

RESPONSE TO COMMENTS

FOR

STATE R.C.R.A.

PERMIT

FACILITY U.S.D.O.E. ROCKY FLATS PLANT

ID# CO7890010526

DATE: SEPTEMBER 30, 1991

REVIEWED FOR CLASSIFICATION
By [Signature]
Date 11/02/91

**RESPONSE TO COMMENTS
STATE RCRA PERMIT
U.S. DEPARTMENT OF ENERGY
ID # CO7890010526**

TABLE OF CONTENTS
RESPONSE TO COMMENTS

RESPONSE TO DOE COMMENTS SIGNATURE PAGE/INTRODUCTION 3

RESPONSE TO DOE COMMENTS PART I STANDARD CONDITIONS 6

RESPONSE TO DOE COMMENTS PART II GENERAL CONDITIONS 8

RESPONSE TO DOE COMMENTS PART III STORAGE IN CONTAINERS 10

RESPONSE TO DOE COMMENTS PART IV WASTE ANALYSIS PLAN 51

RESPONSE TO DOE COMMENTS PART V PROC. TO PREVENT HAZARDS 68

RESPONSE TO DOE COMMENTS PART VI CONTINGENCY PLAN 84

RESPONSE TO DOE COMMENTS PART VII PERSONNEL TRAINING 95

RESPONSE TO DOE COMMENTS PART VIII CLOSURE PERMITTED UNITS 105

RESPONSE TO DOE COMMENTS PART IX DECONTAMINATION 129

RESPONSE TO DOE COMMENTS PART X SOIL SAMPLING 136

RESPONSE TO DOE COMMENTS PART XI HSW AMENDMENTS 144

RESPONSE TO EPA COMMENTS 146

RESPONSE TO ENVIRONMENTAL DEFENSE FUND COMMENTS 156

RESPONSE TO LYNETTE REILING COMMENTS 160

RESPONSE TO CITY OF WESTMINSTER COMMENTS 164

RESPONSE TO ROCKY FLATS CLEANUP COMMISSION COMMENTS 165

RESPONSE TO DOE COMMENTS SIGNATURE PAGE

1. I.D. Number, page 2.

Comment: The facility I.D. number at the top of the page is incorrect.

Suggested Change: I.D. No CO7890010526

RESPONSE: The I.D. number has been corrected.

2. Prime Operating Contractor. page 2.

Comment: Change Rockwell International to EG&G Rocky Flats, Inc. and add the word "centered" before the location coordinates. (Change to from Rockwell to "the Permittee" throughout the remainder of the permit.)

Suggested Change: Pursuant to the Colorado Hazardous Waste Act (Title 25 Article 15, Section 101 et.seq.) hereafter called the Act and regulations promulgated thereunder by the Colorado Board of Health (Codified and to be codified in Title 6 of the Code of Colorado Regulations (CCR)), a State RCRA Permit is issued to the United States Department of Energy and EG&G Rocky Flats, Inc. (jointly, "the Permittee") to operate a hazardous and low-level radioactive mixed waste storage facility located in Jefferson County, Colorado centered at Latitude 39°53'30" North and Longitude 105°11'30" West.

Explanation: The Rocky Flats Prime Operating Contractor is changing from Rockwell International to EG&G in January 1990.

RESPONSE: The language has been adopted as suggested.

3. Allowance to Correct Information. page 2.

Comment: Add information submitted in response to this Draft Permit as allowable modifications.

Suggested Change: This permit is based on the assumption that the information submitted to the Colorado Department of Health (CDH) in the Permittee's Part A and Part B permit application dated November 28, 1986 as modified by subsequent revisions dated December 15, 1987 and April 13, 1988, (hereafter referred to as the application), and as modified by information submitted by the facility in response to this draft permit, is accurate.

Explanation: Some inaccurate information contained in the applications is correct and/or updated in these comments.

RESPONSE: The language has been adopted as suggested.

4. Erroneous reference to application, page 2.

Comment: Change "application" to "permit", 2nd paragraph, last sentence.

Suggested Change: The Permittee must inform CDH of any deviation or changes in the permit which would affect the Permittee's ability to comply with the applicable regulations or permit conditions.

Explanation: This signature page will be a part of the permit, and therefore should reference the permit and not the application.

RESPONSE: This sentence is correct as written.

RESPONSE TO DOE COMMENTS-SIGNATURE/INTRODUCTION

5. Permit duration, page 2.

Comment: Change 5 year duration to 10 years.

Suggested Change: This permit is effective as of _____ and shall remain in effect until _____ (ten year duration) unless revoked and reissued, or terminated (6CCR 1007-3, Section 100.61)

Explanation: This sentence states that the permit has a 5 year duration, but on page 10 (handwritten), paragraph E.3, it states that the permit will expire in 10 years. The permit duration should be ten years since this is the typical duration of a permit and there is not apparent rationale for a shorter duration.

RESPONSE: The permit duration is five years. Significant corrective action activities under the IAG will occur within the five year permit duration, as well as numerous permit modifications which will make large parts of this permit obsolete.

RESPONSE TO DOE COMMENTS INTRODUCTION

1. 1st paragraph, page 3.

Comment: Change the name of the prime operating contractor from Rockwell International to EG&G Rocky Flats, Inc. in the introduction, and change to the "Permittee" throughout the remainder of the permit.

Suggested Change: The prime operating contractor for the facility is EG&G Rocky Flats, Inc.

Explanation: The Rocky Flats Prime Operating Contractor is changing from Rockwell International to EG&G in January 1990. In an attempt to make permit modifications simpler in the event that the Prime Contractor should change again in the future, it is suggested that the name of the Prime Contractor be specified only once, in this introduction to the permit.

RESPONSE: The Introduction specifies EG&G and throughout the rest of the permit "Permittee" is used to indicate the prime operating contractor.

2. Reference to DOE area office, page 3.

Comment: Change Albuquerque Operations Office of the U.S. Department of Energy (DOE) to Rocky Flats Office.

Suggested Change: It is part of a nationwide nuclear weapons research, development, and production complex administered by the Rocky Flats Office of the U.S. Department of Energy (DOE).

Explanation: The Albuquerque Operations Office of the U.S. Department of Energy (DOE) no longer administers Rocky Flats Plant. This function occurs at the DOE Rocky Flats Office.

RESPONSE: In case the area office of the Department of Energy should change in the future the area office reference to has been deleted.

3. Update contractor history, page 3.

Comment: Change name of the prime operating contractor from Rockwell International to

RESPONSE TO DOE COMMENTS-SIGNATURE/INTRODUCTION

EG&G Rocky Flats, Inc and update the contractor history.

Suggested Change: The prime operating contractor for the Rocky Flats Plant is EG&G Rocky Flats, Inc. EG&G has served as prime contractor for DOE since January 1990. Prior to that date, Rockwell International served as prime contractor of the facility from July 1975 to January 1990, and Dow Chemical Company served in this capacity from inception of the plant in 1951 until 1975.

Explanation: The Rocky Flats Prime Operating Contractor is changing from Rockwell International to EG&G in January 1990.

RESPONSE: The contractor history for a government owned facility is not relevant to the issuance of a hazardous and mixed waste permit and this information has been deleted.

4. Radioactive Waste Generation, page 4.

Comment: Delete isotopic references (or alternatively include all isotopes handled).

Suggested Change: The Rocky Flats Plant processes large quantities of plutonium, significant amounts of depleted uranium, small amounts of enriched uranium, and trace amounts of americium and neptunium.

Explanation: The list of isotopes given is not complete, and it would be simpler to remove the specific isotopes than to list them at all.

RESPONSE: It is not necessary to include a complete list of all isotopes in the Introduction.

5. Transuranic Waste, page 4.

Comment: The second paragraph discusses a partial historical chain of events, and should be deleted.

Suggested Change: Delete second paragraph.

Explanation: The historical information is incomplete, and does not add important information to this permit. Therefore, it is suggested it be deleted for simplification.

RESPONSE: Historical information irrelevant to the issuance of a hazardous and mixed waste permit has been deleted.

6. Radioactive Mixed Waste Generation, page 4.

Comment: The second paragraph discusses a partial historical chain of events, and should be deleted.

Suggested Change: Delete second paragraph.

Explanation: The historical information is incomplete, and does not add important information to this permit. Therefore, it is suggested it be deleted for simplification.

RESPONSE: The paragraph has been deleted as suggested.

7. Hazardous Waste Generation, page 5.

Comment: It should be specified that the hazardous waste discussed in this paragraph is nonradioactive.

Suggested Change: The manufacturing processes and support operations at the Rocky Flats Plant also generate nonradioactive hazardous waste as defined by RCRA.

RESPONSE TO DOE COMMENTS-SIGNATURE/INTRODUCTION

Explanation: This clarification distinguishes nonradioactive hazardous waste from the radioactive mixed wastes which are radioactive and hazardous.

RESPONSE: The five waste types are clearly defined in the text, additional information is not necessary.

RESPONSE TO DOE COMMENTS PART I-STANDARD CONDITIONS

1. Effect of Permit, 2nd sentence, page 7.

Comment: The second sentence is ambiguous. It is not clear if the words "not authorized" modify both "this permit" AND "interim status requirements". The sentence suggests there is a choice, with regards to storage of mixed radioactive waste, of either complying with the permit or the interim status requirements. The sentence also does not address allowable generator storage requirements (i.e. satellite and 90-day units).

Suggested Change: Storage of hazardous or low-level mixed wastes addressed in this permit (see page 6) is permitted only to the extent authorized by this permit. Storage units not addressed in this permit continue to be regulated under the interim status requirements of the Colorado Hazardous Waste Regulations, 6 CCR 1007-3, Part 265, and the generator storage requirements, 6 CCR 1007-3, Part 262.34. Any storage of hazardous or low-level mixed radioactive waste not authorized in this permit or under the interim status requirements or under the generator requirements is prohibited.

Explanation: New wording provides better clarification of permit applicability.

RESPONSE: The permit has been revised as in the suggested change to clarify the distinction between permitted, interim status, and generator storage requirements.

2. Monitoring and Records, 2nd and 3rd Sentence, page 9.

Comment: Add "or equivalent method, as described in Part IV of this permit" for sample method and laboratory method, and change the edition reference for SW-846 from 2nd edition to current edition.

Suggested Change: The method used to obtain a representative sample of the waste to be analyzed must be the appropriate method from Appendix I of 6 CCR 1007-3, Section 261, or equivalent method, as described in Part IV of this permit. Laboratory methods must be those specified in Test Methods for Evaluating Solid Waste: Physical/Chemical Methods SW-846 (promulgated edition) , or equivalent method, as described in Part IV of this permit.

Explanation: Sample and laboratory methodology is explained in detail in Part IV, Waste Analysis Plan. Equivalent methods authorized in Part IV of the permit should also be referenced in this condition. Recently the 3rd edition of SW-846 was published; the reference should be for the current edition so that this will not need to be changed again when future editions come out.

RESPONSE: The permit has been revised as in the suggested change to allow use of other approved methods, or the use of the currently promulgated edition of EPA SW-846.

3. Twenty-four Hour Reporting, last paragraph, page 10.

Comment: The Permittee requests an automatic waiver of the 5 day written submission in favor of a 15 day time frame. Change 1st sentence, and delete last sentence.

Suggested Change: A written submission shall also be provided within 15 days of the time the Permittee becomes aware of the circumstances.

Explanation: As indicated in the last sentence, the Director may waive the requirement for five-day written notice and allow the Permittee to submit a written report in 15 days. The

RESPONSE TO DOE COMMENTS PART I STANDARD CONDITIONS

15 day time frame is also consistent with Contingency Plan reporting requirements in 6 CCR Part 264.56 (j).

RESPONSE: The permit has not been revised as a result of this comment. There may be cases in which a written report is necessary within the 5 day timeframe for the Department to make decisions regarding protection of human health and the environment.

4. Other Noncompliance, page 11.

Comment: The condition which discusses "Other Noncompliance" should be revised to clearly limit reporting to inspections conducted as required by the permit. The language in this condition is currently unclear as to how noncompliance is determined and where the information is recorded.

Suggested Change: The Permittee shall record problems identified during inspection of the hazardous waste units, in the operating log. Problems identified during inspection which endanger human health or the environment shall be reported to the Director within 24 hours.

Explanation: The current wording of this condition discourages the Permittee from conducting self audits. This condition appears to require the Permittee to establish a compliance and enforcement program. Determination of non-compliance and enforcement of non-compliance should be a CDH responsibility. The Permittee should be responsible for conducting inspections and recording problems identified during inspections. The Permittee should not be required to report on compliance audits which the facility conducts on a voluntary basis.

RESPONSE: The purpose of Section 100.42(1)(7) is to require the Permittee to report all instances of non-compliance, not otherwise reported in monitoring reports, compliance schedules, or 24 hour reporting. This includes anticipated non-compliance that actually occurs. The burden on the facility is no greater than on any other facility. In the original promulgation of this requirement, EPA acknowledged that this type of reporting would be rare. The permit condition has been revised, using a rewrite suggested by the Colorado Attorney General's Office.

RESPONSE TO DOE COMMENTS PART II-GENERAL FACILITY CONDITIONS

1. Hazardous Waste from Off-Site Sources, page 13.

Comment: Does this condition prevent the Rocky Flats Plant from receiving its own waste, which has been sent to Idaho, Nevada, or an offsite vendor such as OSCO?

Suggested Change: The Permittee shall not receive hazardous or mixed waste from an off-site source except hazardous or mixed waste which originated at Rocky Flats Plant, unless granted approval in writing by the Department.

Explanation: It is anticipated that TRU wastes will be sent to the WIPP site in New Mexico for permanent storage. Wastes from the DOE's Rocky Flats Plant were sent to the DOE's Idaho National Engineering Laboratory (INEL) in the past for temporary storage. It may be necessary to conduct certain characterization tests on this waste before final shipment to WIPP. These tests may be conducted at the Rocky Flats Plant site. The facility may also send hazardous waste to an offsite vendor (such as OSCO), and be requested to take the waste back if the vendor has some type of problem with the waste or with their operations. In addition, low level mixed oils and solvents may be sent to the WERF facility at INEL for incineration, and the solidified ash may need to be returned to Rocky Flats pending an approved disposal facility. The ash may contain residues of non-Rocky Flats waste which were combined with Rocky Flats waste prior to incineration to improve incinerator performance or safety.

RESPONSE: The permit condition as written prohibits Rocky Flats from receiving off-site hazardous wastes from any source. The permit has been revised to clarify under which circumstances Rocky Flats may receive off-site wastes.

2. Security, last sentence, page 13.

Comment: Posting signs in both English and Spanish is burdensome and unnecessary.

Suggested Change: Signs required by 6 CCR 1007-3, Section 264.14(c) will be posted in English.

Explanation: The majority of surrounding populations speak English and would not need signs posted in Spanish as well as English. Colorado voters approved a ballot question in 1988 making English the official language of the state. In any case, the facility is a high security area, and non-English speaking persons could not gain access inadvertently.

RESPONSE: The permit has been revised to require that signs be posted only in English.

3. Personnel Training, 2nd sentence, page 13.

Comment: The sentence states that managers, supervisors, and operators shall have training as specified in Part VII of the permit. This implies either that all managers, supervisors, and operators must have the training specified in Part VII or that only those required by Part VII must have training.

Suggested Change: To the extent required in Part VII, managers, supervisors, and operators shall be trained as specified in Part VII.

Explanation: The present wording of the manager, supervisor, and operator training is confusing.

RESPONSE TO DOE COMMENTS PART II-GENERAL FACILITY CONDITIONS

RESPONSE: The permit has been revised as in the suggested change to clarify the training requirements for various employees.

4. Access to Communications or Alarm System, last sentence, page 14.

Comment: The requirement for a telephone or radio communication system to be available at each waste management area is too general.

Suggested Change: A telephone or two-way radio communication system shall be available at each permitted waste storage area whenever personnel are in the area.

Explanation: Some container storage areas are located outside or in remote areas where a phone is not available. Employees working at the unit are required to carry a two-way radio for notification of appropriate personnel in case emergency assistance is necessary.

RESPONSE: The permit has been revised to incorporate the suggested language regarding communications systems.

5. Implementation of Plan, page 14.

Comment: The section conflicts with the implementation conditions given in Part IV, Contingency Plan, Section G-3. Delete subsections (i) through (iv) and reference Part IV.

Suggested Change: The Permittee shall immediately carry out the provisions of the contingency plan as described in Part IV, Section G-3.

Explanation: The conditions under which the Contingency Plan will be implemented are spelled out in Part IV, Section G-3 of this permit. It is confusing (and contradictory as written) to list them under General Facility Conditions.

RESPONSE: The permit has been revised to make the condition consistent by referencing Part VI of the permit for circumstances under which the contingency plan will be implemented.

RESPONSE TO DOE COMMENTS PART III-STORAGE IN CONTAINERS

III. A. SITE DESCRIPTION

1. 1st paragraph, 1st sentence, page 18.

Comment: Change from 16 areas to 14 areas.

Suggested Change: There are 14 areas used to store hazardous waste and low-level radioactive mixed waste in containers or boxes at the Rocky Flats Plant.

Explanation: These 14 units include Units 1, 10, 11, 12, 13, 15, 17, 19, 20, 21, 23, 24, 25, and 27.

RESPONSE: Permit section III.A. has been revised to clarify that there are 14 areas used to store hazardous and mixed waste at the Rocky FLats Plant.

III.B. UNIT 1. MAIN HAZARDOUS WASTE STORAGE AREA.

2. III.B.1.a. Unit 1 Hazardous Waste Codes, page 19.

Comment: The hazardous waste codes listed for Unit 1 should be expanded. The following code should be added: F008.

Suggested Change:

The permittee may store hazardous waste as described by the following waste codes: (These codes correspond to the codes listed in 6 CCR 1007-3, Part 261)

D001	Ignitable Waste
D002	Corrosive Waste
D003	Reactive Waste
D004	Arsenic Waste
D005	Barium Waste
D006	Cadmium Waste
D007	Chromium Waste
D008	Lead Waste
D009	Mercury Waste
D010	Selenium Waste
D011	Silver Waste
F001	Spent Halogenated Solvents used in Degreasing
F002	Halogenated Solvent Waste
F003	Non-halogenated Solvent Waste (Ignitable)
F005	Non-halogenated Solvent Waste (Ignitable and Toxic)
F006	Wastewater Treatment Sludges from Electroplating
F007	Spent Cyanide Plating Bath Solutions
F008	Cyanide Plating Bath Residues
F009	Cyanide Stripping and Cleaning Solution Waste
P Series Waste	Various (as listed in 6 CCR 1007-3, Section 261.33, as amended)

RESPONSE TO DOE COMMENTS PART III-STORAGE IN CONTAINERS

U Series Waste Various (as listed in 6 CCR 1007-3, Section 261.33, as amended)

Explanation: The Rocky Flats plant may generate wastes coded as F008 in the future. Unit 1 serves as the main storage area for hazardous waste and would potentially be used to store such wastes.

RESPONSE: Permit applications and subsequent correspondence with the facility indicated that the EPA waste codes specified in permit condition III.B.1.1 were correct for Unit 1. Any changes to facility operations which result in additional waste storage needs, such as additional EPA waste codes, must be addressed as a modification to the permit.

III.B.1.a. Liquid Hazardous Waste.

3. III.B.1.a.i. Black and White 55-gallon Drums, page 19.

Comment: The requirement to limit storage of liquid hazardous waste to only "55-gallon drums painted black and white" is unnecessarily restrictive. The reference to black and white drums should be removed.

Suggested Change: The Permittee may store liquid hazardous waste in 55-gallon drums or in other DOT approved containers, subject to the compatibility requirements of Section III.K. of this permit.

Explanation: The use of black and white drums is as a result of internal policy at the Rocky Flats plant which may change. The Permittee may wish to use other color drums for storage of liquid hazardous waste. In addition, the Permittee may need to store hazardous waste in other types of containers. For example, it may be necessary to over-pack a drum and store it in Unit 1.

RESPONSE: The permit has been revised as in the suggested change to delete the reference to use of only black and white drums, and allow use of other DOT-approved containers including overpack drums.

4. III.B.1.a.ii. Heated compartments, aluminum or steel cargo containers, page 19.

Comment: Condition 2 does not allow the 20-ft. or 40-ft. cargo containers to be heated. The condition should be changed to allow heating of these type of cargo containers. In addition, the Rocky Flats Plant utilizes aluminum cargo containers as well as steel cargo containers. Dimensions should be listed as approximate.

Suggested Change: All drums containing liquid hazardous waste will be stored within steel or aluminum cargo containers with approximate dimensions of 20-ft. long by 8-ft. wide by 8-ft. high, 40-ft. long by 8-ft. wide by 8-ft. high; or within one of the 8-ft. long by 8-ft wide by 8-ft. high compartments contained within cargo containers. A typical cargo container is shown in Figure III-3.

Explanation: The Permittee may need to heat one of the 20-ft. or 40-ft. cargo containers to prevent freezing of drums. Aluminum cargo containers as well as steel cargo containers are used at the Rocky Flats Plant. The aluminum cargo containers provide equivalent protection for storage of hazardous wastes. (Note: the requirement to provide heated cargo

RESPONSE TO DOE COMMENTS PART III-STORAGE IN CONTAINERS

containers for wastes subject to freezing is specified in condition 17.) Dimensions should be specified as approximate because the different cargo containers have actual dimensions which vary slightly from those given.

RESPONSE: Permit condition III.B.1.a.ii has been revised as in the suggested change to allow use of 20-ft cargo containers, and clarify that the cargo containers may also be aluminum.

5. III.B.1.a.iii. Cargo container catch basins, page 19.

Comment: In some cases, the catch basin will not extend the full length of the cargo container. The area outside the catch basin can be used to store spill response equipment and other container storage supplies. All containers will be stored in the catch basin. Condition iii. should be modified to allow for this arrangement. The facility may also use catch basins constructed of fiberglass.

Suggested Change: Each cargo container and cargo compartment will contain a steel or fiberglass catch basin. All liquid hazardous waste containers will be placed within catch basins.

Explanation: The use of catch basins which are shorter than the full length of the cargo container allows for storage space outside the secondary containment area. This storage space can be used for spill equipment and other supplies which do not require secondary containment. By requiring all liquid hazardous waste containers to be placed inside the catch basin, secondary containment protection is maintained.

RESPONSE: The permit has been revised as in the suggested change to allow use of fiberglass catch basins, and to allow flexibility to store spill response equipment in the cargo containers.

6. III.B.1.a.iv. Catch Basin Lip Height, page 19.

Comment: The 6 in. high lip requirement for catch basins exceeds the regulatory requirement to provide containment for the largest container or 10 percent of the containers which ever is larger. A 2½ in. high lip would provide adequate protection even assuming that the drums are stored directly in the catch basin for a worst case calculation. A 2½ in. high lip should be established as a minimum requirement. Catch basins may be constructed of steel or fiberglass.

