backlog of residues and recover the plutonium in them. These residues included significant quantities of mixed wastes, which had been collected after a massive industrial fire destroyed significant portions of the Plant in 1969 and which had been stored continuously thereafter at the Plant.

After the FBI raided the Plant, Rockwell suspended attempts to recover plutonium from the residues, which were then stored at the Plant and which Rockwell had been placing in storage continuously from at least 1979 forward. No subsequent effort has been made by EG&G or DOE to extract plutonium from those residues. All of the residues continue to be stored at the Plant.

2. DOE has never applied to EPA or CDH for a RCRA Permit or interim status under RCRA to store, treat, or dispose of residues at the Rocky Flats Plant.

Subsequent to the FBI raid on the Plant, DOE and EPA entered into two Federal Facilities Compliance

Agreements and various extensions of them. However, neither of the agreements nor any of the extensions granted DOE, Rockwell, or EG&G a RCRA permit or interim status to store, treat, or dispose of liquid, low-level, mixed wastes or solid residues at the Plant. Moreover, as Judge Babcock noted in his opinion in Sierra Club, it is a misnomer to refer to these documents as "compliance agreements" because none of them has ever established a date by which DOE has agreed to operate the Plant in compliance with RCRA.

3. DOE and Rockwell collected and stored a large volume of radioactive incinerator ash residues at the Rocky Flats Plant, although no process has ever existed by which plutonium can be recovered from these residues.

A substantial portion of the residue, which was stored at the Plant during Rockwell's management tenure (and which is stored at the Plant today), consists of mixed waste, incinerator ash. However, contrary to Rockwell's representations to DOE, other government agencies, the public, and Judge Babcock in Sierra Club, there is not now and never has been a treatment process available by which the plutonium in mixed waste, incinerator ash residue can be separated from the hazardous ash in which it is encased.

Incinerator ash residues have been collected for decades at the Plant as the by-product of burning mixed wastes in an incinerator, which is located in Building 771. In an effort to extract plutonium from the mixed waste ash, which this incinerator produced, Dow Chemical (the prior operator of the Plant) expended \$50 million in 1971 attempting to develop an effective treatment process for this mixed waste, incinerator ash. However, Dow's experimental treatment process was abandoned as a failure shortly thereafter, and no one has attempted subsequently to extract plutonium from the large volume of mixed waste, incinerator ash residues, which the Plant has generated and which are stored at the Plant.

4. Rockwell established and operated a nonpermitted, mixed waste, permanent storage facility at the Rocky Flats Plant.

By maintaining the fiction that plutonium could be recovered from the mixed waste, incinerator ash residues, DOE and Rockwell concealed from regulators and the public what they were really doing. Rockwell characterized mixed waste, incinerator ash as a "residue" in the "recycling" or "recovery" process to disguise:

(a) the real status of this hazardous and radioactive waste at the Plant:

and

(b) an important function of the Plant.

Under Rockwell's management, the Plant took on two new roles. First, (as discussed in greater detail below) Rockwell "treated" - within the meaning of RCRA - large volumes of mixed wastes and hazardous wastes by burning them in an incinerator in Building 771 and reducing them to ashes with a volume less than 10% of their respective volumes before they were incinerated. Second, by characterizing the product of this waste treatment process as a "residue," which was being "temporarily" stored at the Plant awaiting recovery and recycling of the plutonium, Rockwell converted part of the Plant into a permanent storage facility for radioactive and hazardous incinerator ash, because Rockwell knew that the incinerator ash could not and would not ever be reprocessed or removed from "temporary" storage at the Plant.

5. Rockwell had several reasons to avoid disclosing the true status of the residues which were stored at

the Rocky Flats Plant.

Rockwell management knew that the residues were being stored and labelled at the Plant in a manner, which violated several provisions of RCRA. For example, Rockwell knew that the Plant lacked sufficient floor space to store the residues in compliance with RCRA's requirements for separation between storage containers. Likewise, Rockwell knew from an internal audit that the residues, which were being stored in a haphazard manner in Buildings 776 and 777 had improper and inadequate identification of the contents of the drums and the potential generation of explosive hydrogen gases within some of the drums containing mixed wastes. In one storage room alone, more than 1,100 drums (each with a capacity of 55 gallons) were stored. In another storage room, several of these 55-gallon drums of residues blocked the emergency exits because the drums were packed so tightly into the room. The bottoms of most of these mixed waste residue drums had rusted and they posed a substantial risk of giving way - and spilling their radioactive contents into the environment - if they had been lifted from the ground.

Rockwell management also resisted EPA's authority over the residues because Rockwell wanted to prevent CDH and EPA from conducting inspections throughout the Plant and, possibly, discovering other RCRA operating violations, such as the usage of the incinerator in Building 771 as a nonpermitted, treatment facility for hazardous wastes and mixed wastes. Moreover, Rockwell realized that DOE would have to apply for - and probably could not obtain - a RCRA Permit to continue storing mixed wastes residues in what had become a de facto mixed waste, permanent storage at the Plant.

When EPA gained access to the Plant for inspection purposes, one of Rockwell's fears was realized. EPA advised DOE and Rockwell in early 1989 (long before the FBI raided the Plant) that they were storing land-banned, hazardous solid and liquid wastes at the plant in violation of RCRA. Many of these wastes were contaminated with low levels of radioactive material. Despite this clear notice of a RCRA violation, Rockwell continued to store these hazardous wastes at the Plant in violation of RCRA's one-year time limit on the temporary storage of such wastes at the Plant.