Suggested Change: Each steel or fiberglass catch basin will have at least a 2½ in. high lip around its perimeter to provide capacity equivalent to 10 percent of the total container volume.

Explanation: A 2½ in. high lip meets the regulatory requirement to provide capacity equivalent to 10 percent of the total containers volumes. Calculations are presented in Attachment III-1.

RESPONSE: CDH calculations show that a 2.52-in lip meets the regulatory requirement for secondary containment for the proposed storage volume. The permit has been revised to specify that the catch basins have a 2.6-in lip, or be large enough to contain 10% of the liquid waste volume in storage. In addition, a reference to fiberglass catch basins has been added.

RESPONSE TO DOE COMMENTS PART III-STORAGE IN CONTAINERS

7. III.B.1.a.v. Catch basin coatings, page 19.

Comment: The Permittee should have the flexibility to use other types of coatings which provide equivalent or better protection from spills. Catch basins may be constructed of steel or fiberglass, and fiberglass basins do not need to be coated.

Suggested Change: Each steel catch basin will be coated with epoxy paint or other material which offers equivalent or better protection, in order to prevent waste incompatibility with the steel catch basin. Alternatively, uncoated fiberglass catch basins may be used.

Explanation: The regulatory requirement is for containment which is free of cracks and gaps and is sufficiently impervious to contain leaks, spills, and accumulated precipitation until the collected material is detected and removed. (6 CCR Part 264.175 (b)(1).

RESPONSE: The permit has been revised as in the suggested change to allow use of other coatings, fiberglass catch basins, or stainless steel.

8. III.B.1.a.vi. Epoxy Coating, page 20.

Comment: Delete the reference to epoxy coating, as explained for condition 5.

Suggested Change: Each catch basin will be maintained in good condition and the coating will be free of cracks, gouges or chips which may impair the effectiveness of the containment.

Explanation: Other types of coating besides epoxy paint may be used.

RESPONSE: The permit has been revised as in the suggested change to delete the reference to epoxy coating and generalize the condition to all coating and liners.

9. III.B.1.a.vii. Compatibility Codes within Cargo Containers, page 20.

Comment: This requirement limits storage of only one compatibility code in each cargo container. The requirement should be modified to allow storage of more than one compatibility code as long as all wastes within the cargo container are compatible.

Suggested Change: Waste stored in an individual cargo container or heated compartment must have the same compatibility code or must have compatibility codes which are compatible, as designated in the Waste Analysis Plan, Part IV of this permit.

Explanation: Allowing storage of more than one compatibility code within a cargo container provides greater flexibility. The concern of mixing incompatibles is still addressed as long as all wastes within the cargo container are compatible.

RESPONSE: The permit has been revised as in the suggested change to allow storage of several waste types in a single cargo container as long as the compatibility codes of all wastes are compatible.

10. III.B.1.a.viii. Multiple Compatibility Codes, page 20.

Comment: Change "compatibility code" to "compatibility codes".

Suggested Change: Each cargo container will be labeled on the outside door with the appropriate waste compatibility codes.

Explanation: As discussed above under condition vii, the Permittee requests the flexibility to store more than one compatibility code in a cargo container.

RESPONSE TO DOE COMMENTS PART III-STORAGE IN CONTAINERS

RESPONSE: The permit has been revised as in the suggested change to read "codes".

11. III.B.1.a.ix. Maximum Storage Volume 20-ft. Cargo Containers, page 204.

Comment: The 20-ft. cargo containers can hold a maximum of twenty-two 55-gallon containers.

Suggested Change: No more than twenty-two 55-gallon drums will be stored in each nominal 20-ft. long cargo container, or an equivalent volumetric capacity of other DOT-approved containers. (1,210 gallons)

Explanation: Some of the newer nominal 20-ft cargo containers actually measure 21'9" long, and can hold 22 drums. (see comment 4, condition 2).

RESPONSE: The permit has been revised as in the suggested change to indicate that up to (22) 55-gallon drums may be stored in the 20-ft cargo containers. However, maximum permitted volume for the unit may not be exceeded.

12. III.B.1.a.xi. Storage Capacity Heated Cargo Containers, page 20.

Comment: The limit of 8 drums in a heated cargo container should be changed to a limit of 6 drums in an 8-ft. cargo container.

Suggested Change: No more than six 55-gallon drums will be stored in each 8-ft. long cargo compartment, or an equivalent volumetric capacity of other DOT-approved containers (330 gallons).

Explanation: The Permittee may install heating equipment into 20-ft. or 40-ft. cargo containers. This condition limits storage in heated cargo containers to only six drums which would indirectly restrict storage in heated 20-ft. or 40-ft. cargo containers to only six drums. The intent of this condition is to limit storage in the 8-ft. cargo compartments to only six drums. (Note: the appropriate drum limit for the 8-ft cargo compartment is six drums as opposed to eight.)

RESPONSE: The permit has been revised as in the suggested change to indicate that no more than six 55-gallon drums will be stored in each 8-ft. long cargo container.

13. III.B.1.a.xii. Maximum Storage Capacity Unit 1, page 20.

Comment: The maximum volume for Unit 1 should be changed to 61,600 gallons in 1120 55-gallon drums.

Suggested Change: The maximum volume of liquid hazardous waste which may be stored at any one time is 61,600 gallons in 1120 55-gallon drums or an equivalent volumetric capacity of other DOT-approved containers.

Explanation: The maximum physical capacity for the Unit 1 liquid storage area is 28 40-ft cargo containers which equates to 1120 55-gallon drums. The Permittee may need to store waste within Unit 1 up to this maximum capacity. Under the hazardous waste permit process, the Permittee may propose new units or may expand existing units to meet the facility's needs.

RESPONSE: The "applied for" volume of liquid hazardous waste storage at Unit 1 is 39,160 gallons from the facility's PartA/PartB permit application. Any changes in permitted

RESPONSE TO DOE COMMENTS PART III-STORAGE IN CONTAINERS

volumes must be addressed as a modification to the permit when final.

14. III.B.1.a.xiv. Aisle Spacing, page 20.

Comment: The aisle spacing limit should be changed from a 3-ft. wide access aisle to a minimum of a 18-in. wide access aisle.

Suggested Change: An access aisle of a minimum of 18-in. will extend down the center of each cargo container and heated compartment for the full length and will not be blocked during storage.

Explanation: An 18-in. aisle provides adequate space to conduct inspections. Wider aisle spacing is not necessary since the containers are protected by secondary containment and elevated to prevent any contact with spills. This limit should be identified as a minimum since the actual aisle spacing will in many cases be wider. Note: the access aisle may temporarily be blocked during transfer of containers.

RESPONSE: The 36-in aisle space in condition III.B.1.a.xiv was based upon 2 rows of drums, one on each side of a cargo container, as shown in the facility's diagram (Figure III-3). The facility has not provided justification for reducing the aisle space to 18 inches. CDH does not agree that 18 inches is adequate to conduct inspections, and provide access to all drums in storage. Permit condition III.B.1.1.14 has been revised to specify a 26-inch aisle space to be consistent with other storage areas addressed by the permit.

15. III.B.1.a.xvi. pg 20 No Fence Warning Signs, Electrical Grounds, Air Vents,

Comment: The reference to warning signs for each cargo container should be removed. Warning signs should be placed on the surrounding fence.

Suggested Change: Each cargo container will be fitted with an electrical ground, and air ventilators.

Explanation: Unit 1 is surrounded by a fence which controls access to the area. Warning signs should be placed on the surrounding fence instead of each cargo container. Condition 4 under Solid Hazardous Waste Storage addresses this need.

RESPONSE: The permit has been revised as in the suggested change to eliminate the requirement for warning signs on individual cargo containers since permit condition III.E clearly states the requirement for warning signs.

16. III.B.1.a.xvii. Heating Cargo Containers, page 21.

Comment: The Permittee should have the flexibility to heat other types of cargo containers as well as the 8-ft cargo compartments for storage purposes. The first sentence of condition 17 should be removed. The reference to Section III.F. does not appear to apply to this unit, and should be deleted.

Suggested Change: All drums which may be prone to expansion or failure due to freezing will be stored within a heated cargo container unit. The heaters will be intrinsically safe electric heaters.

Explanation: The Permittee may need to heat 20-ft and 40-ft cargo containers in order to provide sufficient capacity for waste containers which may be prone to expansion or failure because of freezing.

RESPONSE TO DOE COMMENTS PART III-STORAGE IN CONTAINERS

RESPONSE: The permit has been revised as in the suggested change to allow any cargo container to be heated under the specific conditions given.

17. III.B.1.a.xviii. 20 and 40-ft.Cargo Container Equivalence, page 21.

Comment: This condition should be modified to allow a greater number of cargo containers if smaller cargo containers are used to replace 40-ft. cargo containers.

Suggested Change: The maximum number of cargo containers which may be used to store waste at any one time is 28 40-ft. cargo containers or an equivalent capacity of smaller cargo containers. (eg. Two 20-ft. cargo containers can be used in place of one 40-ft. cargo container.)

Explanation: The Permittee may need to use smaller cargo containers in place of the 40-ft cargo containers. Use of the smaller cargo containers provides greater flexibility for storage of a wide variety of wastes. For example, it may be necessary to segregate small numbers of drums which present incompatibility problems with other wastes.

RESPONSE: The permit has been revised to allow use of the nominal 20-ft cargo containers. However, maximum permitted storage volume remains the same.

III.B.1.b Solid Hazardous Waste Storage

18. III.B.1.b.i. Black and White 55-gallon drums, page 21.

Comment: The requirement to limit storage of solid hazardous waste to only "55-gallon drums painted black and white" is unnecessarily restrictive.

Suggested Change: The Permittee may store solid hazardous waste in 55-gallon drums or in other DOT approved containers, subject to the compatibility requirements of Section III.K. of this permit.

Explanation: The use of black and white drums is mandated by internal policy at the Rocky Flats plant. The Permittee may wish to use other color drums for storage of liquid hazardous waste. In addition, the Permittee may need to over-pack containers if a leaking or damaged drum is found. Over-packed drums may be temporarily stored in Unit 1 in a cargo container.

RESPONSE: The permit has been revised as in the suggested change to delete requirements for using specific color drums, and to allow use of other DOT-approved containers.

19. III.B.1.b.ii. Solid Waste Drum Storage Racks and Pallets, page 21.

Comment: The condition should be changed to allow storage of solid hazardous waste drums in other types of drum racks or on pallets.

Suggested Change: The drums will be stored in steel drum racks or in cargo containers or on pallets.

Explanation: The Permittee should not be limited to one type of drum rack provided other types of storage which are equivalent can be used. Cargo containers or pallets may be used for storage provided capacity exists.

RESPONSE TO DOE COMMENTS PART III-STORAGE IN CONTAINERS

RESPONSE: The permit has been revised to allow storage of solid hazardous waste in cargo containers. However, this will result in a corresponding volume decrease for liquid hazardous waste storage. Storage on pallets, or other suitable arrangements with CDH approval, may also be used. Based on one commenter's suggestion, a requirement has been added which specifies that the drums stored outside at Unit 1 must be covered to prevent deterioration due to weather.

20. III.B.1.b.iii. Drum Racks, page 21.

Comment: Depending on the design of the drum rack used, it may be appropriate to store drums horizontally wider than three drums. The condition should be modified to accommodate other types of drum racks.

Suggested Change: Drums shall be stored in drum racks in accordance with the design of the rack.

Explanation: As discussed above, the Permittee may wish to use other types of drum racks. RESPONSE: The permit has been revised to allow use of other types of drum storage methods. See response to comment 19.

21. III.B.1.b.vi. Access Aisles, page 21.

Comment: An access aisle should be required between every double row of drums not between every row of drums.

Suggested Change: A 10-ft wide access aisle will extend between each double row of drum racks and will not be blocked.

Explanation: Drum racks are arranged in rows of two in Unit 1. It is unnecessary to provide an aisle space between each row. A 10-ft. access aisle between each double row still provides access to each drum for inspection purposes and for emergency equipment.

RESPONSE: The permit has been revised as in the suggested change to allow storage in double rows of drum racks with a 10-ft aisle.

22. III.B.1.b.vii. Warning Signs on Fence, page 21.

Comment: The requirement to place a warning sign on each row of drum racks should be eliminated. Instead warning signs should be placed on the fence which surrounds Unit 1.

Suggested Change: Warning signs shall be placed on the fence surrounding Unit 1.

Explanation: Since submittal of the Part B application, Unit 1 has been equipped with a barrier fence. Placement of warning signs on the surrounding fence will provide the necessary warning notification. Individual warning signs for cargo containers and drum rack rows are no longer necessary.

RESPONSE: The permit has been revised as in the suggested change to eliminate the requirement for warning signs on individual rows since permit condition III.E clearly states the requirement for warning signs.

23. III.B.1.b.viii. Real Time Radiography moved to Waste Analysis Plan, pg 21.

RESPONSE TO DOE COMMENTS PART III-STORAGE IN CONTAINERS

Comment: The requirement for conducting Real Time Radiography (RTR) is a waste analysis requirement and should be included in the Unit Specific Waste Analysis Plan, Section IV.C-3. In addition, the Permittee should have the flexibility to store solids as liquids instead of analyzing the waste for free liquids. Finally, testing for free liquids should be limited to newly generated drums.

Suggested Change: All drums generated after the effective date of the permit containing solid hazardous waste must be stored in an area which provides secondary containment as required for liquid hazardous waste or the solid hazardous waste must be analyzed for free liquids in accordance with the requirements specified in the Unit Specific Waste Analysis Plan, Part IV. C-3. Any drums found to contain free liquids will be stored within a cargo container or compartment.

Explanation: Conditions which require waste analysis should be moved to the Waste Analysis Plan. The permit condition should not apply retroactively to hazardous waste already in storage in Unit 1. Establishing the condition based on the effective date of the permit allows the Permittee to implement the change and comply with the condition.

RESPONSE: The facility has previously agreed to RTR all solid hazardous waste drums in storage at Unit 1 since leaking drums were discovered during a joint CDH/EPA inspection at the unit. Due to the difficulties presented by this requirement since the RTR facility (Unit 20) does not have interim status for, or is not permitted for solely hazardous waste, the permit has been revised to allow use of other approved fingerprint methods to verify the absence of free liquids. This requirement has been moved to the waste analysis plan, Part IV of this permit, and applies to all drums in storage at the unit which have not been fingerprinted. No distinction is made between existing and newly generated wastes for storage purposes.

III.B.2 Unit 10. Building 561 Drum Storage Area

24. III.B.2.a. Permitted Hazardous Waste Codes in Unit 10, page 23.

Comment: The hazardous waste codes listed for Unit 10 should be expanded. The following codes should be added: D003, D010, D011, F008, P Series, and U Series.

Suggested Change:

The permittee may store radioactive mixed waste as described by the following waste codes: (These codes correspond to the codes listed in 6 CCR 1007-3, Part 261)

D001	Ignitable Waste
D002	Corrosive Waste
D003	Reactive Waste
D004	Arsenic Waste
D005	Barium Waste
D006	Cadmium Waste
D007	Chromium Waste
D008	Lead Waste

RESPONSE TO DOE COMMENTS PART III-STORAGE IN CONTAINERS

D009	Mercury Waste
D010	Selenium Waste
D011	Silver Waste
F001	Spent Halogenated Solvents used in Degreasing
F002	Halogenated Solvent Waste
F003	Non-Halogenated Solvent Waste (Ignitable)
F005	Non-Halogenated Solvent Waste (Ignitable and Toxic)
F006	Wastewater Treatment Sludges from Electroplating
F007	Spent Cyanide Plating Bath Solutions
F008	Cyanide Plating Bath Residues
F009	Cyanide Stripping and Cleaning Solution Waste
P Series Waste	Various (as listed in 6 CCR 1007-3, Part 261.33, as amended)
U Series Waste	Various (as listed in 6 CCR 1007-3, Part 261.33, as amended)

Explanation: The Rocky Flats plant may generate wastes coded as D003, D010, D011, F008, P Series, and U Series. Unit 10 is used to store the same types of waste stored in Unit 1, except Unit 1 is used for hazardous waste only, and Unit 10 is used for mixed waste. Therefore, the same codes listed for Unit 1 are needed for Unit 10.

RESPONSE: Permit applications and subsequent correspondence from the facility indicated that the EPA waste codes specified in permit condition III.B.2.a. were correct for Unit 10, and that only liquid hazardous wastes were to be stored in the unit. Any changes in facility operation which result in the need for additional waste codes or solid low-level mixed waste storage at Unit 10 must be addressed as a modification to the permit when final.

25. III.B.2.b. White 55-gallon Drums, page 23.

Comment: The requirement to limit storage of liquid low-level radioactive mixed waste in only "55-gallon drums painted white" is unnecessarily restrictive. The reference to white drums should be removed. In addition the word "liquid" should be removed since Unit 10 may also be used to store solid wastes in cargo containers.

Suggested Change: The Permittee may store radioactive mixed waste in 55-gallon drums or other approved DOT containers, subject to the compatibility requirements of Section III.K. of this permit.

Explanation: The use of white drums is as a result of internal policy at the Rocky Flats plant which may change. The Permittee may wish to use other color drums for storage of hazardous waste. In addition, the Permittee may need to use other types of DOT approved containers. For example, a drum found to be leaking would be over-packed and the over-packed drum would be stored in Unit 10.

RESPONSE: The permit has been revised as in the suggested change to delete the reference to use of only white drums, and allow use of other DOT-approved containers including overpack drums.

26. III.B.2.c. Aluminum and/or 20-ft Cargo Containers, page 23.

RESPONSE TO DOE COMMENTS PART III-STORAGE IN CONTAINERS

Comment: Condition 3 should be expanded to allow storage of hazardous wastes in 20-ft cargo containers or 8-ft cargo compartments. The Rocky Flats Plant utilizes aluminum cargo containers as well as steel cargo containers. Dimensions should be listed as approximate.

Suggested Change: All drums containing radioactive mixed waste will be stored within steel or aluminum cargo containers with approximate dimensions of 20-ft. long by 8-ft. wide by 8-ft. high, 40-ft. long by 8-ft. wide by 8-ft. high; or within one of the 8-ft. long by 8-ft wide by 8-ft. high compartments contained within cargo containers.

Explanation: 20-ft cargo containers and 8-ft cargo containers may be used at Unit 10 in order to provide greater storage flexibility. In example, it may be necessary to segregate a small number of drums of incompatible wastes in a 20-ft cargo container. Aluminum cargo containers as well as steel cargo containers are used at the Rocky Flats Plant. The aluminum cargo containers provide equivalent protection for storage of hazardous wastes. Dimensions should be specified as approximate because the different cargo containers have actual dimensions which vary slightly from those given.

RESPONSE: Permit condition III.B.2.c has been revised as in the suggested change to allow use of 20-ft cargo containers, and clarify that the cargo containers may also be aluminum.

27. III.B.2.d. Hazardous Waste Drums must be stored in catch basins, page 23.

Comment: In some cases, the catch basin will not extend the full length of the cargo container. The area outside the catch basin can be used to store spill response equipment and other container storage supplies. All containers will be stored in the catch basin. Condition 4 should be modified to allow for this arrangement.

Suggested Change: Each cargo container and cargo compartment will contain a catch basin. All mixed radioactive and hazardous waste containers will be placed within catch basins.

Explanation: The use of catch basins which are shorter than the full length of the cargo container allows for storage space outside the secondary containment area. This storage space can be used for spill equipment and other supplies which do not require secondary containment. By requiring all liquid hazardous waste containers to be placed inside the catch basin, secondary containment protection is maintained.

RESPONSE: The permit has been revised as in the suggested change to allow use of fiberglass catch basins, and to allow flexibility to store spill response equipment in the cargo containers.

28. III.B.2.e. Catch Basin Lip Height, page 23.

Comment: The 6 in. high lip requirement for catch basins exceeds the regulatory requirement to provide containment for the largest container or 10 percent of the containers which ever is larger. A 2½ in. high lip would provide adequate protection even assuming that the drums are stored directly in the catch basin for a worst case calculation. A 2½ in. high lip should be established as a minimum requirement. Catch basins may be constructed of steel or fiberglass.

Suggested Change: Each steel or fiberglass catch basin will have at least a 2½ in. high lip

RESPONSE TO DOE COMMENTS PART III-STORAGE IN CONTAINERS

around its perimeter to contain leaks and spills.

Explanation: A 2½ in. high lip meets the regulatory requirement to provide capacity equivalent to 10 percent of the total containers volumes. Calculations are provided in Attachment III-1.

RESPONSE: CDH calculations show that a 2.52-in lip meets the regulatory requirement for secondary containment for the proposed storage volume. The permit has been revised to specify that the catch basins have a 2.6-in lip, or be large enough to contain 10% of the liquid waste volume in storage. In addition, a reference to fiberglass catch basins has been added.

29. III.B.2.f. Catch Basin Coatings, page 23.

Comment: The Permittee should have the flexibility to use other types of coatings which provide equivalent or better protection from spills. Catch basins may be constructed of steel or fiberglass, and fiberglass basins do not need to be coated.

Suggested Change: Each steel catch basin will be coated with epoxy paint or other material which offers equivalent or better protection, in order to prevent waste incompatibility with the steel catch basin. Alternatively, uncoated fiberglass catch basins may be used.

Explanation: The regulatory requirement is for containment which is free of cracks and gaps and is sufficiently impervious to contain leaks, spills, and accumulated precipitation until the collected material is detected and removed. (6 CCR Part 264.175 (b)(1).

RESPONSE: The permit has been revised as in the suggested change to allow use of other coatings, fiberglass catch basins, or stainless steel.

30. III.B.2.g. Alternative Catch Basin Coatings, page 23.

Comment: Delete the reference to epoxy coating, as explained for condition e.

Suggested Change: Each catch basin will be maintained in good condition and the coating will be free of cracks, gouges or chips which may impair the effectiveness of the containment.

Explanation: Other types of coating besides epoxy paint may be used.

RESPONSE: The permit has been revised as in the suggested change to delete the reference to epoxy coating and generalize the condition to all coating and liners.

31. III.B.2.h. Waste Compatibility Codes within Cargo Containers, page 24.

Comment: This requirement limits storage of only one compatibility code in each cargo container. The requirement should be modified to allow storage of more than one compatibility code as long as all wastes within the cargo container are compatible.

Suggested Change: Waste stored in an individual cargo container or heated compartment must have the same compatibility code or must have compatibility codes which are compatible, as designated in the Waste Analysis Plan, Part IV of this permit.

Explanation: Allowing storage of more than one compatibility code within a cargo container provides greater flexibility. The concern of mixing incompatibles is still addressed as long as all wastes within the cargo container are compatible.

RESPONSE TO DOE COMMENTS PART III-STORAGE IN CONTAINERS

RESPONSE: The permit has been revised as in the suggested change to allow storage of several waste types in a single cargo container as long as the compatibility codes of all wastes are compatible.

32. III.B.2.i. Multiple Compatibility Codes within Cargo Containers, page 24.

Comment: Change "compatibility code" to "compatibility codes".

Suggested Change: Each cargo container will be labeled on the outside door with the appropriate waste compatibility codes.

Explanation: As discussed above under condition 8, the Permittee requests the flexibility to store more than one compatibility code in a cargo container.

RESPONSE: The permit has been revised as in the suggested change to read "codes".

33. III.B.2.j. Maximum Storage Volume Unit 10, page 24.

Comment: The maximum volume for Unit 10 should be changed to 19,800 gallons in 360 55-gallon drums.

Suggested Change: The maximum volume of liquid hazardous waste which may be stored at any one time is 19,800 gallons in 360 55-gallon drums or an equivalent volumetric capacity of other DOT-approved containers.

Explanation: The maximum physical capacity for the Unit 10 storage area is 9 40-ft cargo containers which equates to 360 55-gallon drums. The Permittee may need to store waste within Unit 10 up to this maximum capacity. Under the hazardous waste permit process, the Permittee may propose new units or may expand existing units to meet the facility's needs.

RESPONSE: The facility's PartA/PartB permit application for Unit 10 lists 4,000 gallons as the "applied for" storage volume. The final approved interim status volume for liquid low-level mixed waste storage at Unit 10 is 17,600 gallons. The Division used the approved interim status capacity in the permit. Any changes in permitted storage volumes must be addressed as a modification to the final permit. The permit has not been revised as a result of this comment.

34. III B.2.k. Volume Equivalence for Cargo Containers, page 24.

Comment: This condition should be modified to allow a greater number of cargo containers if smaller cargo containers are used to replace 40-ft. cargo containers.

Suggested Change: The maximum number of cargo containers which may be used to store waste at any one time is 9 40-ft. cargo containers or an equivalent capacity of smaller cargo containers. (eg. Two 20-ft. cargo containers can be used in place of one 40-ft. cargo container.)

Explanation: The Permittee may need to use smaller cargo containers in place of the 40-ft cargo containers. Use of the smaller cargo containers provides greater flexibility for storage of a wide variety of wastes. For example, it may be necessary to segregate small numbers of drums which present incompatibility problems with other wastes.

RESPONSE: The permit has been revised as in the suggested change to allow more

RESPONSE TO DOE COMMENTS PART III-STORAGE IN CONTAINERS

flexibility in waste management. See response to comment # 26.

35. III.B.2.n. Aisle Spacing, page 24.

Comment: The aisle spacing limit should be changed from a 3-ft. wide access aisle to a minimum of a 18-in. wide access aisle.

Suggested Change: An access aisle of a minimum of 18-in. will extend down the center of each cargo container and heated compartment for the full length and will not be blocked during storage.

Explanation: An 18-in. aisle provides adequate space to conduct inspections. Wider aisle spacing is not necessary since the containers are protected by secondary containment and elevated to prevent any contact with spills. This limit should be identified as a minimum since the actual aisle spacing will in many cases be wider. Note: aisle spacing may temporarily be blocked during transfer of containers.

RESPONSE: The 36-in aisle space in condition III.B.2.n was based upon 2 rows of drums, one on each side of a cargo container, as shown in the facility's diagram (Figure III-3). The facility has not provided justification for reducing the aisle space to 18 inches. CDH does not agree that 18 inches is adequate to conduct inspections, and provide access to all drums in storage. Permit condition III.B.2.n has been revised to specify a 26-inch aisle space to be consistent with other storage areas addressed by the permit.

36. III.B.2.r. New Condition Heated Cargo Containers, page 24.

Comment: The Permittee may store containers with liquids subject to freezing in Unit 10. As with Unit 1, the Permittee should store drums which are subject to failure due to freezing in a heated cargo container.

Suggested Change: All drums which may be prone to expansion or failure due to freezing will be stored within a heated cargo container unit. Heaters will be intrinsically safe electric heaters.

RESPONSE: A new permit condition III.B.2.r has been added as in the suggested change to specify that all drums subject to failure by freezing will be stored in a heated cargo container or unit.

III.B.3. Unit 12:Bldg 776 Drum Storage Area (Room 237)

37. III.B.3.a. Permitted Hazardous Waste Codes in Unit 12, page 25.

Comment: The hazardous waste codes listed for Unit 12 should be expanded. The following codes should be added: D002, D003, D004, D005, D010, D011, F005, F006, F007, F008, and F009.

Suggested Change:

The permittee may store radioactive mixed waste as described by the following waste codes: (These codes correspond to the codes listed in 6 CCR 1007-3, Part 261)

D001	Ignitable Waste
D002	Corrosive Waste

RESPONSE TO DOE COMMENTS PART III-STORAGE IN CONTAINERS

D003	Reactive Waste
D004	Arsenic Waste
D005	Barium Waste
D006	Cadmium Waste
D007	Chromium Waste
D008	Lead Waste
D009	Mercury Waste
D010	Selenium Waste
D011	Silver Waste
F001	Spent Halogenated Solvents used in Degreasing
F002	Halogenated Solvent Waste
F003	Non-halogenated Solvent Waste (Ignitable)
F005	Non-halogenated Solvent Waste (Ignitable and Toxic)
F006	Wastewater Treatment Sludges from Electroplating
F007	Spent Cyanide Plating Bath Solutions
F008	Cyanide Plating Bath Residues
F009	Cyanide Stripping and Cleaning Solution Waste
P Series Waste	Various (as listed in 6 CCR 1007-3, Part 261.33, as amended)
U Series Waste	Various (as listed in 6 CCR 1007-3, Part 261.33, as amended)

Explanation: The Rocky Flats plant may generate all the waste codes listed above. Unit 12 is used to store the same types of waste stored in Unit 10, except Unit 12 is used for mixed wastes with higher levels of radioactivity than Unit 10 can safely store. Therefore, the same codes listed for Unit 10 are needed for Unit 12.

RESPONSE: Permit applications and subsequent correspondence with the facility indicated that the EPA waste codes specified in permit condition III.B.3.a were correct for Unit 12. Any changes to facility operations which result in additional waste storage needs, such as additional EPA waste codes, must be addressed as a modification to the permit when final.

38. III.B.3.b. White 55-gallon drums, page 25.

Comment: The requirement to limit storage of wastes to only 55-gallon drums painted white is unnecessarily restrictive.

Suggested Change: The Permittee may store liquid and solid low-level radioactive mixed waste in 55-gallon drums or other DOT approved containers, subject to the compatibility requirements of Section III.K. of this permit.

Explanation: The use of white drums for low-level waste is a result of internal policy at Rocky Flats Plant which may change. The Permittee may wish to use other color drums for storage of low-level wastes. In addition, the Permittee may need to use 85-gallon overpack drums or other DOT-approved containers for storage of wastes.

RESPONSE: The permit has been revised as in the suggested change to delete the reference to use of only white drums, and allow use of other DOT-approved containers including overpack drums.

RESPONSE TO DOE COMMENTS PART III-STORAGE IN CONTAINERS

39. III.B.3.c. Concrete Floor Sealant, page 25.

Comment: Other types of compatible floor coatings should be allowed in addition to epoxy paint.

Suggested Change: All drums containing low-level radioactive mixed waste will be stored upon a concrete floor which is free of cracks and gaps and is coated with epoxy paint or another compatible coating in good condition.

Explanation: The regulatory requirement is for containment which is free of cracks and gaps and is sufficiently impervious to contain leaks, spills, and accumulated precipitation until the collected material is detected and removed. (6 CCR Part 264.175 (b)(1)).

RESPONSE: The permit has been revised as in the suggested change to allow the use of other compatible floor coatings.

40. III.B.3.d. Secondary Containment, Lip Height, page 25.

Comment: The condition should be changed to account for the concrete wall on one side of the unit. The minimum berm height should be changed to 1.7 ", and other compatible coatings in addition to epoxy paint should be allowed.

Suggested Change: A concrete wall or a concrete berm which is at least 1.7 inches high, free of cracks and gaps, and coated with epoxy paint (or other compatible coating) in good condition, will completely surround the drum storage area. The wall coating must be maintained up to a level of 1.7 inches above the floor.

Explanation: The berm does not extend completely around the storage unit due to the concrete wall on one side. The minimum berm height necessary to provide containment for 10% of the drums is 1.7 inches. Stating that the berm must be at least 2 inches in height poses a conflict with internal plant criticality standards, which state that berms must be no more than 2 inches high. Calculations are provided in Attachment III-1.

RESPONSE: The permit has been revised to require a minimum wall or berm height of 1.8 inches. CDH calculations show that a minimum 1.72 inch berm is needed to provide the required secondary containment volume, and it is more appropriate to round up rather than down.

41. III.B.3.e. Drums Elevated Off Floor, page 25.

Comment: The requirement for pallets should be changed to include other means of elevating the drums off of the floor.

Suggested Change: All drums will be stored on pallets or otherwise elevated off the floor within the berm and the drums will not extend on to or over the edge of the berm.

Explanation: The requirement for using pallets is unnecessarily restrictive. Elevating the drums on 2x4's or other materials accomplishes the same goal.

RESPONSE: The permit has been revised as in the suggested change to allow use of other means to elevate the containers off the floor.

42. III.B.3.h. Individual Drum Access, page 25.

Comment: The part of the condition that drums must be capable of being removed without moving any other drum should be deleted.

RESPONSE TO DOE COMMENTS PART III-STORAGE IN CONTAINERS

Suggested Change: Each stored drum must be accessible and inspectable without moving any other drum, but it is not necessary to be able to move a drum without moving any other drum.

Explanation: It is not necessary to be able to move a leaking drum without moving other drums. All containers are elevated to prevent any contact with spills. Further, moving a leaking drum potentially would lead to spread of contamination, so containment in place is the preferred alternative.

RESPONSE: Permit condition III.B.3.h. has been revised to clarify that drums must be accessible and inspectable without moving any other drum. See response to comment # 45.

43. III.B.3.j Accumulated Liquid in Bermed Area, page 25.

Comment: Delete the last part of the condition requiring drums of liquids from spill cleanups to be stored in Unit 12.

Suggested Change: Any accumulated liquid within the bermed area will be removed in a timely manner using a portable pump and transferred to a drum of adequate integrity. The drum will be stored in a 90-day collection area or in a permitted unit.

Explanation: Unit 12 may be at permitted capacity at the time of such incident, and the drummed liquid would have to be stored in a 90-day collection area or in another permitted unit.

RESPONSE: The permit has been revised as in the suggested change to allow storage of any accumulated liquid in either a 90-day area or an appropriate permitted or interim status unit.

44. III.B.3.k. Perimeter Fence, page 25.

Comment: Add that a wall forms one side of the unit, as noted in Condition 4.

Suggested Change: The unit shall be surrounded by a perimeter fence or wall which is maintained in good condition (e.g. free of holes or gaps).

RESPONSE: The permit has been revised as in the suggested change to clarify that the unit may have a wall on a portion of its perimeter.

45. III.B.3.l Aisle Spacing, page 25.

Comment: Add a condition for aisle spacing, to be consistent with the other units.

Suggested Change: A minimum aisle space of 18 inches will be maintained between double rows of drums.

Explanation: An 18-inch aisle provides adequate space to conduct inspections. The limit should be identified as a minimum since the actual aisle spacing will in many cases be wider.

RESPONSE: The facility has not provided justification for reducing the aisle space to 18 inches. CDH does not agree that 18 inches is adequate to conduct inspections, and provide access to all drums in storage. Permit condition III.B.3.l. has been added to specify a 26-inch aisle space to be consistent with other storage areas addressed by the permit.

III.B.4. Unit 13: Mixed Waste Storage Bldg

RESPONSE TO DOE COMMENTS PART III-STORAGE IN CONTAINERS

46. III.B.4.a. Permitted Hazardous Waste Codes, page 26.

Comment: The hazardous waste codes listed for Unit 13 should be expanded. The following codes should be added: D002, D004, D005, D010, F006, F007, F008, F009, P Series, and U Series.

Suggested Change:

The permittee may store radioactive mixed waste as described by the following waste codes: (These codes correspond to the codes listed in 6 CCR 1007-3, Part 261)

D001	Ignitable Waste
D002	Corrosive Waste
D003	Reactive Waste
D004	Arsenic Waste
D005	Barium Waste
D006	Cadmium Waste
D007	Chromium Waste
D008	Lead Waste
D009	Mercury Waste
D010	Selenium Waste
D011	Silver Waste
F001	Spent Halogenated Solvents used in Degreasing
F002	Halogenated Solvent Waste
F003	Non-halogenated Solvent Waste (Ignitable)
F005	Non-halogenated Solvent Waste (Ignitable and Toxic)
F006	Wastewater Treatment Sludges from Electroplating
F007	Spent Cyanide Plating Bath Solutions
F008	Cyanide Plating Bath Residues
F009	Cyanide Stripping and Cleaning Solution Waste

P Series Waste Various (as listed in 6 CCR 1007-3, Part 261.33, as amended)

U Series Waste Various (as listed in 6 CCR 1007-3, Part 261.33, as amended)

Explanation: The Rocky Flats plant may generate all the waste codes listed above. Unit 13 may be used to store the same types of waste stored in Units 10 or 12, and therefore the same codes listed for these units are needed for Unit 13.

RESPONSE: Permit applications and subsequent correspondence with the facility indicated that the EPA waste codes specified in permit condition III.B.4.a were correct for Unit 13. Any changes to facility operations which result in additional waste storage needs, such as additional EPA waste codes, must be addressed as a modification to the permit when final.

47. III.B.4.b. Liquid Mixed Waste, White 55-gallon drums, page 26.

Comment: The permittee would like to have the flexibility to store liquids as well as solids. This change will also be consistent with Comment 55, when free liquids are discovered and placed in containment pans. Also, the requirement to limit storage of wastes to only 55-

RESPONSE TO DOE COMMENTS PART III-STORAGE IN CONTAINERS

A revision has been made to allow liquid low-level mixed waste storage, with a two high stacking arrangement. See response to comment #47.

49. III.B.4.f. Insufficient Information for Crate Storage, page 26.

Comment: Add crate storage.

Suggested Change: Drums and crates will be stacked no more than 3 high within the storage area.

Explanation: The facility may store crates in this unit, subject to the other unit requirements listed in this permit.

RESPONSE: Insufficient information was provided by the facility to determine if the wastes proposed for storage in crates fit the allowable waste codes for unit 13, and crate storage was not addressed in the facility's Part B permit application. No revisions were made to the permit as a result of this comment. See response to comment # 47.

50. III.B.4.g. Individual Drum Accessibility, page 26.

Comment: The part of the condition that drums must be accessible without moving any other drum should be clarified to state that it is not necessary to be able to move a drum without moving any other drum. Also, add crate storage.

Suggested Change: Each stored drum or crate must be accessible and inspectable without moving any other container, but it is not necessary to be able to move a drum or crate without moving any other container.

Explanation: Due to the stacking and banding arrangement of the drums, it may not be physically possible to move an individual drum without moving any other drums. This suggested change clarifies this point. Each drum or crate will be accessible for inspections and emergency response.

RESPONSE: The permit has been revised to clarify that the drums must be accessible for inspection without moving any other drums.

Crate storage is not addressed.

51. III.B.4.h. Drums Banded on Third Level, page 26.

Comment: Combine with condition 5 as noted above, and change to say drums will only be required to be banded on the third level.

Suggested Change: See Condition e. (Comment 44)

Explanation: See Condition e. (Comment 44)

RESPONSE: See response to comment #48.

52. III.B.4.i Aisle Spacing, page 26.

Comment: The minimum aisle spacing limit should be changed from 26 inches to 18 inches. Also, the aisle space should apply between double rows of drums or crates.

Suggested Change: A minimum aisle space of 18-inches will be maintained between double rows of drums or crates.

Explanation: An 18-inch aisle provides adequate space to conduct inspections. The limit

RESPONSE TO DOE COMMENTS PART III-STORAGE IN CONTAINERS

should be identified as a minimum since the actual aisle spacing will in many cases be wider. **RESPONSE:**The facility has not provided justification for reducing the aisle space to 18 inches. CDH does not agree that 18 inches is adequate to conduct inspections, and provide access to all drums in storage. Permit condition III.B.4.i. has been revised to specify a 26-inch aisle space between stacked double rows of drums to be consistent with other storage areas addressed by the permit.

53. III.B.4.j. Beginning Row Aisle Spacing, page 26.

Comment: The aisle spacing at the beginning of the rows should be changed from 15-feet to 10-feet.

Suggested Change: A minimum aisle space of 10-feet will be maintained at the beginning of each row of drums to allow for forklift access to each row.

Explanation: A minimum aisle of 10-feet has been found to be adequate for forklift access. **RESPONSE:**The permit has been revised as in the suggested change to allow a 10-ft aisle space for forklift access.

54. III.B.4.k. Maximum Storage Volume, page 26.

Comment: The maximum capacity for the unit should be changed to 60,060 gallons in 1,092 55-gallon drums, or 523 cubic yards in 126 crates.

Suggested Change: The maximum volume of low-level radioactive mixed waste which may be stored at any one time is 60,060 gallons in 1,092 55-gallon drums, or 523 cubic yards in 126 crates, or some combination of drums and crates.

Explanation: If the aisle space between rows is changed to 18 inches as requested in Comment 52, and the aisle space at the beginning of each row is reduced from 15 feet to 10 feet as requested in Comment 53, the additional capacity requested is available in the storage area. Crate storage is requested as discussed in comment 47.

RESPONSE:Figure III.1 shows the modified approved storage arrangement for Unit 13. The maximum volume which may be stored using this arrangement is 55,440 gallons in 864 55-gallon drums. This volume is also the approved interim status storage volume applied for by the facility. The "applied for" volume in the permit application was 26,000 gallons and 125 cubic yards. Any changes to the storage arrangement or maximum storage volume must be addressed as a modification to the permit.

55. III.B.4.l. Free Liquid Analysis, page 26.

Comment: The requirement for conducting Real Time Radiography (RTR) is a waste analysis requirement and should be included in the Unit Specific Waste Analysis Plan, Section IV. C-3. In addition, the Permittee should have the flexibility to store solids as liquids instead of analyzing the waste for free liquids. Finally, testing for free liquids should be limited to newly generated drums.

Suggested Change: All drums or crates generated after the effective date of this permit containing solid hazardous waste must be stored in an area which provides secondary containment as required for liquid hazardous waste or the solid hazardous waste must be

RESPONSE TO DOE COMMENTS PART III-STORAGE IN CONTAINERS

analyzed for free liquids in accordance with the requirements specified in the Unit Specific Waste Analysis Plan, Section IV. C-3. Any drums found to contain free liquids will be stored within a containment pan.

Explanation: Conditions which require waste analysis should be moved to the Waste Analysis Plan. The permit condition should not apply retroactively to hazardous waste already in storage in Unit 13. Establishing the condition based on the effective date of the permit allows the Permittee to implement the change and comply with the condition.

RESPONSE: The permit has been revised regarding verification of the absence of free liquids. This information is now a requirement under the waste analysis plan, and applies to all wastes in storage at the unit, and cannot be limited to newly generated wastes. The facility has not provided sufficient information for CDH to determine how existing waste inventory would be handled; ie-whether tested for free liquids or stored in containment pans.

The permit has been revised to allow temporary storage in a 90-day area if free liquids are found, or storage in an appropriate interim status or permitted area.

56. III.B.4.m. Deleted Condition, page 26.

Comment: Delete this condition.

Explanation: This condition is redundant with Condition 7, which specifies that each stored drum must be accessible and inspectable.

RESPONSE: Permit condition III.B.4.m has been deleted as in the suggested change as it is redundant with condition III.B.4.g.

III.B.5 Unit 15. Mixed Waste Cargo Container Storage Area of 904 Pad

57. III.B.5.a. Permitted Hazardous Waste in Unit 15, page 28.

Comment: The hazardous waste codes listed for Unit 15 should be expanded. The following codes should be added: D004, D005, D009, D010, D011, F008, P Series, and U Series.

Suggested Change:

The permittee may store radioactive mixed as described by the following waste codes: (These codes correspond to the codes listed in 6 CCR 1007-3, Part 261)

D001	Ignitable Waste
D002	Corrosive Waste
D003	Reactive Waste
D004	Arsenic Waste
D005	Barium Waste
D006	Cadmium Waste
D007	Chromium Waste
D008	Lead Waste

RESPONSE TO DOE COMMENTS PART III-STORAGE IN CONTAINERS

D009	Mercury Waste
D010	Selenium Waste
D011	Silver Waste
F001	Spent Halogenated Solvents used in Degreasing
F002	Halogenated Solvent Waste
F003	Non-halogenated Solvent Waste (Ignitable)
F005	Non-halogenated Solvent Waste(Ignitable and Toxic)
F006	Wastewater Treatment Sludges from Electroplating
F007	Spent Cyanide Plating Bath Solutions
F008	Cyanide Plating Bath Residues
F009	Cyanide Stripping and Cleaning Solution Waste
P Series Waste	Various (as listed in 6 CCR 1007-3, Part 261.33, as amended)
U Series Waste	Various (as listed in 6 CCR 1007-3, Part 261.33, as amended)

Explanation: The Rocky Flats plant may generate wastes with the EPA codes listed above. Unit 15 may be used to store such wastes.

RESPONSE: Permit applications and subsequent correspondence with the facility indicated that the EPA waste codes specified in permit condition III.B.5.1 were correct for Unit 15-A. Any changes to facility operations which result in additional waste storage needs, such as additional EPA waste codes, must be addressed as a modification to the permit.

58. III.B.5.b. White Drums, D011 Silver Waste, Other Solid Low Level Waste, page 28.

Comment: The permittee would like to have the flexibility to store other solid low-level mixed wastes besides vacuum filter sludge and solvent contaminated oil as long as the wastes exhibit the EPA hazardous waste codes listed in Condition 1. Chip roaster oxide is no longer a mixed waste as a result of the solvent elimination program. (The roaster oxide is now managed as a low level radioactive waste.) Also, the requirement to limit storage of wastes to only 55-gallon white drums is unnecessarily restrictive.

Suggested Change: The Permittee may store solid low-level radioactive mixed waste in 55-gallon drums or other DOT approved containers, subject to the compatibility requirements of Section III.K. of this permit.