6. DOE did not want to pay for the residues to be stored at the Rocky Flats Plant in accordance with the requirements of RCRA.

The cost of RCRA compliance was a major, motivating factor in DOE's decision to challenge EPA's authority to inspect and regulate the handling of the residues at the Plant, DOE did not want to spend the money, which RCRA would have required EPA to spend to continue to store the residue drums at the Plant, e.g. the construction of a residue drum storage facility.

7. DOE does not have to continue storing the residues at the Rocky Flats Plant.

All of the residues, which have been stored (and are stored today) at the Plant, could have been shipped to INEL many years ago (and could be shipped there today). These residues could have been placed in retrievable storage at INEL for reprocessing when and if a treatment process is developed for recovering the plutonium from the residues and it is economically wise to attempt to recover the plutonium from such residues. However, DOE has chosen through this date to leave the residues in storage at the Plant, although DOE does not have a RCRA Permit or interim status to store the residues at the Plant.

8. DOE and Rockwell violated several provisions of RCRA by treating, storing, and disposing of residues at the Rocky Flats Plant without having appropriate RCRA permits.

With regard to residues, which have been treated and stored at the Plant, DOE, Rockwell, and certain

employees of each of them violated RCRA on virtually a daily basis between the effective date of RCRA and December 32, 1989 (Rockwell's last day managing the Plant) by:

- (a) failing to report to EPA that they were storing the mixed waste residues at the Plant;
- (b) storing certain mixed waste residues at the Plant for longer than one year although there was no technology available to treat the residues or extract the plutonium from the residues;
- (c) storing certain mixed waste residues at the Plant for longer than one year although processes were known to exist by which the hazardous constituent could have been treated and the plutonium could have been extracted from the residues; and
- (d) engaging in the practices discussed in subparagraphs III.B.3, III.B.4., and III.B.5. above.

Rockwell decided in the fall of 1989 to terminate its contract to operate the Plant when its National Director of Environmental Affairs advised the Chairman of Rockwell that any operation of the Plant would expose the company to criminal prosecution under RCRA. The Director of Environmental Affairs recommended this action because RCRA makes it a crime for any person or company to generate mixed wastes for which there is no permitted, permanent storage facility. Since no facility in the United States has a permit to permanently store low-level, mixed waste, Rockwell violated RCRA, prior to the termination of its contract to operate the Plant, each and every time that it generated any low-level mixed waste at the Plant.

### **C. DOE AND ROCKWELL VIOLATED RCRA BY ILLEGALLY TREATING AND DISPOSING OF HAZARDOUS WASTES AND MIXED WASTES THROUGH USE OF A NONPERMITTED TREATMENT FACILITY AT THE ROCKY FLATS PLANT.**

1. DOE and Rockwell concealed from EPA and CDH that Rockwell was using an incinerator at the Rocky Flats Plant to treat hazardous wastes and mixed wastes.

On November 1, 1985, DOE's Acting Plant Manager signed a RCRA Part A Permit application for the Plant. Rockwell's Plant Manager signed the same Permit application on behalf of Rockwell. Both of these men knew or had sufficient information to know, when they signed this Permit application, that it contained a substantial misstatement of fact.

DOE and Rockwell represented in this Permit application that the incinerator in Building 771 was not being used to burn or treat hazardous waste. However, they knew or should have known at that time that: (a) Rockwell was burning hazardous wastes and mixed wastes in the incinerator in Building 771 at that time; and (b) the incinerator had been used for an extensive period before that date - and would continue to be used for the foreseeable future - as the exclusive means at the Plant to reduce the volume of certain hazardous wastes and mixed wastes, which Rockwell could not otherwise treat and which DOE and Rockwell would have otherwise had to ship elsewhere for storage.

CDH and EPA did not know when DOE submitted its RCRA Part A Permit application in November of 1985 that DOE was burning hazardous wastes or mixed wastes in the incinerator in Building 771. Since DOE had never advised CDH or EPA that Rockwell was using the 771 incinerator as a treatment facility for hazardous wastes and mixed wastes, CDH and EPA had no reason to be aware that DOE and Rockwell were using a nonpermitted, hazardous waste treatment facility at the Plant.

2. DOE and Rockwell illegally used the incinerator in Building 771 to treat hazardous wastes and mixed wastes.

Rockwell used the incinerator in Building 771 on a regular basis from 1980 through 1989, as a treatment

facility to reduce the volume of hazardous wastes and mixed wastes at the Plant. Although there was a consistently large demand to use the 771 incinerator to burn mixed wastes, Rockwell also used this incinerator on various occasions (including as recently as February 26, 1989) to burn hazardous wastes, which had no radioactive components. By burning various hazardous wastes and mixed wastes in the 771 incinerator, Rockwell reduced the volume of such wastes by as much as 90%.

DOE and Rockwell knew when Rockwell was operating the 771 incinerator that RCRA required them to have a RCRA Permit or RCRA interim status to burn hazardous waste or mixed waste. DOE and Rockwell also knew when Rockwell was operating the 771 incinerator that DOE had never applied for and did not have a RCRA Permit or RCRA interim status to operate the 771 incinerator as a hazardous waste and mixed waste treatment facility. However, they chose to ignore these RCRA requirements and they proceeded from 1980 through 1989 to use the 771 incinerator as treatment facility to reduce the volume of hazardous materials, which were stored at the Plant. In the process, they consistently violated RCRA and released hazardous materials - and potentially radioactive materials - into the air of metropolitan Denver at levels substantially greater than those amounts which RCRA allows for treatment facility incinerators.

3. DOE did not apply for RCRA Permit for the 771 incinerator because DOE knew the incinerator could not meet RCRA's standards for a hazardous waste treatment facility.

DOE has never applied for a RCRA Permit or RCRA interim status to operate the 771 incinerator because the incinerator could not meet the environmental, operating, and safety standards, which RCRA imposes on incinerators that are used to burn hazardous wastes and mixed-wastes. Moreover, DOE and Rockwell knew from their independent engineering studies that the 771 incinerator could not be modified to bring it into compliance with RCRA's requirements.

The 771 incinerator used an inefficient filtering system, which permitted substantial quantities of hazardous materials to escape into the atmosphere. The incinerator's operating methods were, likewise, outdated and inappropriate for such dangerous materials. For example, Rockwell employees would start the fire in the incinerator by first igniting newsprint or some other readily flammable material outside of the incinerator with a cigarette lighter or match. The Rockwell employee would then throw the burning newsprint or other object into the incinerator's combustion chamber, where the hazardous and radioactive materials would be burned.

#### **D. DOE AND EG&G HAVE VIOLATED VARIOUS PROVISIONS OF RCRA SUBSEQUENT TO JANUARY 1, 1990**

1. On January 1, 1990, EG&G assumed responsibility for operating the Rocky Flats Plant in compliance with applicable law.

Rockwell terminated its contract to manage the Plant, effective December 31, 1989. DOE entered a separate contract with EG&G to operate the Plant, commencing on January 1, 1990. EG&G agreed in its contract with DOE to operate the Plant in compliance with all applicable laws.

2. EG&G has violated and continues to violate RCRA in operating the Rocky Flats Plant.

Subsequent to the FFBI raid, EPA and DOE produce a series of reports concerning environmental conditions at the Plant. However, DOE and EG&G have not corrected all of the violations of RCRA and other environmental laws, which were highlighted for DOE and EG&G in those reports. When EPA and CDH have questioned EG&G's failure to bring the Plant into compliance with these laws, DOE has

typically responded on behalf of EG&G with a report, which discloses more information about environmental conditions at the Plant but which does nothing to cure violations of RCRA.

During its management of the Plant, EG&G has not put the Plant in compliance with RCRA. EG&G has perpetuated many of the RCRA violations, which prompted the FBI to raid the Plant in 1989.

During questioning before Colorado Federal District Court Judge Lewis Babcock on August 6, 1991, DOE's counsel in the Sierra Club case publicly admitted that DOE and EG&G were still violating RCRA in the improper storage of RCRA wastes at the Plant. The evidence before this Grand Jury shows that DOE and EG&G have violated since January 1, 1990 and continue to violate RCRA in at least the following respects in operating and managing the Plant:

- (a) they are storing 19 categories of hazardous and mixed wastes at the Plant, which are banned from land disposal and for which they do not have a RCRA storage permit for RCRA interim status;
- (b) they are storing approximately 28,000 gallons of liquid hazardous and mixed wastes at the Plant, which consist primarily of land-banned liquid solvents and oil mixtures for which they do not have a RCRA storage permit nor RCRA interim status;
- (c) they are storing at the Plant large quantities of RCRA land-banned solid wastes, which contain various hazardous constituents and for which they do not have a RCRA storage permit for interim storage status;
- (d) they are storing at the Plant large volumes of solid, mixed waste "residues" and for which they do not have a RCRA storage permit nor RCRA interim storage status;
- (e) they are storing various solid and liquid hazardous wastes at the Plant in violation of RCRA's requirements for spacing, packaging, labeling, and other physical compliance matters; and
- (f) they are storing various solid and liquid hazardous wastes at the Plant without permitting scheduled inspections of all of the storage areas.

On September 28, 1990, EG&G reported to DOE that it was storing at the Plant 2,188 drums (i.e. 55-gallon capacity) of mixed waste residues, 302 cans (i.e. 10-gallon capacity) of mixed waste residues, 561 drums of radioactive residues in which the hazardous component (if any) had not been identified. DOE and EG&G did not have then and do not have now a RCRA storage permit nor RCRA interim status storage for these residues.

### 3. EG&G's clean-up efforts at the Rocky Flats Plant have violated RCRA.

During the more than two-year period of its management of the Plant, EG&G has engaged in some "clean-up" efforts at the Plant. Some of these efforts have generated mixed wastes. Since there is no permitted, permanent storage site for these wastes, EG&G has violated RCRA when it has generated mixed wastes for which there is no permitted, permanent storage facility. Further, EG&G has violated RCRA by storing these wastes at the Plant during its management of the Plant without having a RCRA Permit or RCRA interim status to store these wastes there. Moreover, by storing these additional mixed wastes at the Plant for longer than one year, EG&G has violated that provision of RCRA, which forbids the storage of mixed wastes for longer than 12 months at a location, which does not have a permanent RCRA storage permit or RCRA interim status.

### 4. EG&G cannot restart operations at the Rocky Flats Plant without violating RCRA.

The Rocky Flats Plant cannot be restarted without violating RCRA and other environmental laws. Any decision to operate the Plant without a Presidential proclamation exempting operation of the Plant from compliance with RCRA for the illegal generation and STD of RCRA wastes would constitute a willful and knowing violation of the criminal laws of the United States.