Explanation: The facility would like this change to allow storage of other solid mixed wastes in Unit 15. This change is consistent with the conditions listed for the other storage units in this permit. The other DOT approved containers have been included because 85-gallon overpack drums or other containers may be used in the unit, and crate storage is requested. The use of white drums for low-level waste is a result of internal policy at Rocky Flats Plant which may change. The Permittee may wish to use other color drums for storage of low-level wastes.

RESPONSE: The permit has been revised to allow storage of other solid low-level mixed wastes in drums and other DOT-approved containers. A new condition III.B.5.c. has been inserted to allow storage in crates with the appropriate EPA waste codes. Waste code D011 has been added to correct a mistake in the draft permit condition. The reference to white

RESPONSE TO DOE COMMENTS PART III-STORAGE IN CONTAINERS

drums has been deleted. There is an existing inventory of chip roaster oxide still classified as mixed waste in storage at the unit for which EPA waste codes must be placed on the hazardous waste labels.

59. III.B.5.c. Metal or Plywood Crates for Solid Low-Level Mixed, page 28.

Comment: Condition 3 should be expanded to allow storage of wastes in 20-ft cargo containers or 8-ft cargo compartments, or in metal or plywood crates.

Suggested Change: All drums containing radioactive mixed waste will be stored within steel or aluminum cargo containers with approximate dimensions of 20-ft. long by 8-ft. wide by 8-ft. high, 40-ft. long by 8-ft. wide by 8-ft. high; or within one of the 8-ft. long by 8-ft wide by 8-ft. high compartments contained within cargo containers. Wastes may also be stored within metal or plywood crates stored outside the cargo containers.

Explanation: 20-ft cargo containers and 8-ft cargo containers may be used at Unit 15 in order to provide greater storage flexibility. For example, it may be necessary to segregate a small number of drums of incompatible wastes in a 20-ft cargo container. The addition of wood or metal crates is to allow storage of wastes such as cemented composite chips and contaminated soil, which are currently stored on the side of the 904 pad not included in this permit. These wastes will need to be moved to the permitted side of the pad or to another permitted unit when the other side undergoes closure.

RESPONSE: Permit condition III.B.5.c has been renumbered III.B.5.d. and has been revised as in the suggested change to allow use of 20-ft cargo containers, and 8-ft compartments.

60. III.B.5.f. Catch Basins, page 28.

Comment: In some cases, the catch basin will not extend the full length of the cargo container. The area outside the catch basin can be used to store spill response equipment and other container storage supplies. All containers will be stored in the catch basin. Condition 4 should be modified to allow for this arrangement. In addition, this condition should reference the Waste Analysis Plan with regards to free liquids testing.

Suggested Change: Each cargo container and cargo compartment will contain a steel or fiberglass catch basin. All radioactive mixed waste containers generated after the effective date of this permit will be placed within catch basins unless the drums have been certified free of liquids in accordance with the Waste Analysis Plan, Part IV of this permit.

Explanation: The use of catch basins which are shorter than the full length of the cargo container allows for storage space outside the secondary containment area. This storage space can be used for spill equipment and other supplies which do not require secondary containment. By requiring all liquid hazardous waste containers to be placed inside the catch basin, secondary containment protection is maintained.

RESPONSE: The facility's comment and suggested change appear contradictory. The comment states that all containers will be stored in catch basins, while the suggested change states that newly generated wastes verified to have no free liquids will be stored outside the catch basins. The permit has been revised to clarify that all wastes will be stored in steel or fiberglass catch basins unless verified to have no free liquids by an approved method.

RESPONSE TO DOE COMMENTS PART III-STORAGE IN CONTAINERS

Permit condition III.B.5.d. has been renumbered as III.B.5.f. and a new permit condition III.B.5.e. has been added which specifies that wastes stored at Unit 15-A in crates must be covered to protect them from deterioration by the elements.

61. III.B.5.g Catch Basin Lip Height for Secondary Containment, page 28.

Comment: The 6 in. high lip requirement for catch basins exceeds the regulatory requirement to provide containment for the largest container or 10 percent of the containers whichever is larger. A 2½ in. high lip would provide adequate protection even assuming that the drums are stored directly in the catch basin for a worst case calculation. A 2½ in. high lip should be established as a minimum requirement.

Suggested Change: Each steel or fiberglass catch basin will have at least a 2½ in. high steel lip around its perimeter to contain leaks and spills.

Explanation: A 2½ in. high lip meets the regulatory requirement to provide capacity equivalent to 10 percent of the total containers volumes. Calculations are provided in Attachment III-1.

RESPONSE: CDH calculations show that a 2.52-in lip meets the regulatory requirement for secondary containment for the proposed storage volume. The permit has been renumbered III.B.5.g., and revised to specify that the catch basins have a 2.6-in lip, or be large enough to contain 10% of the liquid waste volume in storage. In addition, a reference to fiberglass catch basins has been added.

62. III.B.5.h. Catch Basin Coatings, page 28.

Comment: The Permittee should have the flexibility to use other types of coatings which provide equivalent or better protection from spills. Catch basins may be constructed of steel or fiberglass, and fiberglass basins do not need to be coated.

Suggested Change: Each steel catch basin will be coated with epoxy paint or other material which offers equivalent or better protection, in order to prevent waste incompatibility with the steel catch basin. Alternatively, uncoated fiberglass catch basins may be used.

Explanation: The regulatory requirement is for containment which is free of cracks and gaps and is sufficiently impervious to contain leaks, spills, and accumulated precipitation until the collected material is detected and removed. (6 CCR Part 264.175 (b)(1)).

RESPONSE: Permit condition III.B.5.6. has been renumbered III.B.5.h. and revised to allow use of other compatible coatings, fiberglass, or stainless steel.

63. III.B.5.i Catch Basin Maintenance, page 28.

Comment: Delete the reference to epoxy coating, as explained for condition 6.

Suggested Change: Each catch basin will be maintained in good condition and the coating will be free of cracks, gouges or chips which may impair the effectiveness of the containment.

Explanation: Other types of coating besides epoxy paint may be used.

RESPONSE: Permit condition III.B.5.7. has been renumbered III.B.5.i. and revised to clarify maintenance requirements for the catch basins.

RESPONSE TO DOE COMMENTS PART III-STORAGE IN CONTAINERS

64. III.B.5.j Compatible Wastes allowed in cargo container, page 28.

Comment: This requirement limits storage of only one compatibility code in each cargo container. The requirement should be modified to allow storage of more than one compatibility code as long as all wastes within the cargo container are compatible.

Suggested Change: Waste stored in an individual cargo container or heated compartment must have the same compatibility code or must have compatibility codes which are compatible, as designated in the Waste Analysis Plan, Part IV of this permit.

Explanation: Allowing storage of more than one compatibility code within a cargo container provides greater flexibility. The concern of mixing incompatibles is still addressed as long as all wastes within the cargo container are compatible.

RESPONSE: Permit condition III.B.5.8. has been renumbered III.B.5.j. and revised as in the suggested change to clarify that more than one compatibility code may be stored in a cargo container as long as the codes are compatible.

65. III.B.5.j. Multiple Compatibility Codes in Cargo Containers, page 28.

Comment: Change "compatibility code" to "compatibility codes".

Suggested Change: Each cargo container will be labeled on the outside door with the appropriate waste compatibility codes.

Explanation: As discussed above under condition 8, the Permittee requests the flexibility to store more than one compatibility code in a cargo container.

RESPONSE: Permit condition III.B.5.9. has been renumbered III.B.5.j, and revised to read "codes". A new permit condition III.B.5.k. has been added to specify compatibility code requirements for crate storage.

66. III.B.5.m Drum Limits in 40-ft and 20-ft Cargo Containers, page 28.

Comment: Specify that the 40 drum limit applies to 40-ft cargos, and add 20-ft cargo containers.

Suggested Change: No more than 40 55-gallon drums will be stored in each 40-ft cargo container, and no more than 22 drums will be stored in each (nominal) 20-foot cargo container.

Explanation: See comment 59.

RESPONSE: The permit has been revised as in the suggested change to allow use of the 20-ft cargo containers.

67. III.B.5.n and III.B.5.o. Solid and Liquid Maximum Capacity, page 29.

Comment: One limit should be placed on the total waste volume of solid and liquid waste. Condition 11 and 12 should be removed since condition 13 restricts the total waste volume.

Suggested Change: Delete Conditions n and o.

Explanation: The total waste volume limit specified in condition 13 provides the necessary restrictions on maximum storage capacity. The permit should not restrict liquid and solid storage individually. The Permittee should have the flexibility to store up to the maximum

RESPONSE TO DOE COMMENTS PART III-STORAGE IN CONTAINERS

volume in any combination of liquid and solid wastes.

RESPONSE: The storage capacities listed for Unit 15-A are based upon the facility's Part A/Part B "applied for" storage volumes, the design capacity, and the approved interim status capacity for the unit. Any changes to permitted storage volumes must be addressed as a modification to the permit when final.

Permit condition III.B.5.11. has been renumbered III.B.5.n. and the number of drums corrected to 1014 drums of solid low-level mixed waste.

Permit condition III.B.5.12. has been renumbered III.B.5.o. and has not been revised as a result of this comment for the reasons stated above.

68. III.B.5.p Combined Liquid and Solid Low-Level Capacity Unit 15, page 29.

Comment: The maximum volume for Unit 15 should be changed to 74,800 gallons in 1360 55-gallon drums in the cargo containers, plus 750 cubic yards stored in crates. Note: the number of 55-gallon drums currently listed for this unit is inconsistent with the gallon limit.

Suggested Change: The maximum volume of combined solid and liquid radioactive mixed waste which may be stored at any one time in the cargo containers is 74,800 gallons in 1360 55-gallon drums, or in an equivalent volumetric capacity of other DOT-approved containers. The maximum volume of solid mixed waste which may be stored at any one time in crates outside the cargo containers is 750 cubic yards in 180 crates.

Explanation: The maximum physical capacity for the cargo containers at the Unit 15 storage area is 34 40-ft cargo containers which equates to 1360 55-gallon drums. The maximum number of crates which may be stored outside the cargo containers is 180. The Permittee may need to store waste within Unit 15 up to this maximum capacity. Under a hazardous waste permit, the Permittee may propose new units or may expand existing units to meet the facility's needs. A diagram showing storage arrangement at Unit 15 is provided in Attachment III-3.

RESPONSE: Permit condition III.B.5.13. has been renumbered III.B.5.p.

The permit has been revised to allow storage of crates in Unit 15-A in order to facilitate closure of Unit 15-B, the pondcrete and saltcrete portion of the 904 Pad. This was agreed upon between CDH and the facility at the time the Part B permit application was withdrawn for Unit 15-B. Storage of low-level mixed waste in crates is permitted under a new permit condition III.B.5.q.

The commentor correctly states that the suggested changes may be made under a State RCRA permit. However, the suggested change in permitted storage volume will require a modification to the permit when final, which will be subject to public comment, or would have required that a new draft permit be prepared and subject to public comment. The Division chose the former option.

RESPONSE TO DOE COMMENTS PART III-STORAGE IN CONTAINERS

69. III.B.5.s. Crates Stacked no more than Three High, page 29.

Comment: Add that crates will be stacked no more than 3 high.

Suggested Change: Drums will not be stacked within the cargo containers. Crates stored outside the cargo containers may be stacked no more than three high.

Explanation: Storage of crates is requested in this unit, and a stacking limit should be included.

RESPONSE: A new permit condition III.B.5.s. has been added to to specify crate stacking requirements.

70. III.B.5.t Aisle Spacing between Cargo Containers, page 29.

Comment: The aisle spacing limit should be changed from a 3-ft. wide access aisle to a minimum of a 18-in. wide access aisle. Add a minimum 10-ft aisle between the crates and the cargo containers for fork-lift access.

Suggested Change: An access aisle of a minimum of 18-in. will extend down the center of each cargo container and heated compartment for the full length and will not be blocked during storage. An access aisle of a minimum of 10-ft. will extend between the row of cargo containers and the crates to allow access by fork-lift.

Explanation: An 18-in. aisle provides adequate space to conduct inspections. Wider aisle spacing is not necessary since the containers are protected by secondary containment and elevated to prevent any contact with spills. This limit should be identified as a minimum since the actual aisle spacing will in many cases be wider. A minimum aisle of 10 feet is needed between the crates and cargo containers for forklift access.

RESPONSE: The 36-in aisle space in condition III.B.5.15 was based upon 2 rows of drums, one on each side of a cargo container, as shown in the facility's diagram (Figure III-3). The facility has not provided justification for reducing the aisle space to 18 inches. CDH does not agree that 18 inches is adequate to conduct inspections, and provide access to all drums in storage. Permit condition III.B.5.15 has been renumbered III.B.5.s. and revised to specify a 26-inch aisle space to be consistent with other storage areas addressed by the permit. A 10-ft aisle space for forklift access has been added as permit condition III.B.5.u.

71 III.B.5.w. Electrical Grounds, Air Ventilators, Warning Signs, page 29.

Comment: The reference to warning signs for each cargo container should be removed. Warning signs should be placed on the surrounding fence.

Suggested Change: Each cargo container will be fitted with an electrical ground, and air ventilators. Warning signs will be placed on the fence surrounding Unit 15.

Explanation: Unit 15 is surrounded by a fence which controls access to the area. Warning signs should be placed on the surrounding fence instead of each cargo container.

RESPONSE: The permit has been revised as in the suggested change to eliminate the requirement for warning signs on individual cargo containers since permit condition III.E clearly states the requirement for warning signs.

72. III.B.5.x. Cargo Container Equivalence, page 29.

RESPONSE TO DOE COMMENTS PART III-STORAGE IN CONTAINERS

Comment: This condition should be modified to allow a greater number of cargo containers if smaller cargo containers are used to replace 40-ft. cargo containers. Also, the maximum number of cargo containers for Unit 15 is actually 34.

Suggested Change: The maximum number of cargo containers which may be used to store waste at any one time is 34 40-ft. cargo containers or an equivalent capacity of smaller cargo containers. (eg. Two 20-ft. cargo containers can be used in place of one 40-ft. cargo container.)

Explanation: The Permittee may need to use smaller cargo containers in place of the 40-ft cargo containers. Use of the smaller cargo containers provides greater flexibility for storage of a wide variety of wastes. For example, it may be necessary to segregate small numbers of drums which present incompatibility problems with other wastes.

RESPONSE: Permit condition III.B.5.18. has been renumbered III.B.5.x. and revised to allow use of 34 cargo containers, or the equivalent capacity of smaller cargo containers. However, the permitted storage capacity has not been revised.

III.B.6. Unit 17: Building 777 Mixed Waste Storage Area (Room 432C)

73. III.B.6.b. White and Overpack Drums, page 31.

Comment: The requirement to limit storage of wastes to only 55-gallon white drums is unnecessarily restrictive.

Suggested Change: The Permittee may store solidified scintillation cocktail, a solid low-level radioactive mixed waste, in 55-gallon drums or other DOT approved containers, subject to the compatibility requirements of Section III.K. of this permit.

Explanation: The use of white drums for low-level waste is a result of internal policy at Rocky Flats Plant which may change. The Permittee may wish to use other color drums for storage of low-level wastes. In addition, the Permittee may need to use 85-gallon overpack drums or other DOT-approved containers for storage of wastes.

RESPONSE: The permit has been revised as in the suggested change to delete the reference to use of only white drums, and allow use of other DOT-approved containers including overpack drums.

74. III.B.6.c. Concrete Floor Coatings, page 31.

Comment: Other types of compatible floor coatings should be allowed in addition to epoxy paint.

Suggested Change: All drums containing low-level radioactive mixed waste will be stored upon a concrete floor which is free of cracks and gaps and is coated with epoxy paint or another compatible coating in good condition.

Explanation: The regulatory requirement is for containment which is free of cracks and gaps and is sufficiently impervious to contain leaks, spills, and accumulated precipitation until the collected material is detected and removed. (6 CCR Part 264.175 (b)(1)).

RESPONSE: The permit has been revised as in the suggested change to allow the use of other compatible floor coatings.

RESPONSE TO DOE COMMENTS PART III-STORAGE IN CONTAINERS

75. III.B.6.d Protection from Run-On Liquids, page 31.

Comment: The condition that there will be a concrete berm surrounding Room 432C should be clarified to indicate that the berm forms the lower portion of the walls of the room.

Suggested Change: To protect the drums stored in Room 432C from run-on liquids, a 6 inch continuous concrete berm (which is also the lower part of the concrete walls) will surround Room 432C, including the doorway.

Explanation: The berm referred to in the condition is actually part of the wall. The epoxy paint coating covers the floor and the lower 6 inches of the wall.

RESPONSE: The permit has been revised as in the suggested change to indicate that a berm or wall will surround Unit 17.

76. III.B.6.e. Berm Wall Coating, page 31.

Comment: Other types of compatible berm coatings should be allowed in addition to epoxy paint.

Suggested Change: The concrete berm will be free of cracks and gaps and coated with epoxy paint or another compatible coating in good condition.

Explanation: See comment on Condition 3 above.

RESPONSE: The permit has been revised as in the suggested change to delete the reference to epoxy coating and generalize the condition to all coating and liners.

III.B.7 Unit 23. Gas Cylinder Storage Building 952

77. III.B.7.e. Building Vents, page 32.

Comment: Change "a steel ventilating screen" to "vents", and change to present tense.

Suggested Change: Vents will be maintained at floor level to provide ventilation for heavier than air gases.

Explanation: Round vents have been installed at floor level, not steel ventilating screens. Photographs are provided in Attachment III-2 which show these vents.

RESPONSE: The permit has been revised as in the suggested change to indicate that floor vents will be installed.

78. III.B.7.i Gas Compatibility Codes, page 32.

Comment: Compatibility codes are only applicable to liquid wastes.

Suggested Change: Delete condition 9.

Explanation: Compatibility codes are only used for liquids, and this unit stores compressed gases.

RESPONSE: The commentor appears to have incorrectly stated that compatibility codes apply only to liquids. Reference 6 CCR 1007-3, Part 264, Appendix 5. Since containerized gases may be in liquid phase depending on temperature and pressure, no change to permit

RESPONSE TO DOE COMMENTS PART III-STORAGE IN CONTAINERS

condition III.B.7.i. as a result of this comment.

79. III.B.7.j. Chaining Gas Cylinders to Rack, page 32.

Comment: The word "individually" should be removed from condition 10.

Suggested Change: Each gas cylinder or lecture bottle will be chained to the building or secured within a rack which is secured to the wall to prevent potential toppling.

Explanation: Gas cylinders and lecture bottles do not have to be individually chained to be secure. It is common practice in industry to chain several cylinders together during storage.
RESPONSE:The permit has been revised as in the suggested change to allow several gas cylinders to be chained together when secured to the wall or rack.

III.B.8. Unit 24: Building 964 Mixed Waste Storage Building

80. III.B.8. Unit Title, page 33.

Comment: Should be III.B.8 instead of II.B.8.

RESPONSE: The permit has been revised as in the suggested change to correct the unit title.

81. III.B.8.a. Permitted Hazardous Waste Codes in Unit 24, page 33.

Comment: The hazardous waste codes listed for Unit 24 should be expanded. The following codes should be added: D001, D002, D003, D004, D005, D009, D010, D011, F007, F008, F009, P Series, and U Series.

Suggested Change:

The permittee may store radioactive mixed as described by the following waste codes:
(These codes correspond to the codes listed in 6 CCR 1007-3, Part 261)

D001	Ignitable Waste
D002	Corrosive Waste
D003	Reactive Waste
D004	Arsenic Waste
D005	Barium Waste
D006	Cadmium Waste
D007	Chromium Waste
D008	Lead Waste
D009	Mercury Waste
D010	Selenium Waste
D011	Silver Waste
F001	Spent Halogenated Solvents used in Degreasing
F002	Halogenated Solvent Waste
F003	Non-halogenated Solvent Waste (Ignitable)
F005	Non-halogenated Solvent Waste(Ignitable and Toxic)
F006	Wastewater Treatment Sludges from Electroplating

RESPONSE TO DOE COMMENTS PART III-STORAGE IN CONTAINERS

F007	Spent Cyanide Plating Bath Solutions
F008	Cyanide Plating Bath Residues
F009	Cyanide Stripping and Cleaning Solution Waste
P Series Waste	Listed in 6 CCR 1007-3, Part 261.33, as amended.
U Series Waste	Listed in 6 CCR 1007-3, Part 261.33, as amended.

Explanation: The Rocky Flats plant may generate wastes with the EPA codes listed above. Unit 24 may be used to store such wastes.

RESPONSE: Permit applications and subsequent correspondence with the facility indicated that the EPA waste codes specified in permit condition III.B.8.1 were correct for Unit 24. Any changes to facility operations which result in additional waste storage needs, such as additional EPA waste codes, must be addressed as a modification to the permit.

82. III.B.8.b. White Drums, Vacuum Filter Sludge, page 33.

Comment: The permittee would like to have the flexibility to store other solid low-level mixed wastes besides vacuum filter sludge, as long as the wastes exhibit the EPA hazardous waste codes listed in Condition 1. Also, the requirement to limit storage of wastes to only 55-gallon white drums is unnecessarily restrictive. Suggested Change: The Permittee may store solid low-level radioactive mixed waste in 55-gallon drums or other DOT approved containers, subject to the compatibility requirements of Section III.K. of this permit.

Explanation: The facility would like this change to allow storage of other solid mixed wastes in Unit 24. This change is consistent with the conditions listed for the other storage units in this permit. The other DOT approved containers have been included because 85-gallon overpack drums or other containers may be used in the unit. The use of white drums for low-level waste is a result of internal policy at Rocky Flats Plant which may change. The Permittee may wish to use other color drums for storage of low-level wastes.

RESPONSE: The four-high drum stacking arrangement for Unit 24 was approved based on a uniform waste type (ie-vacuum filter sludge). The permit has not been revised to allow other waste types. The requirement for a certain color drums has been deleted. See response to comment 81.

83. III.B.8.e. No Free Liquid Drum Storage, Other Stable Stacking, page 33.

Comment: The Permittee would like the option of using plywood in place of pallets for stacking drums, and would like to have the option of storing the bottom level of drums directly on the concrete floor. Also, banding should only be required for the fourth level of drums.

Suggested Change: Drums on the fourth levels will be banded together in groups of four and stored on pallets. Drums on the first, second, and third levels may either be banded in groups of four on pallets or stored individually with the first level directly on the concrete floor and the second and third levels on plywood sheets. Any drums over 500 pounds that are banded and stored on pallets must be on pallets strengthened by 2 center reinforcing

RESPONSE TO DOE COMMENTS PART III-STORAGE IN CONTAINERS

2x4's.