## **E. ROCKWELL VIOLATED RCRA AND THE TERMS OF DOE'S NPDES PERMIT BY SPRAY IRRIGATING CHROMIC ACID AND RAW SEWAGE.**

### 1. Rockwell used the STP to treat hazardous waste.

On Thursday morning, February 23, 1989, Rockwell employees noticed that a green - slightly fluorescent - fluid had begun to flow into the STP. Although the Rockwell employees did not know what this unknown liquid was, they did not take any significant, precautionary measures. Specifically, Rockwell did not attempt to:

- (a) divert the unknown fluid into equalization basins and prevent it from entering the STP;
- (b) divert their unknown fluid to the B-Series Ponds after it had passed through the STP; or
- (c) shut down the Plant to diminish the subsequent need to discharge the contaminated wastewater effluent by spray irrigation or direct discharge into Walnut Creek.

Rockwell attempted to use the STP to treat the unknown toxic substance, which was subsequently determined to be chromic acid. However, since the STP did not have a permit to treat RCRA wastes and since chromic acid is a RCRA listed hazardous waste, Rockwell violated RCRA by using the STP to treat RCRA wastes.

### 2. The chromic acid spill destroyed the STP's ability to treat sewage.

When the chromic acid began flowing into the STP's settling basins, the level of turbidity in them increased between one and four turbidity units. By Saturday morning, the turbidity level reached seven turbidity units and the STP reached an "upset" condition. As a consequence, the STP lost its ability to treat the Plant's sewage before it was discharged into the B-Series Ponds, and Rockwell then began discharging partially treated and raw sewage to the B-3 Pond, where it was then illegally discharged with the chromic acid into the B-5 Pond and spray irrigated onto the spray fields.

The elevated level of turbidity in the STP's settling basins indicated to the operators of the STP that the unknown fluid was a highly toxic substance. The elevated level of turbidity also indicated that the unknown substance contained a metal that was killing the microbiological bacteria in the STP that typically treated and purified the wastewater effluent.

### 3. Rockwell spray irrigated the chromic acid to avoid adverse publicity.

When the wastewater containing the unknown fluid began passing through the STP, Rockwell decided to spray irrigate the wastewater effluent, which was contaminated with the unknown fluid, onto the south spray field because Rockwell did not want to face potentially adverse publicity from discharging the colored wastewater effluent directly downstream into the Great Western Reservoir (i.e. Broomfield's drinking water supply) and because the Plant did not have sufficient storage capacity to retain all of the chromic acid on site. Rockwell realized that a substantial quantity of the toxic liquid would run-off the spray field into Broomfield's water supply because the spray field was frozen at the time and it was covered completely with snow and ice.

When DOE learned that the chrome spill had occurred, a DOE employee requested that Rockwell discontinue spray irrigation until the foreign substance could be identified. DOE feared that spray irrigation of the unknown liquid could create a new solid waste management unit under the irrigated ground. Rockwell ignored this request and continued to spray irrigate the then unidentified toxic liquid.

4. Rockwell acted too slowly in determining the identity of the unknown toxic liquid, which flowed into the STP.

Rockwell acted slowly in identifying what was the chemical composition of the unknown fluid. Although Rockwell took samples of the unknown fluid shortly after it entered the STP, management did not expedite the analysis of the sample. Consequently, Rockwell did not know until following Monday that the unknown fluid consisted of chromic acid, which is a RCRA listed waste. A subsequent audit determined that 30.4 pounds of chrome were missing and presumed to have been part of the chromic acid spill.

Chromic acid, which contains hexavalent chrome, is a toxic and hazardous substance. Rockwell negligently failed to maintain and implement adequate spill detection control and containment procedures and equipment in Building 444, where the chromic acid spill occurred on February 22.

5. Rockwell failed to promptly advise the regulatory agencies and surrounding communities that the chrome spill had occurred.

Rockwell did not advise DOE that the chrome spill had occurred until two days after it happened. Rockwell waited until Tuesday, February 28 to advise CDH and EPA that the chrome spill had occurred.

During the chrome spill incident, Rockwell disregarded the potential effect of its actions on the surrounding communities and the environment. Rockwell did not advise Broomfield, Westminster, CDH, or EPA of the toxic spill, the spray irrigation of a toxic substance in an area supplying Broomfield's drinking water, or the discharge downstream from the spray irrigation fields of partially treated or raw sewage. Rockwell waited until after the toxic liquid had passed completely through the STP and the untreated sewage had been sprayed onto the spray fields before Rockwell advised the regulatory authorities of the problem.

6. Rockwell violated RCRA and the Clean Water Act in several respects during the chrome spill incident.

When Rockwell sampled the B-Series Bonds into which unknown fluid flowed before it was spray irrigated, Rockwell discovered that the concentration of chromium in the water being discharged from Pond B-3 to Pond B-5 was as much as four time greater than the level considered to be safe for drinking water. This circumstance violated the conditions of DOE's NPDES Permit for the ponds.

Rockwell violated RCRA and the Clean Water Act (33U.S.C.S 1342) during and after this multi-day series of events in at least the following respects:

- (a) Rockwell disposed of a hazardous substance (within RCRA's definitions) through spray irrigating it onto the land without having a RCRA Permit or RCRA interim status to dispose of chromic acid in that manner;
- (b) Rockwell used the STP to treat a hazardous substance (the chromic acid) although Rockwell did not have a RCRA Permit or RCRA interim status to use the STP as a hazardous waste treatment facility;
- (c) Rockwell violated the terms of DOE's NPDES permit by failing to apply good engineering practices, i.e. spray irrigating the chromic acid and raw sewage onto a frozen ice field from which sheet run-off occurred;
- (d) Rockwell violated the terms of DOE's NPDES permit by discharging water from the B-3 Pond into the B-5 Pond, when the water had a concentration of chromium in it, which was greater than the amount permitted by the NPDES permit;

- (e) Rockwell negligently violated conditions and limitations in the NPDES permit by discharging and releasing non-sanitary industrial wastes to the STP;
- (f) Rockwell bypassed facilities necessary to maintain compliance with the Plant's NPDES permit; and
- (g) Rockwell violated RCRA by creating a new solid waste management unit in the area in which it sprayed the chromic acid.

#### **V. ROCKWELL AND EG&G HAVE OPERATED THE PLANT IN VIOLATION OF THE CLEAN WATER ACT WITH A DEFICIENT GROUNDWATER MONITORING SYSTEM.**

Rockwell operated the Plant through 1989 with a groundwater monitoring system that violated the Clean Water Act. From March of 1985 forward, DOE and Rockwell management knew that the Plant had significant Clean Water Act deficiencies including:

- (a) the placement of groundwater monitoring wells at the Plant;
- (b) the means by which the groundwater monitoring wells had been constructed at the Plant; and
- (c) the unreliability and limited scope and length of sampling data obtained from the groundwater monitoring wells.

The groundwater monitoring wells at the Plant in 1985 had been designed and constructed to detect the presence of radioactive material in the groundwater. However, those wells were not adequate to satisfy the RCRA requirements for monitoring changes in the extent of the contamination of the groundwater.

EPA discovered in 1985 for the first time that DOE and Rockwell were violating their prior certificate of compliance for groundwater monitoring. However, when EPA became aware of this condition, it did not bring an enforcement action to require DOE to drill and operate a sufficient number of appropriate wells to monitor the expanding plume of contaminated groundwater at the Plant.

A report in December of 1985 by Rockwell consultant stated that Rockwell could not obtain and did not have enough data from the existing groundwater monitoring wells to comply with the law. This consultant also criticized the construction and location of these wells, and the consultant recommended that Rockwell plug the existing wells and start over with a new system of groundwater monitoring wells.

In July of 1986, an Assistant Secretary of DOE was advised by DOE staff member in a memorandum that the Plant was being operated in violation of the groundwater monitoring requirements of the Clean Water Act. However, prior to the FBI's raid of the Plant in June of 1989, no one in DOE's headquarters office had directed DOE's regional or Plant managers to bring the Plant into compliance with the statutory and regulatory requirements for groundwater monitoring.

During 1986 and 1987, Rockwell constructed 136 groundwater monitoring wells, but these wells were not constructed in a manner and in locations sufficient to satisfy the requirements of the law. On December 30, 1987, CDH advised Rockwell in writing of the specific deficiencies with the Plant's groundwater monitoring system.

In 1988, DOE performed an internal audit on the risks, which its various facilities posed to public health. At the time, DOE rated the extensive contamination of the groundwater at Rocky Flats as the number one environmental hazard among all of the DOE's facilities throughout the United States. The DOE reached this conclusion because the groundwater contamination was so extensive, toxic, and migrating toward the drinking water supplies for the Cities of Broomfield and Westminster, Colorado.

[EG&G has not significantly improved groundwater monitoring at the Plant during the period while](#)

EG&G has operated the Plant, i.e. January 1, 1990 through the present. EG&G operates the Plant in violation of the groundwater monitoring requirements of the Clean Water Act.

## VI. DOE AND ROCKWELL CONSPIRED TO VIOLATE ENVIRONMENTAL LAWS.

From the perspective of this Grand Jury, Rockwell and DOE were indistinguishable co-conspirators in violating RCRA, the CWA, and other environmental laws, regulations and agreements. Rockwell used DOE as a shield against environmental reporting, regulation, compliance, and enforcement.

Rockwell conspired with certain DOE officials over a period of years to hide its illegal acts and the illegal acts of its employees behind the sovereign immunity of a department (DOE) of the Federal Government. Some DOE employees, likewise, became a *law unto themselves* and attempted to immunize themselves from prosecution by hiding behind the sovereign immunity of the U.S. Government.

Certain Rockwell employees conspired to persuade DOE's Plant Manager and other DOE employees to endorse their illegal acts as the official DOE policy. Further, they drafted correspondence and reports for DOE's approval, which approved of many of Rockwell's illegal acts and, thereby, set in motion the process for them to subsequently argue that the defense of estoppel by entrapment bars prosecution of Rockwell, Rockwell's employees, and DOE's employees. In the process, Rockwell attempted to immunize itself, its employees, and DOE's employees from subsequent prosecution for violating the environmental laws of the United States while operating the Rocky Flats Plant.

Rockwell controlled all of the material information, data, and analysis regarding environmental matters at the Plant. Since Rockwell often failed to disclose all of the relevant facts to DOE's employees, Rockwell and its managers were able to consistently manipulate and control DOE policy [to assure that DOE endorsed Rockwell's illegal conduct in pursuit of very large bonus and contract fee awards. To the extent to which DOE may have authorized Rockwell to break the law, DOE acted more often than not at Rockwell's direction and after Rockwell had independently formed an intent to break the law.](#)

The pervasive nature of the conspiracy between DOE and Rockwell may be the best illustrated by the means in which bonus fee awards for Rockwell were determined semi-annually at the Plant. During the period from 1986 through 1989, Rockwell semi-annually prepared for DOE's office at the Plant, recommended bonus fee award reports. In virtually every circumstance, the DOE Plant Manager would then adopt with almost no changes the recommended bonus fee report-as his report-to justify paying a bonus fee award to Rockwell. In determining the amount of bonus to be paid to Rockwell, the DOE Plant Manager relied almost exclusively on Rockwell to supply the information and suggested grades for each category on which the amount of the bonus fee would ultimately be determined.