Explanation: For light weight drums such as combustibles, the user has found it more stable to place plywood between the levels of drums instead of pallets. For heavier drums, pallets are more stable. The bottom level need not be stored on pallets because any free liquids in the area will be stored inside overpack drums. The purpose of banding is to ensure the stability of the drums in storage. The drums are stable without banding up to three levels high. Therefore, banding should only be required on the fourth level. Whenever drums are stored on pallets banding will be required, because a pallet of four drums must be banded to allow safe transport with a fork-lift. Drums stored individually on plywood sheets will be moved one at a time using a fork-lift drum-hugger attachment.

RESPONSE: The permit has been revised to allow other stable stacking arrangements under certain conditions. Drums with free liquids may not be stored in this area.

84. III.B.8.g. Individual Drum Access Without Moving other Drums, page 33.

Comment: The part of the condition that drums must be accessible without moving any other drum should be clarified to state that it is not necessary to be able to move a drum without moving any other drum.

Suggested Change: Each stored drum must be accessible and inspectable without moving any other drum, but it is not necessary to be able to move a drum without moving any other drum.

Explanation: Due to the stacking and banding arrangement of the drums, it may not be physically possible to move an individual drum without moving any other drums. This suggested change clarifies this point. Each drum will be accessible for inspections and emergency response.

RESPONSE: The permit has been revised to clarify that each drum must be accessible for inspection without moving any other drum.

85. III.B.8.h Aisle Spacing Between Pallet Rows, page 33.

Comment: The minimum aisle spacing limit should be changed from 26 inches to 18 inches. Also, the aisle space should apply between double rows of drums instead of between rows of pallets.

Suggested Change: A minimum aisle space of 18 inches will be maintained between double rows of drums.

Explanation: An 18-inch aisle provides adequate space to conduct inspections and emergency response. The limit should be identified as a minimum since the actual aisle spacing will in many cases be wider.

RESPONSE: The facility has not provided justification for reducing the aisle space to 18 inches. CDH does not agree that 18 inches is adequate to conduct inspections, and provide access to all drums in storage. Permit condition III.B.8.8. has been not been revised since a 26-inch aisle space is consistent with other storage areas addressed by the permit.

RESPONSE TO DOE COMMENTS PART III-STORAGE IN CONTAINERS

86. III.B.8.i Forklift Access Aisle Spacing, page 33.

Comment: The aisle spacing at the beginning of the rows should be changed from 15 feet to 10 feet.

Suggested Change: A minimum aisle space of 10 feet will be maintained at the beginning of each row of drums to allow for forklift access to each row.

Explanation: A minimum aisle of 10 feet has been found to be adequate for forklift access. **RESPONSE:** The permit has been to allow a 10-ft aisle space for forklift access. Figure III-2 has also been revised to reflect the suggested storage arrangement.

87. III.B.8.-Real Time Radiography moved to Waste Analysis, page 33.

Comment: The requirement for conducting Real Time Radiography (RTR) is a waste analysis requirement and should be included in the Unit Specific Waste Analysis Plan, Section IV. C-3. In addition, the Permittee should have the flexibility to store solids as liquids instead of analyzing the waste for free liquids. Finally, testing for free liquids should be limited to newly generated drums.

Suggested Change: All drums generated after the effective date of this permit containing solid hazardous waste must be stored in an area which provides secondary containment as required for liquid hazardous waste or the solid hazardous waste must be analyzed for free liquids in accordance with the requirements specified in the Unit Specific Waste Analysis Plan, Section IV. C-3. Any drums found to contain free liquids will be stored within a containment pan.

Explanation: Conditions which require waste analysis should be moved to the Waste Analysis Plan. The permit condition should not apply retroactively to hazardous waste already in storage in Unit 24. Establishing the condition based on the effective date of the permit allows the Permittee to implement the change and comply with the condition.

RESPONSE: The permit has been revised regarding verification of the absence of free liquids. This information is a requirement under the waste analysis plan, and applies to all wastes in storage at the unit, and cannot be limited to newly generated wastes. This information should be available as part of either the generator or unit specific waste analysis. The facility has not provided sufficient information for CDH to determine how existing waste inventory would be handled; ie-whether tested for free liquids or stored in containment pans until verified to have no free liquids or shipped off-site.

III.B.9. Unit 27: Building 776 Mixed Waste Storage Area (Room 201)

88. III.B.9.a Permitted Hazardous Waste Codes in Unit 27, page 35.

Comment: The hazardous waste codes listed for Unit 27 should be expanded. The following codes should be added: D002, D003, D004, D005, D010, D011, F005, F006, F007, F008, F009, P Series, and U Series.

Suggested Change:

The permittee may store radioactive mixed as described by the following waste codes:

RESPONSE TO DOE COMMENTS PART III-STORAGE IN CONTAINERS

(These codes correspond to the codes listed in 6 CCR 1007-3, Part 261)

D001	Ignitable Waste
D002	Corrosive Waste
D003	Reactive Waste
D004	Arsenic Waste
D005	Barium Waste
D006	Cadmium Waste
D007	Chromium Waste
D008	Lead Waste
D009	Mercury Waste
D010	Selenium Waste
D011	Silver Waste
F001	Spent Halogenated Solvents used in Degreasing
F002	Halogenated Solvent Waste
F003	Non-halogenated Solvent Waste (Ignitable)
F005	Non-halogenated Solvent Waste(Ignitable and Toxic)
F006	Wastewater Treatment Sludges from Electroplating
F007	Spent Cyanide Plating Bath Solutions
F008	Cyanide Plating Bath Residues
F009	Cyanide Stripping and Cleaning Solution Waste
P Series Waste	Listed in 6 CCR 1007-3, Part 261.33, as amended.
U Series Waste	Listed in 6 CCR 1007-3, Part 261.33, as amended.

Explanation: The Rocky Flats plant may generate wastes with the EPA codes listed above. Unit 27 may be used to store such wastes.

RESPONSE: Permit applications and subsequent correspondence with the facility indicated that the EPA waste codes specified in permit condition III.B.9.a were correct for Unit 27. Any changes to facility operations which result in additional waste storage needs, such as additional EPA waste codes, must be addressed as a modification to the permit.

89. III.B.9.b White and Overpack Drums, page 35.

Comment: The requirement to limit storage of wastes to only 55-gallon drums painted white is unnecessarily restrictive.

Suggested Change: The Permittee may store liquid and solid low-level radioactive mixed waste in 55-gallon drums or other DOT approved containers, subject to the compatibility requirements of Section III.K. of this permit.

Explanation: The use of white drums for low-level waste is a result of internal policy at Rocky Flats Plant which may change. The Permittee may wish to use other color drums for storage of low-level wastes. In addition, the Permittee may need to use 85-gallon overpack drums or other DOT-approved containers for storage of wastes.

RESPONSE: The permit has been revised as in the suggested change to delete the

RESPONSE TO DOE COMMENTS PART III-STORAGE IN CONTAINERS

reference to use of only white drums, and allow use of other DOT-approved containers including overpack drums.

90. III.B.9.c Concrete Floor Protective Coatings, page 35.

Comment: Other types of compatible floor coatings should be allowed in addition to epoxy paint.

Suggested Change: All drums containing low-level radioactive mixed waste will be stored upon a concrete floor which is free of cracks and gaps and is coated with epoxy paint or another compatible coating in good condition.

Explanation: The regulatory requirement is for containment which is free of cracks and gaps and is sufficiently impervious to contain leaks, spills, and accumulated precipitation until the collected material is detected and removed. (6 CCR Part 264.175 (b)(1).

RESPONSE:The permit has been revised as in the suggested change to allow the use of other compatible floor coatings.

91. III.B.9.d. Berm Height for Secondary Containment, page 35.

Comment: The condition should be changed to account for the concrete wall on one side of the unit, and the 6-inch high steel berm on one side. The minimum berm height should be changed from 2 inches to 1.8 inches. Also, add other compatible coatings in addition to epoxy paint.

Suggested Change: A wall or a berm which is at least 1.8 inches high, free of cracks and gaps, sealed to the floor and coated up to a level of 1.8-inches above the floor with epoxy paint or other compatible coating in good condition will completely surround the drum storage area.

Explanation: The angle iron referred to in the condition only forms part of the containment. A concrete wall forms one side, and a 6-inch steel plate forms one side. The minimum berm height necessary to provide containment for 10% of the drums is 1.8 inches. Stating that the berm must be at least 2 inches in height poses a conflict with internal plant criticality standards, which state that berms must be no more than 2 inches high. Calculations are provided in Attachment III-1.

RESPONSE:The permit has been revised to specify that a 1.9-inch berm or wall, or berm sufficient to contain 10% of the volume in storage will surround the unit.

92. III.B.9.e Elevation of drums off the floor, page 35.

Comment: The requirement for pallets should be changed to include other means of elevating the drums off of the floor.

Suggested Change: All drums will be stored on pallets or otherwise elevated off the floor within the berm and the drums will not extend on to or over the edge of the berm.

Explanation: The requirement for using pallets is unnecessarily restrictive. Elevating the drums on 2x4's or other materials accomplishes the same goal.

RESPONSE:The permit has been revised as in the suggested change to allow other stable means of elevating the containers.

RESPONSE TO DOE COMMENTS PART III-STORAGE IN CONTAINERS

93. III.B.9.h. Drum Accessibility without moving any other drums, page 35.

Comment: The part of the condition that drums must be accessible without moving any other drum should be clarified to state that it is not necessary to be able to move a drum without moving any other drum.

Suggested Change: Each stored drum must be accessible and inspectable without moving any other drum, but it is not necessary to be able to move a drum without moving any other drum.

Explanation: It is not necessary to be able to move a leaking drum without moving other drums. All containers are elevated to prevent any contact with spills. Further, moving a leaking drum potentially would lead to spread of contamination, so containment in place is the preferred alternative.

RESPONSE: Permit condition III.B.9.h. has been revised to clarify that drums must be accessible and inspectable without moving any other drum.

94. III.B.9.i Aisle Spacing between Double Rows of Drums, page 35.

Comment: Combine two conditions and change the aisle space requirement to a minimum of 18 inches.

Suggested Change: A minimum aisle space of 18 inches will be maintained between double rows of drums.

Explanation: Aisle spacing should be consistent for all the drum storage facilities. An 18-inch aisle provides adequate space to conduct inspections and emergency response. The limit should be identified as a minimum since the actual aisle spacing will in many cases be wider.

RESPONSE: The facility has not provided justification for reducing the aisle space to 18 inches. CDH does not agree that 18 inches is adequate to conduct inspections, and provide access to all drums in storage. Permit condition III.B.9.i. has not been revised, leaving a 26-inch aisle space which is consistent with other storage areas addressed by the permit. Permit condition III.B.9.e. has been revised to allow use of other means of elevating the drums off the floor.

95. III.B.9.j. Storage of Accumulated Liquid, page 35.

Comment: Delete the last part of the condition requiring drums of liquids from spill cleanups to be stored within the storage area.

Suggested Change: Any accumulated liquid within the bermed area will be removed in a timely manner using a portable pump, and transferred to a drum of adequate integrity. The drum will be stored in a 90-day collection area or in another permitted unit.

Explanation: Unit 27 may be at permitted capacity at the time of the incident, and the drummed liquid would have to be stored in a 90-day collection area or in another permitted unit.

RESPONSE: The permit has been revised as in the suggested change to allow storage of

RESPONSE TO DOE COMMENTS PART III-STORAGE IN CONTAINERS

any accumulated liquid in either a 90-day area or an appropriate permitted or interim status unit.

96. III.B.9.1 Physical Definition of Unit 27, page 35.

Comment: Change from "walls and a fence", to "walls" or a "fence" around the outside perimeter of Unit 27.

Suggested Change: The unit will be physically defined by walls or a fence around the outside perimeter.

RESPONSE: The permit has been revised as in the suggested change to specify that the unit will be surrounded by a wall or fence.

III.F. COMPLIANCE SCHEDULE

97. III.F.2,3 and 4. Deletion of Repaired Items, page 36.

Comment: These repair items have been completed, as shown in the photographs provided in Attachment III-2 to these comments.

Suggested Change: Delete items 2,3, and 4.

RESPONSE: The permit has been revised by deletion of these items based on documentation submitted by the facility and CDH inspections.

98. III.F.2. Addition of Compliance Testing for Free Liquids, page 36.

Comment: Add another compliance schedule items for testing for free liquids. The specific unit conditions listed for Units 1,13, and 24 for testing for free liquids on newly generated wastes prior to placing them in the storage units should have a corresponding compliance schedule condition.

Suggested Change: Item: Compliance with the requirement to test for free liquids on newly generated wastes stored in Units 1,13, and 24 as described in Section III.B.1.2.8 (moved), III.B.4.12 (moved), and III.B.8.11 (moved) have been moved to the waste analysis section.

Date Due to the State Director: One year from the effective date of this permit.

Explanation: Free liquids can be tested using RTR, a paint filter test, or penetrometer, as specified in the Waste Analysis Plan. RTR is the method of choice for many waste types, because it does not involve opening the drums. This minimizes employee exposure to radioactive waste. There is currently only one RTR unit on plant site, in Building 664 (Unit 20). The existing unit cannot handle the additional load imposed by the permit conditions referenced above. A second unit has been budgeted for FY90', but has not been ordered. This compliance schedule item will allow the new unit to be purchased, installed and made operational to satisfy the permit conditions in Units 1,13, and 24.

RESPONSE: A new permit condition has been added as in the suggested change to specify a compliance schedule for performance of the fingerprinting tests for free liquids at Units 1,13, and 24.

RESPONSE TO DOE COMMENTS PART III-STORAGE IN CONTAINERS

PART III TABLES AND FIGURES

99. III.Table 1, Unit 1, page 38.

Comment: Change unit dimensions from 100-ft x 145-ft to 106-ft x 169-ft. Delete the word "steel" from items 1,2, and 3, and delete the drum rack dimensions from item 4.

Suggested Change: Outdoor storage area of the dimensions 106-ft. x 169-ft. containing: 1) Cargo containers of the approximate dimensions 20-ft.x8-ft.x8-ft., 2) Cargo containers of the approximate dimensions 40-ft.x8-ft.x8-ft., 3) Cargo containers containing individual units of the approximate dimensions 8-ft.x8-ft.x 8-ft., 4) Drum racks.

Explanation: These changes are for the purpose of consistency with the changes suggested for part III.B.1.

RESPONSE: The permit has been revised as in the suggested change to insert the corrected description for the unit.

100. III.Table 1, Unit 10, page 38.

Comment: Change unit dimensions as given below. Delete the word "steel" before cargo containers, and add cargo containers of the dimensions 20-ft. x 8-ft. x 8-ft.

Suggested Change: Outdoor storage area of the dimensions 115-ft. x 130-ft. with a 60-ft. x 60-ft. cutout in the northeast corner where the unit adjoins Building 561, and a cutout of an irregular area on the southwest side where the unit is bounded by the access road. Contains cargo containers of approximate dimensions 40-ft. x 8-ft. x 8-ft. or 20-ft. x 8-ft. x 8-ft.

Explanation: These changes are for the purpose of consistency with the changes suggested for Part III.B.2.

RESPONSE: The permit has been revised as in the suggested change to insert the corrected description of the unit.

101. III.Table 1, Unit 15, page 38.

Comment: Change unit dimensions from 455-ft. x 296-ft. to x 66-ft. x 296-ft. Change waste type to solid and liquid mixed waste.

Suggested Change: Outdoor storage area of the dimensions 66-ft. x 296-ft. Contains cargo containers of approximate dimensions 40-ft. x 8-ft. x 8-ft. or 20-ft. x 8-ft. x 8-ft., and crates stored outside of cargo containers. Waste type; Solid and liquid mixed waste.

Explanation: These changes are for the purpose of consistency with the changes suggested for Part III.B.5.

RESPONSE: The permit has been revised as in the suggested change to insert the corrected description of the unit.

102. III. Table 2, Unit 13, page 39.

RESPONSE TO DOE COMMENTS PART III-STORAGE IN CONTAINERS

Comment: Move Unit 13 from Table 2 to Table 1. for container storage areas containing free liquids.

Suggested Change: Move Unit 13, as written to Table 1.

Explanation: If free liquids are found in a drum in Unit 13, they are placed inside steel containment pans as indicated in Part III.B.4.l. Therefore, the unit should be permitted for liquids as well as solids.

RESPONSE: The permit has been revised as in the suggested change to move Unit 13 to Table 1, and correct the description.

103. III. Table 2, Unit 24, page 39.

Comment: Change waste type from vacuum filter sludge to solid mixed waste.

Suggested Change: Waste type: Solid mixed waste.

Explanation: This change is for the purpose of consistency with the change suggested for part III.B.8.b.

RESPONSE: The permit has not been revised since no other waste types are permitted for Unit 24.

104. Figure III.1, Unit 13, page 27.

Comment: Change figure to show 10-foot wide forklift aisle and 13 rows of drums. Also show alternate arrangement for crate storage.

Suggested Change: See Attachment III-3.

Explanation: This change is for the purpose of consistency with the change suggested Part III.B.4.i and j.

RESPONSE: The permit has been revised by correcting Figure III.1 in accordance with the changes made in Part III of the permit.

105. Figure III.2, Unit 24, page 34.

Comment: Change figure to show 10-foot wide forklift aisle.

Suggested Change: See Attachment III-3.

Explanation: This change is for the purpose of consistency with the change suggested for Part II.B.8.i.

RESPONSE: Figure III.2 has been revised in accordance with the changes made to Part III of the permit.

106. Figure III.3, Cargo Container, page 22.

Comment: Change maximum capacity of a 20-ft. cargo container to 22 drums. Add the word "typical".

Suggested Change: See Attachment III-3.

Explanation: Some of the cargos have different dimensions and configurations. For example, some have three compartments, and some have double floors instead of the rollers pictured.

RESPONSE TO DOE COMMENTS PART III-STORAGE IN CONTAINERS

RESPONSE: The revised Figure III-# has replaced the previous version in the permit.

107. New Figure III.4, Unit 15, page 30.

Comment: Add a new figure for Unit 15 showing proposed arrangement of cargo containers and crates.

Suggested Change: See Attachment III-3.

Explanation: The figure will provide a better understanding of the layout of Unit 15.

RESPONSE: The revised Figure III.4 has replaced the previous version in the permit.

RESPONSE TO DOE COMMENTS PART IV-WASTE ANALYSIS PLAN

IV. A. GENERAL WASTE ANALYSIS

1. IV.A. 1.a. Condition 1, page 41.

Comment: It is unclear what is intended by this condition.

Explanation: The Generator Waste Analysis Plan procedures which are included as a revised section in these comments should be consistent with the updated waste characterization. However, the Waste Analysis Plan should not be changed to incorporate new waste identification data. The plan should remain the same since the test methods, test parameters, frequency, and sampling methods remain the same. The condition should not be included in a permit.

RESPONSE: Permit Condition IV.A.1.a. has been modified to clarify that revisions to the waste analysis plan may be necessary as a result of current and future waste characterization efforts at RFP.

2. IV.A.1.b. Condition 2, page 41.

Comment: Condition 2 should be modified. The facility agrees to provide information on radiological analysis in accordance with the June 28, 1989 Agreement in Principle.

Suggested Change: As committed in the June 28, 1989 Agreement in Principle, the Permittee is currently revising the generator waste analysis information, and providing CDH with sufficient chemical and physical data to ensure proper and continued definition of each waste stream at the plant. Such information will include radiological parameters needed to ensure separate and safe storage of low level and transuranic mixed waste.

Explanation: The DOE and its operating contractor at the Rocky Flats Plant routinely conduct radiological analysis of wastes generated at the plant including mixed wastes. In signing the June 28, 1989 Agreement in Principle, the facility committed to supplying CDH with radiological analysis necessary to ensure safe storage of low level and transuranic mixed waste.

RESPONSE: Permit condition IV.A.1.b. has been revised to clarify that RFP must perform radiological analysis in order to assure safe and separate storage of hazardous, low level mixed, and TRU mixed waste.

The facility has consistently failed to adequately characterize, track, treat, store, or dispose of the hazardous and mixed wastes it generates. This general non-compliance has resulted in a number of enforcement actions, including those concerning land disposal requirements and residues, which are now in effect. The radiological parameters required under permit condition IV.A.1.b. are those that the facility must determine in order to assure safe and separate storage of TRU, low-level, and non-radioactive waste.

DOE's failure to determine these parameters has resulted in violations of State and Federal law, as demonstrated by DOE's August 27, 1990 letter from Rocky Flats Manager Robert Nelson to Frederick Dowsett of the Colorado Department of Health, Hazardous Materials

RESPONSE TO DOE COMMENTS PART IV-WASTE ANALYSIS PLAN

Nelson to Frederick Dowsett of the Colorado Department of Health, Hazardous Materials and Waste Management Division. The Division has determined that these fingerprint requirements must be kept in the waste analysis plan in the permit.

3. IV.A.1.c. and IV.A.1.d. Condition 4 and 5, page 41,42.

Comment: Both these conditions relate to Section IV.(C), the Generator Waste Analysis Plan. The revised Generator Waste Analysis plan submitted as Attachment IV-1, addresses the provisions of these two conditions. These conditions are no longer necessary and should be removed.

Explanation: See comment 5

RESPONSE: These conditions have been deleted from the permit as in the suggested change. See response to comment 5.

IV.B. INTRODUCTION AND DESCRIPTION OF WASTE ANALYSIS PLAN.

4. IV.B. First Paragraph, page 43.

Comment: The first paragraph of Section IV(B) should be revised to better explain the role of generator waste analysis. As discussed in Comment 5, the generator waste analysis should not be included in the Part B permit or the revised generator waste analysis plan should be used.

Suggested Change: IV.B.INTRODUCTION AND DESCRIPTION OF WASTE ANALYSIS PLAN The Waste Analysis Plan as described in this section consists of three parts: a description of the Generator Waste Analysis Plan, the Unit Specific Waste Analysis Plan and Additional Waste Analysis Plans. The Permittee conducts ongoing generator waste analysis for the purpose of determining which solid wastes are hazardous wastes. The hazardous waste determination is required by 6 CCR 1007-3, Section 262.11, and is therefore not included in this permit. The information developed in the generator waste analysis can be used to support the Unit Specific Waste Analysis Plan and the Additional Waste Analysis Plans. Consequently, a description of the Generator Waste Analysis Plan has been included in this permit.

Explanation: As discussed in Comment 5, the Generator Waste Analysis Plan as currently written, should not be included in the Part B permit. The introduction to the waste analysis plan section should be modified to incorporate the changes to the Generator Waste Analysis Plan.

RESPONSE: The introduction to the waste analysis plan has been modified as suggested, and the revised generator waste analysis plan has been incorporated into the permit.

5. IV.C. Revision of Part IV (C) starts page 43.

Comment: The Generator Waste Analysis Plan, section C-2 of the permit, should be removed. The Generator Waste Analysis Plan is required by 6 CCR 1007-3, Section 262.11, and as such, the plan should not be included this permit.