The DOE Plant Manager would then return the recommended report to Rockwell for minor revisions consistent with his reaction to Rockwell's suggested report. When Rockwell had revised the report to the satisfaction of the DOE's Plant Manager it would submit the revised bonus fee report to DOE's Albuquerque office on DOE letterhead, as his recommended bonus fee award for Rockwell for that six-month period. DOE's Albuquerque office would then rubber-stamp the report and bonus fee award recommendation, which Rockwell had generated for DOE's Rocky Flats Manager.

The Federal Facility Compliance Agreements between DOE and EPA and the operating contract between DOE and EG&G;have essentially duplicated the circumstances, which existed before the FBI raided the Plant. DOE has continued through the negotiation and implementation of these Agreements to thwart the efforts of EPA and CDH to bring the Plant into compliance with applicable environmental laws. Likewise, DOE has continued to attempt to shield its contractor's illegal acts behind DOE's shield

of sovereign immunity, as a means to avoid the imposition of civil penalties against DOE and its contractor. As the situation before the FBI raided the Plant in June of 1989, DOE continues to direct and endorse this course of illegal activity in violation of applicable environmental laws and in the name of political expediency. It is primarily for this reason that this Grand Jury has recommended that the Rocky Flats Plant be closed.!

## PART SIX

### F. ROCKWELL ILLEGALLY STORED AND TREATED LIQUID MIXED WASTES IN A CLOSED RCRA TREATMENT FACILITY.

DOE's 1985 RCRA Part A Permit for the Plant permitted DOE and Rockwell to use three solar evaporation ponds for the storage of liquid mixed wastes in an "emergency" situation, such as a major spill, ruptured storage tank, or other event that posed a serious threat to human health or the environment. However, this Permit did not allow DOE and Rockwell to use the solar evaporation ponds as a regular STD area for production process wastes containing hazardous and radioactive materials.

DOE and Rockwell used Solar Evaporation Pond 207-C on no less than 15 non-emergency occasions during 1986, 1987, and 1988 for the storage, treatment, and disposal of liquids containing mixed wastes, which were known as concentrate salt brine and which resulted from various liquid waste treatment processes in Building 374. Concentrated salt brine is a characteristic, corrosive, hazardous waste, which has a pH that is equal to or greater than 12.5. Concentrated salt brine also contains various listed hazardous wastes, including acetone, methylene chloride, benzene, and toluene.

On April 4, 1986, Rockwell pumped 25,000 gallons of mixed liquid wastes into Pond 207-C, and Rockwell deposited 15,000 gallons of hazardous liquid wastes there on August 12, 1987. On November 15, 1987, Rockwell stored 18,331 gallons of liquid mixed wastes in the same pond, and the same event occurred with 11,231 gallons of mixed liquid wastes on February 20, 1988. Although the Plant's records are incomplete, they show that liquid, mixed wastes were illegally deposited, treated and stored in Pond 207-C as late as April 8, 1988.

The concentrated salt brine, which was deposited in Pond 207-C would be treated by solar evaporation. The liquid component of the material would evaporate over a period of time and leave a solid mixed waste in the Pond. In the process, the concentrated salt brine would be treated and stored - within the definition of those terms under RCRA - in Pond 207-C.

DOE and Rockwell did not have a RCRA permit or interim status to treat and store concentrated salt brine in Pond 207-C during the period from 1986 through 1988. DOE and Rockwell never applied for a RCRA permit for these purposes because they knew that Pond 207-C could not comply with the minimal technology standards that were required by the 1984 amendments to RCRA. Specifically, they knew that RCRA required and DOE would not pay for the Pond to have a leachate collection system and a double liner before it could be used to treat and store hazardous waste or mixed waste.

Since Pond 207-C was not a RCRA permitted operating unit during this period, DOE, Rockwell, and various Rockwell employees violated the conditions of DOE's RCRA Part A Permit, when they stored, treated and disposed of these hazardous liquid wastes in Pond 207-C. At the time at which each of these transfers occurred, the Solar Evaporation Ponds were marked with signs, which stated clearly that the Ponds were "under closure" and that the Ponds should not be used for any purpose. At the time at which each of these transfers into the Ponds occurred, the Plant was not operating under a "state of emergency".

Rockwell employees transferred the hazardous liquid wastes into the Solar Evaporation Ponds upon the specific approval of high-ranking Rockwell managers. Before any of the hazardous liquids was transferred into Pond 207-C, the transfer of the hazardous fluids had to be approved by Rockwell managers. The process of approval required between two and three days to complete. Some requests to transfer the mixed waste into Pond 207-C were denied by Rockwell managers.

### **G. ROCKWELL VIOLATED RCRA BY ILLEGALLY STORING THOUSANDS OF PONDCRETE AND SALTCRETE BLOCKS OUTDOORS.**

From 1986 through June 10, 1989, DOE and Rockwell manufactured a total of more than 17,000 Pondcrete and Saltcrete blocks. Rockwell stored these blocks outdoors on asphalt pads, which are known as the 750 Pad and the 904 Pad. DOE officials in the headquarters office in Washington, D.C. and the regional office in Albuquerque, New Mexico were directly involved in the decision to produce and store Pondcrete and Saltcrete at the Plant.