RESPONSE TO DOE COMMENTS PART IV-WASTE ANALYSIS PLAN

Suggested Change: Remove section C-2, pages 45-55.

Explanation: As a generator of solid waste, the Rocky Flats Plant must determine which of the solid wastes are hazardous wastes. The hazardous waste determination is required by 6 CCR 1007-3, Section 262.11 which is a generator requirement. Generator requirements are not covered by a part B permit.

As a storage facility, the Rocky Flats plant must meet the waste analysis requirements specified in 6 CCR 1007-3, Section 264.13. The performance standard specified in 6 CCR 1007-3, Section 264.13 is the following: at a minimum, the analysis must contain all the information which must be known to store the waste in accordance with the requirements of 6 CCR 1007-3, Parts 264 and 268, and with the conditions of the permit.

To achieve this performance standard, the following waste characteristics need to be determined.

- EPA hazardous waste code
- compatibility of wastes
- ignitability of wastes
- presence of free liquids
- waste subject to land disposal restrictions

These characteristics will allow for storage of the hazardous waste in accordance with regulations and this permit.

These characteristics may be determined through additional tests as described in this plan or by using existing published or documented data or data developed as part of the generator waste analysis. The tests identified in the Unit Specific Waste Analysis Plan along with the use of established generator or published data will allow the facility to achieve the performance standard for the container storage facilities.

In addition to achieving the performance standard for general waste analysis of wastes destined for storage, the plan provides a check on the determination made by the generator of the waste. This check is normally only required for facilities which receive waste from off site as specified in 6 CCR 1007-3, Section 264.13(a)(4). Consequently, the Unit Specific Waste Analysis plan exceeds the regulatory requirements for a storage facility.

It is the Permittee's interpretation that the removal of section C-2 would meet the requirements of 6 CCR 1007-3, Section 264.13, however the Permittee proposes another suggested change in the interests of compromise. The Permittee realizes that CDH may not accept the removal of section C-2. In order to avoid a lengthy delay of the permit because of an appeal, the Permittee offers the following alternative suggested change. The Permittee believes that this alternative addresses the concerns of the state while allowing the facility the flexibility and clarity to maintain compliance.

Alternative Suggested Change: Attachment IV-1 is provided as a revised section C-2.

RESPONSE TO DOE COMMENTS PART IV-WASTE ANALYSIS PLAN

RESPONSE: The revised generator waste analysis plan, Attachment IV-1, has been incorporated into the permit as a revised section IV (C).

IV.D. UNIT SPECIFIC WASTE ANALYSIS PLAN.

6. IV.D. Unit Specific Waste Analysis Plan, page 47.

Comment: The phrase "operator of each unit" should be changed to the Permittee.

Suggested Change: The Permittee has the unit specific waste analysis plan on file. Attachment 1 to the unit specific plan describes in detail how compatibility codes are assigned.

Explanation: The Permittee has the ultimate responsibility for maintaining the waste analysis plans. Conditions for maintaining information and plans should reference the Permittee since "the Permittee" is clearly defined and other titles and personnel may change.
RESPONSE: The permit has been revised to incorporate the suggested wording change which clarifies that the "Permittee" is ultimately responsible for maintaining the waste analysis plans.

7. IV.D.1. Objective, page 47.

Comment: The unit specific waste analysis plan is used to determine enough information to store hazardous waste safely in the container storage areas. This objective should be included in the introduction to the plan.

Suggested Change: This plan covers the analytical requirements and procedures necessary to store hazardous waste safely in the container storage areas. As a result of the information obtained in this plan, the Permittee will determine the waste characteristics which are necessary to safely store the wastes in the hazardous and low level mixed waste storage units. In addition, the plan serves the purpose of checking the initial generator waste characterization. Sampling methods, test methods and the frequency of sampling are specified in the following sections.

Explanation: Compatibility is only one of the parameters determined by the unit specific waste analysis plan. The objective should be expanded to reference all the waste characteristics necessary for safe storage.

RESPONSE: The suggested change been incorporated into the permit to clarify the objective of the unit specific waste analysis plan.

8. IV.D.2. Waste Stream Source, third sentence, page 47.

Comment: The third sentence which references Table C-1.2 should be removed since table C-1.2 is not included in the permit.

Suggested Change: Delete third sentence.

Explanation: Table C-1.2 is not included.

RESPONSE: The third sentence has been deleted as in the suggested change since Table C-1.2 is not included in the permit.

RESPONSE TO DOE COMMENTS PART IV-WASTE ANALYSIS PLAN

9. IV.D.3. Analysis Plan, page 47.

Comment: The first paragraph of the Analysis Plan is unclear as to the purpose of the plan. The sentence "For the purpose of this plan, compatibility in the storage unit is the regulatory requirement which must be met as long as the wastes are of the proper EPA waste codes for the unit" does not make sense. The paragraph should be revised to clarify the plan purpose and describe how the plan purpose will be met.

Suggested Change: Hazardous wastes to be stored in these units are initially characterized and tested as required for waste generators by 6 CCR 1007-3, Section 262.11 (Hazardous waste determination). This plan provides additional information necessary for permitted storage of these wastes as required by 6 CCR 1007-3, Section 264.13 (General waste analysis). The performance standard specified for the waste analysis plan is as follows: the analysis must at a minimum, contain all the information which must be known to store the waste in accordance with the requirements of 6 CCR 1007-3, Parts 264 and 268, and with the conditions of this permit.

To achieve this performance standard, the following waste characteristics must be determined. These characteristics will allow for storage of the hazardous waste in accordance with regulations and this permit.

- EPA hazardous waste code
- compatibility of wastes
- ignitability of wastes
- presence of free liquids
- waste subject to land disposal restrictions

These characteristics may be determined through additional tests as described in this plan or by using existing published or documented data or by using data developed as part of the generator waste analysis.

In addition to achieving the performance standard for general waste analysis of wastes destined for storage, the plan provides a second purpose. The plan serves as an extra check on the determination made by the generator of the waste.

Explanation: The revised language provides a clear description of the purpose of the unit specific waste analysis plan. Previously, confusion has existed between the purpose of the unit specific waste analysis plan and the purpose of generator waste analysis. Generator waste analysis is conducted in order to determine whether or not a given solid waste is a hazardous waste. The unit specific waste analysis plan is conducted to provide additional information, beyond the generator requirements, which is necessary to store the waste in accordance with the permitted storage and land disposal restriction storage regulations. To obtain this goal, the analysis may involve additional tests or the facility may use existing published or documented data or the facility may use data developed from generator waste analysis. The fingerprint tests included in the unit specific waste analysis plan combined with knowledge of the process and generator waste information supply all the information necessary to safely store the wastes in accordance with 6 CCR 1007-3, Parts 264 and 268,

RESPONSE TO DOE COMMENTS PART IV-WASTE ANALYSIS PLAN

and the permit.

RESPONSE: The permit has been modified to include the suggested change in order to clearly define the purpose and overall implementation of the unit specific waste analysis plan.

10. IV.D.3.a. Full Sample Analysis, page 48.

Comment: Section 3.1 should be removed. This section refers the generator waste analysis plan. If the revised generator waste analysis plan is used in the permit, this section is still obsolete since the section references old waste characterization data which may become out of date.

Explanation: As discussed previously the generator waste analysis plan should not be included in a permit, or should be rewritten as proposed.

RESPONSE: The permit has been revised to incorporate the revised generator waste analysis plan.

11. IV.D.3.b. Fingerprint Tests, first paragraph, page 48.

Comment: The paragraph as it currently reads is inconsistent with the permit. Incompatible wastes are allowed to be stored in the same unit as long as the wastes are segregated. The paragraph should be revised.

Suggested Change: The fingerprint tests serve as a check to assure that the generator description of the waste is correct. This check assures that incompatible wastes are correctly segregated, that proper EPA hazardous waste codes are assigned, and that other characteristics which effect storage are properly identified. The procedure described below will confirm (or reject) the generator's description of the waste to the degree necessary to assure proper storage.

Explanation: Incompatible waste may be stored in the same unit (for example Unit 1) as long as the wastes are segregated. In addition to the incompatible waste issue, the suggested change provides a clearer description of the purpose of the fingerprinting.

RESPONSE: The permit has been modified as in the suggested change to more clearly define the conditions for storage of incompatible wastes.

12. IV.D.3.b. Fingerprint Tests, second paragraph, page 48.

Comment: The fingerprint procedures as currently written are unnecessarily restrictive, and may not be possible with the new requirement for testing for free liquids. A three day turn around on sampling is unrealistic in all cases and is not required by the regulations. The condition should be modified.

Suggested Change:

The fingerprint tests are implemented under the following procedure.

1. The Permittee shall collect a sample when ready to ship the container(s). The container(s) may be sampled in a satellite storage area, a 90-day storage area, or a temporary holding area.

RESPONSE TO DOE COMMENTS PART IV-WASTE ANALYSIS PLAN

2. Containers will be fingerprinted and tests completed prior to transfer to a storage unit. Each different waste shall be sampled. When multiple containers of the same waste are present, at least 20 percent of the containers are sampled. (For waste which remain consistent, the Permittee may sample less than 20 percent of the containers after first receiving approval from the Department. In addition, it should be noted that if the health and safety of any employee involved in the sampling and/or analysis of radioactive materials is in jeopardy, process knowledge will be utilized to fingerprint these wastes.) The tests listed in Tables 1 and 2 will be performed to confirm or assign the proper waste characteristics for storage.
3. After the fingerprint tests are completed the Permittee will assign a proper compatibility code and revise other waste characteristic information as appropriate.
4. The container(s) are then shipped to the storage unit and stored according to the assigned compatibility code.
5. Unused laboratory sample may be returned to the generator of the waste to be reincorporated in the waste stream.

Explanation: The key requirement is to assure that the fingerprint analysis is performed prior to transfer of the waste to a container storage unit. The revised language meets this requirement while allowing a more realistic time frame for waste analysis. Second, a fifth procedure is added which allows the laboratory sample to be returned to the generator. This procedure is allowed under 6 CCR 1007-3, Section 261.4(d), but is suggested for inclusion in the permit for clarity. Also two minor changes have been made. The word "drum(s)" is changed to "container(s)" since other types of containers may be used, and the reference to Waste Operations personnel is changed to the Permittee since the Permittee has ultimate responsibility to comply with the conditions of the permit.

RESPONSE: The permit has been revised as in the suggested change to clarify the implementation of the fingerprint tests.

13. IV.D.3.c. Engineering Analysis, page 49.

Comment: This paragraph should be modified to reference the WEMS data base as well as the Waste Processing Request Form. In addition, the information obtained from the fingerprinting will be used for more than assigning compatibility codes and the paragraph should be expanded to clarify this.

Suggested Change: A combination of process knowledge and data from analytical testing will be used by the generator to provide the initial waste characterization. The generator provides this information to the personnel conducting the Unit Specific Waste Analysis using the Waste Processing Request Form or the WEMS data base as described in Section IV(C)(2)(b) of the permit. Fingerprint samples and tests will then be used to confirm the generator's information. This process will provide information necessary to store the waste in accordance with requirements of this permit which includes assigning compatibility codes, checking EPA identification codes, and verifying other waste characteristics such as whether or not the waste is ignitable and whether or not the waste is subject to the land disposal restrictions. The information gained in the Unit Specific Waste Analysis will be used to

RESPONSE TO DOE COMMENTS PART IV-WASTE ANALYSIS PLAN

designate proper storage.

Explanation: As explained in Section IV(C)(2)(b), the WEMS data base will be used in the future for transferring and tracking waste analysis information.

RESPONSE: The permit has been modified as in the suggested change to clarify use of the WEMS data base, and clarify the scope of fingerprint analyses.

14. IV.D.3.e. Analytical Results, page 50.

Comment: The word "data" should be changed to "results" throughout this paragraph. In addition the numbering of this section should be changed to 3.5 for consistency.

Suggested Change:

3.5 Analytical Results

All waste stream results from the fingerprint analysis will be transferred to the WEMS data base. Records of analysis results will be maintained at least three years unless the waste is still in storage on site, in which case the records of waste analysis results will be maintained for as long as the waste is stored on site. The WEMS data base consists of an operating log with each dated entry showing the container identification number, and complete analytical results.

Explanation: The analytical results, not the raw test data are entered into the WEMS data base. The raw test data are maintained separately.

RESPONSE: The permit has been modified as in the suggested change to clarify that "results", not data, will be maintained on the WEMS data base.

IV.E. ADDITIONAL WASTE ANALYSIS PLANS

15. IV.E. Additional Waste Analysis Plans, page 50.

Comment: Two minor wording changes are suggested for this paragraph. Remove the word "inadvertently" from the first sentence and remove the phrase "Because waste characterization will continue" from the last sentence.

Suggested Change: Additional sampling and analysis will be conducted during clean up of spills, decontamination, closure and when run-off is collected in secondary containment areas. When these activities occur, sampling, analysis, and QA/QC procedures will follow those present in Sections IV(F), IV(G), and IV(H) this document. The WEMS data base will be used to select appropriate analytes. Information concerning hazardous constituents potentially present in any release of waste residuals may be obtained by determining which stream(s) is present.

Explanation: The corrections are suggested for clarity. Run-off which is deliberately collected should be handled the same way as run-off which is inadvertently collected.

RESPONSE: The permit has been modified as in the suggested change to more accurately reflect actual procedures used at the facility for run-on/run-off management.

IV.F. ANALYTICAL METHODS

RESPONSE TO DOE COMMENTS PART IV-WASTE ANALYSIS PLAN

16. IV.F. Analytical Methods page 50.

Comment: The analytical methods used by the Rocky Flats Plant are based on SW-846. These analytical methods which are included in the plant's L-procedures require some modification because of special consideration which must be taken when radionuclides are present. The description of the analytical methods should be revised so that this distinction is clear.

Suggested Change: The required analytical work is intended to be performed on site at the Rocky Flats Plant. The analytical test methods for waste analysis are summarized on Table 4, Table 5, and Table 6. Where appropriate, procedures presented in SW-846 are followed. Details on each analytical test method are present in the "L-Procedures" which are the facility's in-house laboratory procedures. The L-Procedures used for waste characterization are based on SW-846 for tests present in SW-846. Modifications are made to the SW-846 methods when issues such as nuclear safety concerns arise. For example, it may be necessary to conduct an initial preparation step which involves extraction of radionuclides prior to proceeding with a SW-846 methodology. Up to date L-Procedures which apply to waste characterization will be submitted to CDH. Any changes to the L-Procedures will be submitted to CDH as a Class 1 permit modification prior to implementation of the change. Before initiating a completely new method for waste analysis, the Permittee must receive approval from the Department. The Permittee may send samples off-site for waste analysis to a laboratory which follows EPA approved methods.

Explanation: It is important to clarify that the facility does not follow SW-846 methods verbatim. Modifications are necessary to accommodate radiological concerns. In addition, SW-846 does not provide methodologies for most of the fingerprint tests. Analytical methods used at the Rocky Flats Plant are detailed in the plant's L-Procedures. The facility will provide CDH with a copy of the L-Procedures applicable to waste analysis. The facility will also submit updated procedures to CDH which incorporate any minor modifications. The facility is willing to place CDH on formal distribution of the L-Procedures provided that CDH agrees to return out of date pages (this is a condition of formal distribution).

RESPONSE: The permit has been revised as in the suggested change to allow use of other approved analytical methods such as the L-Procedures. CDH intends to be placed on the formal distribution list for updates to the procedures.

IV.G. SAMPLING METHODS

17. IV.G. Sampling Methods, first paragraph, page 50.

Comment: The last three sentences of this paragraph should be removed.

Suggested Change: Sampling methods used to collect hazardous wastes at the Rocky Flats Plant comply with those described in Appendix I of 6 CCR, Section 261. Methods were chosen for their ease in the collection of a representative sample, 6-CCR, 1007-3, Section 264.13 (b) (3). Sampling location, sampling matrix, sample container type and size, and accessibility are taken into consideration when assigning a sampling method. Table C-7 lists waste matrixes and appropriate sample methods.

RESPONSE TO DOE COMMENTS PART IV-WASTE ANALYSIS PLAN

Explanation: The last three sentences reference sections which are not in the permit or are suggested for removal from the permit.

RESPONSE: The permit has been revised as in the suggested change. The three sentences have been removed, and replaced with the suggested change.

IV.H. QA/QC

18. IV.H Quality Assurance/Quality Control, fingerprint QA/QC, page 51.

Comment: Fingerprint analysis, by its nature, is qualitative analysis as opposed to quantitative analysis. As such, many of the quality assurance/quality control (QA/QC) sections are not applicable to fingerprinting and should be removed. Specifically, the following sections should be removed:

- C-7.1.1 Trip Blank
- C-7.1.2 Field Blanks
- C-7.1.3 Field Duplicates
- C-7.3.3 Personnel Training, paragraph 2
- C-7.3.5 Reference Materials
- C-7.4.3 Data Review
- C-7.5.1 Sample Exchange Program
- C-7.6.1 Analytical Measurement Program
- C-7.6.2 Weight Measurement Control

In addition, some of the sections should be modified to reflect QA/QC for fingerprinting. Specifically, the following sections should be modified for fingerprinting:

- C-7.2.2 Sample Management
- C-7.3.2 Instrument Calibration
- C-7.4.5 Data Reporting

Suggested Changes: Attachment IV-7 is provided as a revised fingerprint QA/QC section.

Explanation: The Quality Assurance/Quality Control (QA/QC) section which was provided in the application encompassed more than the fingerprint analysis. The QA/QC section should be revised so that it is specific to fingerprint analysis.

RESPONSE: The permit has been revised as in the suggested change to incorporate Attachment IV-7 as a revised QA/QC section for the fingerprint analysis. The permit also has been revised to require that adequate QA/QC procedures be employed by the facility when full analytical characterization is performed by the treatment/storage facility.

19. IV.H.1.a. Specific References, page 51.

Comment: Several minor suggestions are proposed for section C-7, QA/QC. These minor suggestions are related to avoiding specific references to Quality Engineering and Control,

RESPONSE TO DOE COMMENTS PART IV-WASTE ANALYSIS PLAN

Waste Management Operations, Quality Laboratories, Quality Assurance Coordinator, and Laboratory Quality Assurance/Quality Control officer.

Suggested Change:

- Change "Quality Engineering and Control" to "the quality organization".
- Change "Quality Assurance Coordinator and the Laboratory Quality Assurance/Quality Control Officer" to "the quality assurance function".
- Change "Quality Laboratories" to "the analytical laboratory".

Explanation: The specific names referenced in the permit may change. The language proposed above allows the flexibility to change group names and personnel titles while still maintaining the intent of the permit condition.

RESPONSE: The permit has been revised as in the suggested change to reflect revised organizational references.

20. IV.H.1.a. Organization, page 51.

Comment: Item 5 under the quality assurance function which reads, "Review special project plans for consistency with organizational requirements and will advise laboratory management and waste operations of inconsistencies" should be eliminated.

Suggested Change: Attachment IV-7 is provided as a revised fingerprint QA/QC section.

Explanation: Item 5 is a management function not a quality assurance function.

RESPONSE: The permit has been revised as in the suggested change to incorporate Attachment IV-7 as a revised QA/QC section.

21. IV.H Field Audits, page 51.

Comment: The phrase "personnel from waste compliance and planning" should be replaced with "the Permittee".

Suggested Change: 1. Before placing waste containers into the permitted storage facilities, the Permittee will assign a compatibility code (from Table 3. Cross Reference Compatibility Codes) to the individual waste containers. This assignment will be based on the waste identification provided by the generator and/or fingerprint analyses of the individual container contents.

Explanation: The Permittee is ultimately responsible for complying with the conditions of this permit. Personnel titles and group names may change.

RESPONSE: The permit has been revised as in the suggested change to replace outdated language regarding internal organization at RFP by using the broader "Permittee" reference.

IV. TABLES

22. IV.Table 1 and 2. Fingerprint Analysis, starts page 58.

Comment: The column of Table C-1.1 entitled "Method" should be removed. Analytical

RESPONSE TO DOE COMMENTS PART IV-WASTE ANALYSIS PLAN

methods for fingerprint analysis are already covered under Table C-6. The Table C-1.1 method column is confusing and inconsistent with Table C-6.

Suggested Change: Attachment IV-2 is provided as a revised table.

Explanation: Analytical methods are covered in section C-5 of the permit and are summarized on Table C-6. It is premature, confusing, and inconsistent to list the analytical methods on Table C-1.1.

RESPONSE: The permit has been modified as in the suggested change to include Attachment IV-2 as a revised Table 1 and 2.

23. IV. Table 1 and 2. Fingerprint Analysis, physical form, page 58.

Comment: The test "physical form" is the same test as appearance. The words "physical form" should be removed throughout the table or combined with appearance.

RESPONSE: The permit has been revised as in the suggested change to use the term "appearance".

24. IV. Table 2. Fingerprint Analysis for Solid and Containerized Gas, page 63.

Comment: The table should be divided into a liquid hazardous waste section, a solid hazardous waste section, and a containerized gas hazardous waste section.

Suggested Change: Attachment IV-2 is provided as a revised table.

Explanation: Some of the fingerprint categories only apply to liquids while others only apply to solids. Currently, the separation is unclear. A revised table with liquid, solid, and containerized gas sections would clarify this issue.

RESPONSE: The permit has been revised as in the suggested change to incorporate Attachment IV-2 as a revised Table 1 and 2.

25. IV. Table 2. Radioactive Analysis, page 58.

Comment: The radioactive tests (gross alpha, gross beta, gamma activity, and neutron activity) should be removed from the permit.

Explanation: As discussed previously, the radioactive constituents are excluded from regulation under the Colorado Hazardous Waste Act. The facility has agreed to supply radiological data to CDH in accordance with the June 28, 1989, Agreement in Principle.

RESPONSE: See response to Comment 2. of this section.

26. IV. Tables 1 and 2, Action Alternatives, page 58.

Comment: The action alternative which reads "Test for reactivity with oils and halogenated solvents" should be removed throughout the table.

Explanation: No specific test is conducted for reactivity with oils and halogenated solvents. Instead the laboratory would obtain a more definitive ID which is already provided as an option.

RESPONSE: The permit has been modified as in the suggested change to delete this outdated test.

RESPONSE TO DOE COMMENTS PART IV-WASTE ANALYSIS PLAN

27. IV. Table 2. Solid Wastes, page 62.

Comment: The facility may wish to store solid hazardous waste under the same conditions as are required for liquid hazardous waste in order to avoid the need to fingerprint for free liquids. The requirement to test "all solid waste forms" should be modified to reflect this exception. Also, the items currently listed under the Test column are analysis methods. The Test column should list "free liquids" as the test parameter. Paint filter, penetrometer, and real time radiography should be moved to Table C-6.