Pondcrete is a mixture of cement and sludge from a surface impoundment at the Plant, which is called Solar Evaporation Pond 207-A. Sludge from Pond 207-A was treated and Pondcrete was manufactured in Building 788 into large rectangular blocks. Each of the Pondcrete blocks weighed between 1,500 pounds and 1,800 pounds. Pondcrete is a low-level mixed waste, which contains both characteristic and listed hazardous wastes, including EP toxic cadmium wastes, methylene chloride and acetone.

Saltcrete is mixture of cement, salts, and salt brine from liquid waste treatment processes in Building 374. Salts and salt brine were treated and Saltcrete was manufactured into rectangular blocks in Building 374. A Saltcrete block could weigh between 1,500 pounds and 3,000 pounds. Saltcrete is a low-level, mixed waste, which contains various hazardous wastes, including acetone, methylene chloride, benzene, and toluene.

In the manufacturing process, water and the raw materials for either Pondcrete or Saltcrete would be mixed together and then poured in a slurry form into a large cardboard box, which had plastic liner in it. After the box had been filled with the "crete" slurry, the plastic liner and the box would be closed. The Pondcrete or Saltcrete would then be moved to outside storage on the assumption that the Pondcrete or Saltcrete would soon thereafter harden into a solid, monolithic block. As many as three boxes might be stacked on top of each other outside, and they would only be covered by a tarp.

Rockwell and DOE intended originally in 1986 to store the Pondcrete and Saltcrete blocks at the Plant for no longer than six months before they would be shipped to NTS for permanent underground storage. The Pondcrete and Saltcrete blocks were supposed to harden into concrete monoliths that could be placed in trenches at the Nevada Test Site and be buried there forever without endangering the environment. The first batches of these blocks were stacked six high under the Nevada desert. When NTS learned in 1987 that Pondcrete contained some land-banned substances, Rockwell stopped the Pondcrete and Saltcrete shipments to NTS, and thousands of Pondcrete and Saltcrete "blocks" began to accumulate on the outdoor pads at the Plant.

Rockwell was unable to make the Pondcrete and Saltcrete harden into solid blocks. After Rockwell first discovered this problem in 1987, Rockwell increased the amount of cement which was used in each mixture, and Rockwell instituted new measures to exert better control over the manufacturing process. However, these modifications in the mixture and manufacturing process did not correct the problem. The Pondcrete and Saltcrete blocks continued to take the form of "mush" or "Play-doh". Under exposure to the elements outdoors and the crushing weight of one or more blocks, many of the cardboard containers collapsed and other boxes deteriorated significantly. In some cases, the plastic liner inside a box would rupture, and the Pondcrete or Saltcrete would then be released in a fluid or powdery form as a

"spill" of hazardous and radioactive materials onto the asphalt pads. From there, the wind and rain carried the Pondcrete and Saltcrete constituents into the drainage area for the B-Series Ponds.

Rockwell informed DOE management at the Plant when the first spill of mixed waste from one of the Pondcrete containers occurred during May of 1988. However, DOE did nothing in response until April of 1989. DOE did not give Rockwell permission to reprogram any of its money to reprocess the mushy Pondcrete or to diminish the potential that additional spills would occur. Likewise, DOE denied Rockwell's request for additional money to build protective structures in which the Pondcrete boxes could be sheltered from exposure to further deterioration caused by the brutal outdoor weather fluctuations at the Plant.

In storing Pondcrete and Saltcrete at the Plant, DOE and Rockwell did not comply with RCRA's interim status storage requirements and regulations. 42 U.S.C. S6928(d)-(2)(c). In storing and treating Pondcrete and Saltcrete at the Plant, DOE and Rockwell violated the Colorado Hazardous Waste Regulations for interim status storage regulations in the following respects:

- (1) they failed to minimize the possibility of any unplanned, sudden, or non-sudden release of hazardous wastes or constituents into the air, soil, or water, which would threaten human health, the environment, or both;
- (2) they failed to handle and store the blocks and their cardboard containers in a manner that would prevent them from rupturing or leaking;
- (3) they failed to take remedial action to remedy deterioration and malfunction of equipment and structures; and
- (4) when they discovered that the Pondcrete and Saltcrete containers had begun to leak, they failed to transfer such wastes to containers in good condition.

#### **H. ROCKWELL VIOLATED RCRA AND THE CLEAN WATER ACT BY ENGAGING IN INAPPROPRIATE SPRAY IRRIGATION PRACTICES.**

On May 26, 1984, the EPA issued a National Pollution Discharge Elimination Systems ("NPDES") permit to DOE for the Plant. The permit set specific limits under the Clean Water Act on the kinds of water discharges that the Plant could make, where the discharges could be made (a/k/a/outfalls), and the amounts of specific pollutants that could be discharged from certain outfalls. The NPDES Permit allowed direct discharge downstream from the Plant and into Walnut Creek only from the outfall at Pond B-5.

Rockwell practiced spray irrigation on the East Spray Field to dispose of water from the B-3 Pond, which received treated wastewater effluent directly from the STP, and, thereby, diminish the need for the Plant to discharge from Pond B-5. Rockwell spray irrigated an average of 68 million gallons of treated wastewater effluent onto only 17 acres of land during 1987, 1988 and 1989, which was far in excess of the amount of fluid, which the ground could absorb or which could be expected to evaporate into the air without discharging off-site into the waters of the United States. Rockwell practiced spray irrigation in part out of fear that the public might react adversely if as much as 250,000 gallons of treated wastewater effluent per day flowed downstream from Rocky Flats into the drinking water supplies for Broomfield and Westminster, Colorado. Rockwell spray irrigated the treated wastewater effluent without prior testing to determine if the effluent contained unhealthy concentrations of any substance.