Suggested Change:

WASTE TYPE: All solid waste forms except wastes stored as liquids.

TEST: Free liquids

RATIONALE: To determine if free liquids are present

ACTION CRITERIA: Presence of free liquids as indicated by the test method.

ACTION ALTERNATIVES: Store as liquid or reprocess to solidify.

(See Attachment IV-2)

Explanation: If solid hazardous waste is stored as liquid waste then there is no need to analyze the waste for free liquids. To meet the liquid waste storage requirements, the solid hazardous waste will be stored under the following conditions:

- stacking of no more than two high,
- secondary containment for the largest container or 10% of the total container volume which ever is greater, and
- aisle spacing adequate to inspect and provide materials for response to spills.

RESPONSE: The permit has been modified to allow storage of containerized waste which has not undergone fingerprint tests for free liquids prior to placement in storage, subject to the requirements of Part IV of the permit, and the unit specific requirements of Part III. Ultimately, all wastes streams in storage must be fingerprinted for free liquids. A new permit condition, IV.A.1.d has been added to clarify this requirement.

28. IV. Table 2. Free Liquids, page 62.

Comment: The test for free liquids should be removed from the individual waste categories such as magnesium chips, waste wipes etc.

Explanation The free liquids test is already required for all solid waste categories as discussed in the above condition. Twenty percent of all solid waste categories, including magnesium chips, waste wipes, etc, will be analyzed for free liquids unless the waste is stored as if it were a liquid waste.

RESPONSE: The permit has been modified as in the suggested change, removing the free liquids test from the individual waste categories. See response to comment 18.

29. IV. Table 1. Ignitable Wastes, page 58.

Comment: The test "combustible" should be changed to "ignitable". The corresponding

RESPONSE TO DOE COMMENTS PART IV-WASTE ANALYSIS PLAN

rationale action criteria and action alternatives should also be made consistent with the definition of ignitable.

Suggested Change:

TEST: "Ignitability"

RATIONALE: "Ignitable" or "Not Ignitable" as appropriate

ACTION ALTERNATIVE: "Store as non-ignitable" or "store as ignitable" as appropriate. (See Attachment IV-2, revised Table C-1.1)

Explanation: Ignitability is the criteria which applies to hazardous waste characterization and consequently the fingerprint tests should reference ignitability for consistency.

RESPONSE: The permit has been modified to use the term "ignitable" in place of "combustible".

30. IV. Table 1. Minor Changes, page 58-61.

Comment: Several minor changes should be made to the table. These minor changes are summarized under this comment.

- Acetone: ACTION CRITERIA: The criteria "2 phases" should be changed to "multiple phases" because 3 phases or more is also a concern.
- Acids: ACTION CRITERIA: The criteria ">4" should be change to ">2" so it agrees with the regulatory definition for a characteristically corrosive waste.
- Aqueous lab waste: RATIONALE: The phrase "near 7 to 11" should be changed to ">2 and <12.5". The term "near" is not well defined.
- Blankrola: ACTION ALTERNATIVES: A fourth alternative should be added which reads "4. Reassign as ignitable" in order to handle wastes which are determined to be ignitable.
- Chlorinated solvents: WASTE TYPE; Change to "Halogenated Solvents". TEST: The test specific gravity should be added to the fingerprint tests in this category. The test provides valuable fingerprint information. The corresponding rationale is ">1" and the corresponding action criteria is "Sp.Gr <1.
- Machine coolant: RATIONALE: The rationale which reads "liquid, 1 phase" should be changed to simply "liquid" since machine coolant waste may contain an oil phase. In addition, the rationale which reads "near 7" should be changed to "6-8" since near 7 is undefined. ACTION CRITERIA: Similarly, the action criteria "pH not near 7" should be changed to "ph <6 or >8".
- ECM sludge: RATIONALE: The phrase "solid cake, 1 phase" should be modified to read "1 phase". The ECM sludge is not always a solid. The rationale ">8" is incorrect for ECM sludge. The correct criteria is "4-9". ACTION CRITERIA: The action

RESPONSE TO DOE COMMENTS PART IV-WASTE ANALYSIS PLAN

criteria which reads "ph not near 7" should be changed to read ph "<4 or >9". ACTION ALTERNATIVES: The alternative which reads "Store as 3A if no react. with water & alcohol" should be changed to read "Store as 6-A if no reaction with water & alcohol." ECM sludge contains nitrates and should be assigned a 6-A compatibility code.

- Fixer: ACTION CRITERIA: The action criteria "Negative Ag test" should be removed and a new action alternative which reads "run Ag test" should be added. The Ag test is used to obtain a more definitive I.D.
- Oil: This category of waste type should be removed. Used oil is already included on page 63 of the Permit.
- Oxout: ACTION CRITERIA: The phrase "oxidizer present" should be changed to "nitrate present". The test identifies the presence of nitrates.
- Sample and clean-up waste: WASTE TYPE: The waste type should be changed to "sample and clean-up waste equipment" for clarity. ACTION CRITERIA: The criteria "this waste is normally stored out doors" should be removed since it is not an action criteria.
- Waste Water: RATIONALE: "1 Phase" should be changed to "1 or multiple phases" since waste water may have more than one layer. ACTION CRITERIA: The corresponding action criteria "2 phases" should be removed.
- Coolant: ACTION CRITERIA: The action criteria which reads "<2 or > 62" should be corrected to "<2 or > 12".
- Solvent: This waste type should be removed. The fingerprint test table already includes halogenated solvents and non-halogenated solvents which covers all solvents.
- Other Waste: TEST: The test "solvent component screen by GC or GC/MS" should be removed and instead an action alternative which reads "1. obtain more definitive ID" should be added. GC, GC/MS, IR and other tests are used for obtaining a more definitive ID if a waste fails a fingerprint test.
- Oxidized Uranium chips and Roaster Oxide: Delete from table. These are no longer mixed wastes due to solvent elimination in the uranium foundry and machining operations.

Suggested Change: Attachment VI-2 is provided as a revised table.

RESPONSE: The permit has been modified as in the suggested change to incorporate

RESPONSE TO DOE COMMENTS PART IV-WASTE ANALYSIS PLAN

Attachment IV-2 as a revised Tables 1 and 2., except the fingerprint test for radiological parameters has not been deleted. The existing inventory of roaster oxide wastes may need to be fingerprinted prior to transfer from one storage unit to another.

31. IV. Table 2. Gas Cylinders, page 63.

Comment Figure C-1.1, Alternative to Fingerprinting for Gas Cylinders, is not referenced anywhere in the permit. The figure should be referenced. A few corrections should also be made to Figure C-1.1. First, the "yes" and "no" labels on the flow chart should be switched. Second, the group names "HS&E Waste Operations Labs", "Waste Operations Labs", and "Waste Operations" should be removed. The gas cylinder fingerprint analysis should be included on Table C-1.1.

Suggested Change: Attachment IV-2 is provided as a revised Table C-1.1.

Explanation: Figure C-1.1 is currently incorrect. The suggested changes correct problems with the figure as well as avoid references to specific group names such as "Waste Operations Labs" which may change.

RESPONSE: The permit has been modified as in the suggested change to incorporate Attachment IV-2 as a revised Table 2.

32. IV. Table 4. Analytical Methods Outside PSZ, page 65.

Comment: Several corrections are suggested for Table 4.

Suggested Change: Attachment IV-3 is provided as a revised Table 4.

Explanation: The method numbers for AA analysis and extraction are clarified. The ignitability method number is changed to the SW-846 method. The test, "total cyanide", is separated from reactive cyanide for clarity. Several methods are added for completeness.

RESPONSE: The permit has been revised as in the suggested change to incorporate Attachment IV-3 as a revised Table 4.

33. IV. Table 5. Analytical Methods Inside PSZ, page 67.

Comment: Several corrections are suggested for Table 5.

Suggested Change: Attachment IV-4 is provided as a revised Table 5.

Explanation: The tests for AA are separated from ICP. The method numbers for reactive cyanide and reactive sulfide are clarified. Several methods are added for completeness.

RESPONSE: The permit has been revised as in the suggested change to incorporate Attachment IV-4 as a revised Table 5.

34. IV. Table 6. Analytical Methods L-6220, page 69.

Comment: Table 6 does not include all the analytical methods used for fingerprint analysis. The tests "Free liquids" and "Nitrates" should be added. The test "combustibility" should be changed to "Ignitability". The test "Total Alpha" should be removed. In addition, several clarifications are suggested for methods.

Suggested Change: Attachment IV-5 is provided as a revised Table 6.

Explanation: The Analytical Method Table has been revised to agree with the fingerprint

RESPONSE TO DOE COMMENTS PART IV-WASTE ANALYSIS PLAN

section.

RESPONSE: The permit has been revised to incorporate Attachment IV-5 as a revised Table 6. Analytical methods for radiological parameters must be submitted as a compliance schedule item in Part IV. See response to comment 2.

35. IV. Table 7. Matrix Specific Methods, page 70.

Comment: The second half of the Table C-7 should be removed. Also, the sample method "sample tap" should be added to the first three matrices and the sample method "wipe sample" should be added to all the matrices.

Suggested Change: Attachment IV-6 is provided as a revised Table 7.

Explanation: For aqueous, liquid or oil wastes a sample tap may be used to collect a sample. The second half of Table 7 is not applicable since the permit covers only container storage.

RESPONSE: The permit has been revised as in the suggested change to clarify procedures for sampling non solid wastes, and the second half of Table 7 has been deleted as it references units not included in this permit.

36. IV. Table 3. Compatibility Codes Cross Reference, page 64.

Comment: Table C-1.6 is incorrect. Several of the compatibility codes were incorrectly entered into Table C-1.6. For example, the table currently lists 4-A as being incompatible with 4-A.

Suggested Change: Attachment IV-8 is provided as a corrected Table 3.

Explanation: During the preparation of the table, some of the rows were shifted resulting in incorrect entries.

RESPONSE: The permit has been revised as in the suggested change to incorporate Attachment IV-8 as a corrected Table 3.

37. IV. Table C-1, Table C-2, Table C-3, Deleted.

Comment: Tables C-1, C-2 and C-3 should be removed from the permit. The tables provide details on a "snap-shot" in time. The permit provides the necessary restrictions on waste analysis without these three tables.

Explanation: The permit already defines all the information required by the regulations for waste analysis such as parameters, sampling frequency, sampling method, and analysis method. Table C-1, C-2 and C-3 are unnecessarily restrictive. In addition, the tables are already out of date. The permit already requires this type of information to be kept up to date. Eventually, the WEMS data base will be used for tracking waste analysis information. The permit should not serve as a repository in which all the waste analysis results are kept. Instead, the permit should simply require that the information be kept and provide the framework for the type of information which must be collected.

RESPONSE: The permit has been revised by removal of Tables C-1, C-2, and C-3. CDH agrees that these tables do not provide current information, and are replaced by revisions made to the waste analysis plan by the Division in the permit as a result of public comment.

RESPONSE TO DOE COMMENTS PART V-PROCEDURES TO PREVENT HAZARDS

V.A. SECURITY

1. V.A.1.a. 24 Hour Surveillance System, third paragraph, page 71.

Comment: Delete reference to Rockwell International. Also, visitor badges can be returned at any guard gate by depositing the badge into the marked Visitor Badge Dropbox located at each guard gate on-site. This paragraph only applies to visitors without permanent visitor badges.

Suggested Change: Visitors without permanent visitor badges must be escorted within certain areas of the plant by a Prime Operating Contractor or Department of Energy (DOE) employee. All visitors must return their temporary badges by depositing the badge into a marked Visitor Badge Return Dropbox located at each guard gate prior to departing the site.

Explanation: The changes are more accurate than the previous wording.

RESPONSE: The permit has been revised as in the suggested change to reflect current security procedures.

V.B. INSPECTION SCHEDULE

2. V.B.1. General Inspection Requirements, page 73.

Comment: Delete reference to Table F-1 and delete Table F-1 on pages 134 - 137.

Suggested Change: All container storage units are inspected weekly.

Explanation: Only container storage areas are addressed in this permit. Table F-1 is too lengthy and is unnecessary for purposes of this permit. Inspection schedules of container treatment and tank treatment and storage units will be addressed in a separate RCRA permit.

RESPONSE: The permit has been revised as in the suggested change to address only container storage areas.

3. V.B.2. Specific Process Inspection Requirements, page 74.

Comment: Inspection requirements for treatment facilities are not necessary in this permit.

Suggested Change: The inspection requirements for each container storage facility are outlined below.

Explanation: Only container storage areas are addressed in this permit.

RESPONSE: The permit has been revised as in the suggested change to address only container storage areas.

RESPONSE TO DOE COMMENTS PART V-PROC. TO PREVENT HAZARDS

4. V.B.2.a. Container Inspection, first paragraph, page 75.

Comment: Reword as follows.

Suggested Change: Weekly inspection of container storage areas identify the status of warning signs, container condition, container inventory, spill response and personnel protective equipment (including structures such as dikes and pads), and the condition of aisle space and access routes. Required aisle space for each container storage area is specified in Part III of this permit. A minimum 18-inch aisle space is required for all units.

Explanation: The exact arrangement of containers is not important. The minimum required aisle space is in accordance with Part III of this permit.

RESPONSE: The permit has been revised as in the suggested change to clarify the purpose of weekly inspections, with the exception that the reference to 18" aisle space has been deleted.

5. V.B.2.b. Main Hazardous Waste Storage Area (Unit 1), page 75.

Comment: Unit #1 should be cited in the title instead of Reference #1. Reword the text as follows.

Suggested Change: A catch basin partially lines the floor of each cargo container used to store liquids. Each catch basin is sized to contain a minimum of 10% of the volume of all liquids contained within. The approximately 20-foot long cargo container's catch basin is capable of holding a minimum of 110 gallons. The volume of the catch basin in the nominally 40-foot long container is a minimum of 220 gallons. 55-gallon drums are stored on conveyers or a raised floor within the catch basin. A minimum 18-inch wide aisle space extends down the center of the cargo container.

Explanation: Drums containing liquids are stored elevated on conveyers or raised floors within a cargo container. The current containment capacities specified in the draft permit are greater than the minimum required.

RESPONSE: The permit has been revised as in the suggested change to update the description of Unit 1, with the exception that the 18" aisle space reference has been deleted.

6. V.B.2.b. Main Hazardous Waste Storage Area, (Unit 1), page 75.

Comment: Reword as follows.

Suggested Change: The hazardous waste storage area is composed of 28 modified cargo containers located in the buffer zone northwest of the production and support area. The storage area is inspected weekly to ensure that spill response equipment is maintained in storage within the unit boundaries. The cargo containers are inspected weekly to be sure that container condition is adequate and no leakage has occurred. The catch basins with conveyer systems are checked weekly for corrosion and container leakage. The double floored cargo containers are inspected quarterly by lifting the inside floor panels to inspect the catch basin beneath. The unit area is checked weekly to ensure that emergency response equipment can access the facility. A fire extinguisher is stored inside the spill response equipment storage shed.

Explanation: Unit 1 can hold 28, not 24, cargo containers. Spill response equipment is

RESPONSE TO DOE COMMENTS PART V-PROC. TO PREVENT HAZARDS

better terminology than spill kit because it doesn't limit the type and amount of equipment stored at the unit; this equipment is not stored in cargo container #1 as previously stated. The containment pans in those cargo containers with double floors are checked quarterly due to the difficulty in moving drums to inspect under the double floor. The weekly container inspection would identify any possible leaks or spills. Catch basins in the cargo containers with conveyors are easily visible and can be inspected during the weekly container inspection. Access roads are not checked weekly, but rather the unit area is checked to ensure that emergency response equipment can access the facility. "No Smoking" signs are posted on the fence around the hazardous waste storage area; it is not necessary to also post them on specific cargo containers.

RESPONSE: The permit has been revised as in the suggested change to provide an updated description of Unit 1, and management of spill response equipment.

7. V.B.2.c.-2.i. Deleted Units.

Comment: Delete.

Explanation: Units 2, 3, 4, 5, 6, 7, 8 and 9 are not addressed in this permit and inspection requirements regarding these units should not be included. Unit 2 is inactive and a closure plan has been submitted to CDH.

RESPONSE: The permit has been revised to delete Units 2-9 which are not addressed by this permit.

8. V.B.2.j. Drum Storage Area: Building 561, page 76.

Comment: The title should cite Unit #10 instead of Reference #10. There are more than four steel cargo containers near Building 561. The reference to wastes stored for incineration should be deleted.

Suggested Change: Drums of mixed waste are stored in modified steel cargo containers located near Building 561.

Explanation: The number of cargo containers stated was inaccurate. The unit currently contains eight 40-ft cargo containers. Nine 40-ft cargo containers are requested, or an equivalent waste capacity stored in 20-ft cargo containers.

RESPONSE: The permit has been revised as in the suggested change to accurately reflect the arrangement and wastes managed at Unit 10.

9. V.B.2.j. Drum Storage Area: Building 561, page 76.

Comment: The term spill kits should be replaced with spill response equipment. "No Smoking" signs do not need to be posted on each cargo container as they are visibly posted around the unit area. Catch basins on cargo containers with double floors will be inspected quarterly.

Suggested Change: A catch basin partially lines the floor of each cargo container used to store liquids. Each catch basin is sized to contain a minimum of 10% of the volume of all liquids contained within. The approximately 20-foot long cargo container's catch basin is

RESPONSE TO DOE COMMENTS PART V-PROC. TO PREVENT HAZARDS

capable of holding a minimum of 110 gallons. The volume of the catch basin in the approximately 40-foot long container is a minimum of 220 gallons. 55-gallon drums are stored on conveyers or a raised floor within the catch basin. A minimum 18-inch wide aisle space extends down the center of the cargo container. The cargo containers are inspected weekly to be sure that container condition is adequate and no leakage has occurred. The catch basins with conveyer systems are checked weekly for corrosion and container leakage. The double floored cargo containers are inspected quarterly by lifting the inside floor panels to inspect the catch basin beneath. The unit area is checked weekly to ensure that emergency response equipment can access the facility. A fire extinguisher and spill response equipment are present at the storage area.

Explanation: Spill response equipment is better terminology than spill kit as it doesn't limit the type and amount of spill response equipment stored at the unit. The remainder of the description has been reworded to be consistent with Unit 10 conditions.

RESPONSE: The permit has been revised as in the suggested change to provide an accurate description of Unit 10 with the exception that the reference to 18" aisle space has been deleted. Aisle space is specified in Part III of the permit.

10. V.B.2.j. Drum Storage Area: Building 776 (Unit 11), deleted unit.

Comment: Delete.

Explanation: Unit #11, the Building 776 Drum Storage Area, is not addressed in this permit.

RESPONSE: The permit has been revised as in the suggested change to delete reference to Unit 11 which is not addressed by this permit.

11. V.B.2.d. Drum Storage Area: Building 776 (Unit #12), page 77.

Comment: The title should cite Unit #12 instead of Reference #12. The second sentence should be worded as follows.

Suggested Change: The area, 59 ft by 29 ft, is surrounded by a minimum 1.7-inch high berm or wall.

Explanation: The berm does not extend completely around the unit due to a concrete wall on one side. The minimum berm height should be changed to 1.7 inches for consistency with Section III.B.3.4.

RESPONSE: The permit has been revised as in the suggested change to clarify the type of containment is a combination of berm and wall.

12. V.B.2.d. Drum Storage Area: Building 776 (Unit #12). page 77.

Comment: Change wording of this paragraph as follows.

Suggested Change: Weekly inspections include observation of container integrity, secondary containment integrity, and unobstructed aisle space. Spill response equipment and fire extinguishers are maintained within Building 776 and are readily available to the unit.

Explanation: For units within the PSZ, spill equipment is not maintained within individual

RESPONSE TO DOE COMMENTS PART V-PROC. TO PREVENT HAZARDS

unit areas. Equipment is kept within Building 776 where it is accessible for use at Unit #12.
RESPONSE: The permit has been revised as in the suggested change to clarify management of spill response equipment.

13. V.B.2.e. Mixed Waste Storage: Building 884 (Unit 13), page 78.

Comment: Title should cite Unit #13 instead of Reference #13. The 1st paragraph should be reworded as follows.

Suggested Change: The mixed waste drum storage for mixed waste generated outside of the Perimeter Security Zone (PSZ) is located in Building 884. The storage area is 80 ft by 40 ft with walls and roof made of corrugated steel. The floor is concrete. Liquid and solid wastes are stored in drums. Solid wastes may also be stored in crates or other DOT-approved containers.

Explanation: Not all mixed waste generated outside of the PSZ is stored in Unit #13. Liquid waste storage is requested for Unit #13 in addition to solids. The last sentence was deleted because the drummed wastes may include other types of wastes besides those listed.
RESPONSE: The permit has been revised as in the suggested change to provide a current physical description of Unit 13, with the exception that wastes stored in the Unit are listed in Part III of the permit.

14. V.B.2.e. Mixed Waste Storage Building 884, Unit 13, page 78.

Comment: Catch pans are 6 inches deep, not 10 inches.

Suggested Change: Liquid waste drums are contained in welded steel catch pans that are 6 inches deep.

RESPONSE: The permit has been revised to provide secondary containment capacity for 10% of the total volume stored in each catch pan.

15. V.B.2.e. Mixed Waste Storage Building 884, Unit 13, page 78.

Comment: Change reference to spill kits to spill response equipment.

Suggested Change: Weekly inspections of the unit include observation of the secondary containment, container integrity, unobstructed aisle space, and an inventory of the spill response equipment located at the storage area. A fire extinguisher is present at the area.

Explanation: Spill response equipment is better terminology than spill kit as it doesn't limit the type and amount of spill response equipment stored at the unit.

RESPONSE: The permit has been revised as in the suggested change to clarify management of spill response equipment.

16. V.B.2.m. through V.B.2.p. Deleted Units.

Comment: Delete all.

Explanation: These sections address Units 19, 20, 21, and 22 which are not included in this RCRA permit.

RESPONSE: The permit has been revised as in the suggested change to delete references to Units 19-22 which are not addressed in the permit.

RESPONSE TO DOE COMMENTS PART V-PROC. TO PREVENT HAZARDS

17. V.B.2.f. Gas Cylinder Storage Area: Building 952, Unit 23, page 79.

Comment: Change Reference #23 to Unit #23. Lower vents are also part of the unit's ventilation.

Suggested Change: Beneath the steel roof is a metal screen for ventilation and floor-level vents are also located around the building's base.

Explanation: New floor vents have been added for compliance with section III.B.7.5 of this permit.

RESPONSE: The permit has been revised as in the suggested change to provide the current description of Unit 23.

18. V.B.2.f. Gas Cylinder Storage Area; Building 952, Unit 23, page 79.

Comment: Respirators are not kept at the unit.