Rockwell was totally committed to the goal of avoiding any direct discharge of wastewater effluent downstream. Consequently, Rockwell spray irrigated the effluent, if the irrigation system was working.

Rockwell's spray irrigation practices resulted in sheet run-off of the sprayed effluent into Woman Creek and Walnut Creek, which ultimately flowed downstream to municipal water collection basins. During the driest months of the summer, no more than 35% of the water, which was spray irrigated, was absorbed into the ground on the Plant site. The remaining volume of the treated wastewater effluent continued downstream to Standley Lake and the Great Western Reservoir. During the winter months, Rockwell continued the spray irrigation even during blizzards, when the ground was covered with snow and ice, and it was impossible for any of the treated wastewater effluent to penetrate the surface of the ground. Massive "ice castles" were formed around these agricultural spray irrigation devices at those times, but the flow of irrigation water seldom stopped.

The Rockwell manager, { who was responsible for supervising operation of the spray irrigation system, } recommended to Rockwell's upper management that Rockwell should stop its practice of spray irrigating the wastewater effluent when the spray fields were frozen. However, Rockwell's upper management ignored this recommendation and directed that spray irrigation continue regardless of the meteorological conditions which might be present.

EPA never inspected the spray irrigation system at the Plant nor any records for operation of the spray irrigation system. If EPA had inspected the records or if EPA had inspected the spray fields, EPA would have discovered what would have been obvious. } Rockwell was engaging in spray irrigation as a means to avoid reporting discharges of its treated wastewater effluent downstream. { Likewise, EPA would have realized that Rockwell was spraying 72 times more water onto the spray fields than they could absorb under ideal circumstances. EPA would have also learned from an inspection of the records or the spray fields that Rockwell was spray irrigating at times when it would have been impossible for any of the sprayed water to have evaporated or infiltrated into the ground before it migrated off of the Plant site.

Rockwell followed a continuous practice from 1984 through 1989 of spray irrigating massive quantities of treated wastewater effluent onto an area known as the "east trenches." The "east trenches" are a group of old waste disposal sites at the Plant. They are located east of the production buildings and on the north and south sides of the East Access Road. The east trenches contain approximately 275,000 tons of uranium-contaminated sewage sludge, 300 flattened uranium-contaminated drums, various plutonium-contaminated debris, and volatile organic compounds.

By spray irrigating over the east trenches, Rockwell flushed unknown quantities of radioactive and hazardous materials into the underlying groundwater and greatly expanded the plume of contaminated groundwater, which lies under the ground in that area of the Plant. This practice also accelerated the migration of the contaminated groundwater downstream in the direction of Standley Lake.

Rockwell knew in 1987 that its practice of spray irrigation was resulting in immediate downstream surface run-off (i.e. sheet flow run-off) of the treated wastewater effluent that was being sprayed into Woman and Walnut Creek. Rockwell and DOE never disclosed to EPA that its spray irrigation practices and procedures were resulting in this run-off into Woman Creek and Walnut Creek when Rockwell's Director of Plutonium Operations received a written report on this in 1987, he took no action to avoid or discontinue the surface run-off of the spray irrigated wastewater effluent.

DOE's Plant Manager reported to his regional supervisor in March of 1989 that Rockwell's practice of spray irrigating its treated wastewater effluent was resulting in muddy conditions and sloughing of the land surface because the ground was being oversaturated. However, neither the Plant Manager nor his

supervisors ordered Rockwell to discontinue its spray irrigation practices.

Rockwell exploited the EPA's use of vague and ambiguous terms which the EPA chose not to define in the NPDES permit for the Plant. For example, EPA directed DOE and Rockwell to engage in spray irrigation of the STP's wastewater effluent in a manner "consistent with good engineering practices." However, EPA never defined what was meant by this phrase.

Under the Rockwell standard operating procedures, spray irrigation was being conducted in accordance with "good engineering practices," did not give any consideration to whether the effluent, which was being sprayed, was toxic, nor did it consider whether the spray field could absorb the effluent without resulting in a direct discharge of the effluent through sheet run-off of the effluent or seepage of the effluent at some point slightly downstream from where the effluent initially infiltrated into the ground. Likewise, the Rockwell definition of "good engineering practices" gave no consideration to whether the practice of spray irrigating in a particular circumstance would result in the effluent bypassing some or all of the outfall discharge points at the Plant at which the EPA had authorized Rockwell to discharge the effluent.

Rockwell's practice of spray irrigating its treated wastewater effluent violated the conditions of its NPDES Permit and RCRA in the following respects. First, the large volume of water, which ran directly off the steeply pitched hillsides and beyond the designated outfalls at the B-5 Pond and C-2 Pond constituted unauthorized discharges into the waters of the United States. Second, some unknown volume of the water, which was spray irrigated, entered into the ground and resurfaced as "seeps" discharging into the waters of the United States. Third, spray irrigation moved some of the effluent from one collection pond to another collection pond, where the discharge standards were substantially more lenient and, thereby, illegal bypassed a discharge point. Fourth, the massive volume of spray irrigation on a relatively small parcel of land violated a condition of the NPDES permit that spray irrigation could occur if and only if it was "consistent with good engineering practices." Since it was impossible for the ground to absorb the large volume of treated wastewater effluent, which was spray irrigated onto it, the practice of spray irrigation at the Plant violated "good engineering practices." Fifth, the practice of spray irrigating over the "east trenches" (i.e. the western portion of the south spray field) was consistent with good engineering practices and, therefore, a violation of the NPDES permit, because it recharged a solid waste disposal site with additional water.

END OF REPORT