Suggested Change: Delete last sentence.

Explanation: Respirators are carried by the inspectors in the vehicle utilized in inspection visits. If respirators were needed at Unit 23, storing them inside the unit would be unsafe.

RESPONSE: The permit has been revised as in the suggested change to more accurately reflect procedures regarding respirators.

19. V.B.2.g. Mixed Waste Storage Area: Building 964 (Unit 24), page 80.

Comment: Change Reference #24 to Unit #24. It is not necessary to specify storage of vacuum filter sludge. Part III of the permit contains information of permitted types of wastes for storage (by EPA codes).

Suggested Change: The building is used for storage of solid mixed wastes.

Explanation: This change establishes consistency with section III.B.8.2. of this permit.

RESPONSE: The permit has not been revised as a result of this comment. The facility's permit application and subsequent updates indicated that vacuum filter sludge was the only waste form to be stored in Unit 24.

20. V.B.2.s. Pond Crete - Salt Crete Storage Area (Unit 25), deleted unit.

Comment: Delete all.

Explanation: Unit #25 is not addressed in this permit.

RESPONSE: The permit has been revised by deleting the reference to Unit 25, which is not included in the permit.

21. V.B.2.t. through x. Deleted Units.

Comment: Delete all.

Explanation: The units addressed in these sections are not included in this permit.

RESPONSE: The permit has been revised to delete references to units not addressed by the permit.

22. V.B.2.h. 904 pad: Mixed Waste Storage Area (Unit 15), page 81.

Comment: The title incorrectly identifies Unit 15. Much of the text is presently incorrect

RESPONSE TO DOE COMMENTS PART V-PROC. TO PREVENT HAZARDS

also. Rewrite as follows.

Suggested Change: This mixed waste storage area is located outside the PSZ area, on the 904 pad, on the south side of Central Avenue, approximately 750 feet west of the East Guard Building 900. The portion of the storage pad included in this permit is approximately 296-ft by 66-ft, and is constructed of six inches of number 6 road base topped with three inches of asphalt. Cargo containers will be used to store containers of liquid and solid mixed wastes. The cargo containers are approximately 20 or 40 feet long, eight feet wide, and eight feet high. The cargo containers are fitted with electrical grounds, air vents, locks and appropriate signs. A steel catch basin, designed for containment of ten percent of the containers total volume of hazardous waste, or the volume of the largest drum contained within, whichever is greater, partially forms the inside floor of each cargo container which holds liquid wastes. The rim of the catch basin is a minimum of 2½-inches high within which any spills or leaks will be contained. Fifty-five-gallon steel drums or other DOT-approved containers are stored within the area of the catch basin. An aisle wide enough to safely access the drums extends down the middle of each cargo container. Weekly inspection of this area includes observations of the storage unit and containment structures.

Wood or metal crates containing solid wastes may be stored outside the cargo containers at Unit #15. These crates will be stacked no more than three high. The cargo containers, crates, and 55-gallon drums are inspected for structural integrity and signs of deterioration or leakage. Proper aisle space inside the cargo containers is checked. The aisle space between the crates and cargo containers is also inspected to ensure access is available for emergency response equipment. Spill response equipment is also maintained within the unit.

Explanation: The description originally contained in the second paragraph is not presently accurate as it covers the storage pad area of Unit #15 in addition to the cargo container area addressed in this permit. It is not necessary to specify the type of waste to be stored in Unit #15, this information is contained in Part III of the permit. Specifying the number of cargo containers is unnecessary as the number and amounts of wastes and/or storage containers is also specified in Part III of the permit. The addition of wood or metal crates is to allow storage of wastes such as cemented composite chips and contaminated soil, which are currently stored on the side of the 904 pad not included in this permit. These wastes will need to be moved to the permitted side of the pad or to another permitted unit when the other side undergoes closure. The dimensions of the catch basin are not important, the capacity is already stated. Spill response equipment is better terminology than spill kit as it doesn't limit the amount or type of spill response equipment stored at the site.

RESPONSE: The permit has been revised as in the suggested change to provide a current description of Unit 15. Aisle space requirements are addressed in Part III of the permit.

23. V.B.2. Deleted Unit 16.

Comment: Delete all.

Explanation: Unit #16 is not addressed in this permit. A closure plan for this unit has been submitted to CDH.

RESPONSE TO DOE COMMENTS PART V-PROC. TO PREVENT HAZARDS

RESPONSE: The permit has been revised as in the suggested change to delete references to units not covered by the permit.

24. V.B.2.i. Building 777: Mixed Waste Drum Storage Area (Unit 17), page 82.

Comment: Generation of solidified waste scintillation cocktail has stopped.

Suggested Change: Generation of this waste has ceased.

RESPONSE: The permit has been revised as in the suggested change to state that that generation of solidified scintillation cocktail has ceased.

25. V.B.2.i. Building 777: Mixed Waste Drum Storage Area (Unit 17), page 82.

Comment: Delete the last sentence.

Suggested Change: Spill response equipment is stored within Building 777 and is readily available to Unit #17.

Explanation: For units within the PSZ, spill equipment is not maintained within individual unit areas. Equipment is kept within Building 777 where it is accessible for use at Unit #17.

RESPONSE: The permit has been revised as in the suggested change to clarify spill equipment management procedures.

26. V.B.2.j. Building 776: Mixed Waste Storage, Room 201 (Unit 27), page 83.

Comment: Change 3rd sentence to present tense; delete 4th and last sentences.

Suggested Change: The area is fenced for storage of plutonium contaminated mixed wastes generated inside the Perimeter Security Zone. Spill response equipment is stored within Building 776 and is readily available to Unit #27.

Explanation: The area is presently fenced. The Unit will not necessarily be used in conjunction with Unit #12. For units within the PSZ, spill equipment is not maintained within individual unit areas. Equipment is kept within Building 776 where it is accessible for use at Unit #27.

RESPONSE: The permit has been revised as in the suggested change to provide a current description of Unit 27.

27. V.B. Tank Inspection, deleted units.

Comment: Delete all.

Explanation: Tanks are not addressed in this permit. Therefore this section is unnecessary.

RESPONSE: The permit has been revised to delete references to units not covered by the permit.

28. V.B.5. Inspection Logs, page 84.

Comment: Change the last sentence, revise Table F-3, and delete Tables F-4 through F-6 and F-10 through F-11 on pages 155 through 165.

Suggested Change: An example inspection log is presented in Table F-3. Other inspection forms may be used as long as the information on Table F-3 is included at a minimum.

Explanation: Tables F-3 and F-4 are incorporated into a new inspection log, presented as

RESPONSE TO DOE COMMENTS PART V-PROC. TO PREVENT HAZARDS

a new Table F-3. Tables F-5, F-6, F-9, F-10, and F-11 are inspection logs for storage tanks, 90 day container storage areas, satellite collection areas and loading docks which are not addressed in this permit; therefore, these logs do not need to be included with this permit. RESPONSE: The permit has been revised as in the suggested change to delete outdated and irrelevant inspection logs, and generalize the requirements for these logs.

29. V.B.5. Inspection Logs page 84.

Comment: Delete last sentence and delete Appendix F.

Explanation: Security inspection logs can be included by reference, but including the logs as an appendix will limit any changes or modifications to the logs and require a permit modification.

RESPONSE: The permit has been revised as in the suggested change to delete the requirement that any specific inspection log be used. See response to Comment 28 above.

V.C. PREPAREDNESS AND PREVENTION REQUIREMENTS

30. V.C.1. Internal Communications, page 85.

Comment: The plant public address system should be referred to as the LS/PW Public Address System. Bullhorns are not kept at the facility. Change Building Superintendent to Building Manager.

Suggested Change: The fire alarm system and the Plant LS/PW Public Address System are used to notify facility personnel of an emergency situation and provide immediate emergency instruction to personnel. The Plant Security Dispatcher has access to the LS/PW system to make announcements concerning an emergency situation. Some buildings have a PA system which is part of the plant LS/PW system and can be accessed by the Building Manager.

Explanation: The suggested change is more accurate than the previous wording.

RESPONSE: The permit has been revised as in the suggested change to reflect current emergency communication procedures.

31. V.C.3. Emergency Equipment, page 85, 2nd and 3rd sentences.

Comment: Delete second sentence and Table F-10.5 on pages 167 through 169. Reference Part VI of the permit in the third sentence instead of Section G which is part of the permit application.

Suggested Change: Rocky Flats emergency equipment consists of fire control equipment, spill response equipment and decontamination equipment. Each unit in this permit will have spill response equipment available for emergency response. Part VI provides additional information concerning the number and types of emergency response equipment available at the site.

Explanation: Only nine of the units (or facilities) listed in Table F-10.5 are of concern in this permit. Specifying the type and amount of the spill response equipment will require a possible modification to the permit if new or different equipment is utilized for emergency response. Part VI of the permit addresses emergency response and emergency equipment

RESPONSE TO DOE COMMENTS PART V-PROC. TO PREVENT HAZARDS

in more detail.

RESPONSE: The permit has been revised as in the suggested change to generalize emergency response equipment requirements, and reference the contingency plan.

32. V.C.4. Water for Fire Control, page 85.

Comment: Figure G-3 does not show locations of fire hydrants. It shows the locations of holding ponds.

Suggested Change: Delete second sentence and reference to Figure showing fire hydrant locations which is not included.

RESPONSE: The permit has been revised as in the suggested change to correct inaccuracies by deleting reference to figures not included.

V.D. PREVENTIVE PROCEDURES, STRUCTURES, AND EQUIPMENT

33. V.D. Preventative Structures, Structures and Equipment, page 86, 1st paragraph, 1st and 2nd sentences.

Comment: Delete reference to Rockwell, and change "two day class" to "training".

Suggested Change: The facility currently maintains a general set of procedures which address the health, safety and environmental concerns related to plant operations. New employees are required to attend training regarding environmental procedures and policies, fire prevention and control procedures, and general safety awareness.

Explanation: The two day length of training is not relevant. The reference to Rockwell should be changed.

RESPONSE: The permit has been revised as in the suggested change to delete reference to Rockwell and update training language.

34. V.D. Prevent Procedures, page 86, 2nd paragraph, 1st sentence.

Comment: Delete "monthly" in reference to frequency of safety meetings.

Suggested Change: Safety meetings are conducted to discuss topics of fire prevention and control, safety problems and procedures, good housekeeping programs and any problems related to each particular work area.

Explanation: Safety meetings may be held more or less frequently depending on the specific work area.

RESPONSE: The permit has been revised as in the suggested change to delete the reference to monthly meetings.

35. V.D.1. Loading, Unloading, and Waste Transfer Operations, page 86, 1st sentence.

Comment: Delete first sentence and Table F-12 on pages 172 through 174.

Explanation: This permit is concerned only with container storage areas where hazardous or mixed wastes are stored. The buildings in which hazardous or mixed wastes may be handled is not relevant to the purpose of this permit.

RESPONSE: The permit has been revised as in the suggested change to delete references to units not covered by the permit.

RESPONSE TO DOE COMMENTS PART V-PROC. TO PREVENT HAZARDS

36. V.D.1. Loading and Unloading, page 86, 2nd sentence.

Comment: Reword as follows.

Suggested Change: To prevent accidents and spills during transport and unloading operations, hazardous or mixed wastes will be handled by facility and subcontractor personnel trained in correct handling procedures and in proper spill response.

Explanation: Loading, unloading and waste transfer operations of hazardous or mixed wastes should be discussed in general terms as applicable to the entire plant site.

RESPONSE: The permit has been revised as in the suggested change to generalize requirements for waste handling procedures such as loading and unloading, and transportation.

37. V.D.1. Loading and Unloading, page 86, 2nd paragraph

Comment: Delete.

Explanation: This paragraph discusses tanks which are not included in this permit.

RESPONSE: The permit has been revised to delete references to units not covered by the permit.

38. V.D.1. Loading and Unloading, page 86, 3rd paragraph, 1st sentence.

Comment: Approved procedures are used in loading and unloading drums and smaller containers.

Suggested Change: Loading and unloading of drums and smaller containers is conducted using approved procedures set forth in the Rocky Flats Traffic Department's On-Site Transportation Manual.

Explanation: It is not necessary to specify the procedure. Reference to the Transportation Manual provides information on where the procedures can be located.

RESPONSE: The permit has been revised as in the suggested change to reference the On-site Transportation Manual.

39. V.D.1. Loading and Unloading, page 86, 2nd paragraph, 3rd sentence.

Comment: Not all DOT regulations for transport of hazardous materials are applicable to on-site transportation.

Suggested Change: On-site transport of hazardous waste complies with procedures set forth in the On-Site Transportation Manual.

Explanation: Not all DOT regulations are applicable for on-site transportation of hazardous waste.

RESPONSE: The permit has been revised as in the suggested change to reference the On-site Transportation Manual, and applicable RCRA/CHWA requirements.

40. V.D.1. Loading and Unloading, page 86, 4th paragraph, 2nd sentence.

Comment: Insert "on site" regarding transport of drums.

Suggested Change: Trucks carry a maximum of twenty-five 55-gallon drums on site and trucks transfer full loads of drums most often.

RESPONSE TO DOE COMMENTS PART V-PROC. TO PREVENT HAZARDS

Explanation: Discussion regards transport on site which should be specified.

RESPONSE: The permit has been revised as in the suggested change to clarify that the reference is to on-site transportation.

41. V.D.1. Loading and Unloading, page 86, 5th paragraph, 2nd sentence.

Comment: The word ropes should be replaced with the word straps.

Suggested Change: The crates and boxes are never stacked more than two high, and are secured in place with nylon straps.

Explanation: The new wording is more accurate.

RESPONSE: The permit has been revised as in the suggested change, replacing "ropes" with "straps or other effective means of securing".

42. V.D.1. Loading and Unloading, page 86, 7th paragraph.

Comment: Delete reference to Section B of permit application.

Suggested Change: Wastes are always transported in approved vehicles on approved routes.

Explanation: Referencing the permit application for approved routes limits changes to said routes. The present wording would require a modification to the permit application if waste transportation routes were to be changed.

RESPONSE: The permit has been revised as in the suggested change to allow transport on approved routes.

43. V.D.1. Loading and Unloading, page 86, 8th paragraph.

Comment: Delete.

Explanation: This paragraph concerns tanks which are not addressed in this permit.

RESPONSE: The permit has been revised as in the suggested change by deleting the reference to units not covered by the permit.

44. V.D.1. Loading and Unloading, page 87, 7th paragraph, 2nd sentence.

Comment: The end aisle space is wide enough for fork-lifts. Aisle space between rows of drums are a minimum of 18 inches unless otherwise specified in Part III of this permit.

Suggested Change: End aisle space at each unit is wide enough to allow access of this equipment. Aisle space between rows of drums is a minimum of 18 inches unless otherwise specified in Part III of this permit.

Explanation: It should be clarified that end aisle space is wider than aisle space between rows of drums and that a fork-lift would not be able to access drums between rows.

RESPONSE: The permit has been modified to clarify that aisle space requirements are specified in Part III of the permit for each unit.

45. V.D.1. Loading and Unloading, page 87, deletion.

Comment: Delete reference to Table F-11 in parentheses.

Explanation: Table F-11 is not included in the permit.

RESPONSE TO DOE COMMENTS PART V-PROC. TO PREVENT HAZARDS

46. V.D.1. Loading and Unloading, page 88, 2nd paragraph, 6th bullet.

Comment: Delete.

Explanation: Tanks are not addressed in this permit.

RESPONSE: The permit has been revised as in the suggested change to delete references to units not covered by the permit.

47. V.D.2. Run-off and Run-on, page 87, 5th paragraph, last two sentences.

Comment: Discharges from the plant site are regulated under an NPDES permit issued by the EPA. Delete last two sentences and Table F-13 on page 179.

Suggested Change: Off-site discharges will be controlled, monitored, and reported in accordance with the facility's NPDES Permit.

Explanation: Action levels are defined in the NPDES permit which can be referenced in this permit. This permit does not regulate plant discharges.

RESPONSE: The permit has been revised to reflect that off-site discharges are covered by the facility's NPDES permit and other applicable State standards or Agreements.

48. V.D.2. Run-off and Run-on, page 87, 8th paragraph, 3rd and 4th sentence.

Comment: The third sentence should only refer to permitted units. Delete reference to Section D of the permit application.

Suggested Change: No liquid wastes are stored outside in permitted units. Detailed information concerning the permitted units is given in Part III of this permit.

Explanation: It is inaccurate to say that no liquid wastes are stored outside. Liquid wastes may be stored outside in satellite or 90-day areas. The permit application should not be referenced when the information is available in the permit itself.

RESPONSE: The permit has been revised as in the suggested change to provide accurate description of waste management for liquid wastes.

49. V.D.2. Run-off and Run-on, page 88, 9th paragraph.

Comment: Delete.

Explanation: Tanks are not addressed in this permit.

RESPONSE: The permit has been revised as in the suggested change to delete references to units not covered in the permit.

50. V.D.2. Run-off and Run-on, page 88, 2nd paragraph, 2nd sentence.

Comment: Contaminated liquids that accumulate in bermed areas may also be pumped into tanker trucks.

Suggested Change: If contaminated, the liquid is pumped into drums or tanker trucks and handled as hazardous waste.

Explanation: The amount of contaminated liquid will influence the type of receptacle utilized.

RESPONSE: The permit has been revised as in the suggested change to accurately describe liquid waste management practices.

RESPONSE TO DOE COMMENTS PART V-PROC. TO PREVENT HAZARDS

51. V.D.3. Water Supply Protection, page 88 3rd paragraph, 2nd sentence.

Comment: Delete reference to permit application. Reword as follows.

Suggested Change: Part VI of this permit details the equipment and personnel available onsite to ensure prompt cleanup of any spill.

Explanation: It is not necessary to reference the permit application when the information can be found within the permit itself.

RESPONSE: The permit has been revised as in the suggested change to delete reference to the permit application, and refer to Part VI.

52. V.D.4. Mitigation of Effects of Equipment Failure and Power Outages, page 89.

Comment: Delete reference to permit application.

Suggested Change: The procedure for sampling and analysis of surface water prior to discharge from the facility are given in Part IV Section C-4 of this permit.

Explanation: It is not necessary to reference the permit application when the information is contained within the permit itself.

RESPONSE: The permit has been revised as in the suggested change to change the reference from the permit application to Part IV of the permit.

53. V.D.5. Personnel Protective Equipment, page 89, 2nd paragraph, 1st sentence

Comment: Delete reference to Rockwell.

Suggested Change: Hazardous waste incidents are evaluated by Industrial Hygiene to identify the protective equipment requirements for the protection of facility personnel.

Explanation: EG&G will be replacing Rockwell as the Prime Operating Contractor. Referencing facility personnel avoids possible problems with permit modifications if the Prime Operating Contractor should change again.

RESPONSE: The permit has been revised as in the suggested change to delete reference to past contractor; replaced by general facility personnel reference.

54. V.D.5. Personnel Protective Equipment, page 89, deletion.

Comment: Table F-14 is not included in the permit.

Suggested Change: Upon identifying the type and concentration of contaminants involved, a decision is made as to the level of respiratory protection which will be required.

Explanation: Appropriate guidance would be utilized in making a professional decision regarding respiratory protection.

RESPONSE: The permit has been revised as in the suggested change to provide the generalized reference to protective equipment selection.

55. V.D.5. Personnel Protective Equipment, 2nd paragraph, page 89.

Comment: Information provided regarding the Plant Fire Department's inventory of personnel protective equipment is too specific. Reword as follows.

Suggested Change: The Plant Fire Department has a large inventory of personnel protective equipment for responding to fires or spills. This includes, for example, Class 1 fire gear for

RESPONSE TO DOE COMMENTS PART V-PROC. TO PREVENT HAZARDS

58. IV.E. General Waste Handling Precautions, 3rd paragraph, first three sentences, deletion.

Comment: Delete first three sentences. The last sentence is all that is necessary.

Suggested change: The Rocky Flats Fire Department will inspect all of the permitted units on a yearly basis to assure continued compliance with all of the applicable National Fire Protection Association (NFPA) codes.

Explanation: The first three sentences refer to past events and should be deleted. The Fire Department inspects all buildings and equipment annually, without exception. This includes cargo containers and valve vaults.

RESPONSE: The permit has been revised as in the suggested change to accurately describe fire protection procedures.

59. V.E.3. Management of Incompatible Wastes in Containers, page 90, 1st paragraph, 2nd and 3rd sentences.

Comment: Change "to dispose" to "for proper disposition of" and change "Section C" to "Part IV". Delete the specific reference to the Waste Operations group.

Suggested Change: In addition, all generators must contact waste management personnel for proper disposition of the waste they generate. The compatibility cross-referencing procedures and waste analysis procedures given in Part IV provide operators with the information needed to avoid mixing incompatible wastes in containers.

Explanation: Waste management personnel manage hazardous or mixed wastes generated on-site; they do not dispose of it as stated. The permit should be referenced instead of the permit application where possible.

RESPONSE: The permit has been revised as in the suggested change to accurately reflect waste management procedures for determining waste compatibility.

**60. V.E.4. Deletion, Management of Ignitable or Reactive Wastes in Tanks
Incompatible Wastes in Tanks**

Comment: Delete all.

Explanation: Tanks are not addressed on this permit.

RESPONSE: The permit has not been revised since Preparedness and Prevention requirements are facility-wide, and apply to management of all hazardous and mixed waste.

61. Appendix F, deletion.

Comment: The inspection logs should not be included in the permit. The information contained in the logs is summarized in Section F-2b(6) on page 153.

Suggested Change: Delete all inspection checklists provided in Appendix.

Explanation: Security inspection logs can be included by reference, but including the logs in the permit will limit any changes or modifications to the logs and require a permit modification. See comment 29.

RESPONSE: The permit has been revised to generalize references to inspection logs which must be maintained as part of the facility operating record.

RESPONSE TO DOE COMMENTS PART VI-CONTINGENCY PLAN

GENERAL COMMENTS

1. General comment, Contingency Plan

Comment: Suggest revising the plan as described in the following comments and Attachment VI-1.

Suggested Change: Attachment VI-1 is provided as a revised Contingency Plan.

Explanation: Several sections of the Contingency Plan have been rewritten, and others have been updated. Explanations for the changes are provided in the following comments, and the suggested changes are included in Attachment VI-1.

2. General comment

Comment: Delete Reference to Rockwell International.

Suggested Change: The name Rockwell appears on pages 204, 227, and 238 in the draft permit. See Attachment VI-1 for suggested changes.

Explanation: The Rocky Flats Prime Operating Contractor is changing from Rockwell International to EG&G in January 1990. In an attempt to make permit modifications simpler in the event that the Prime Contractor should change again in the future, it is suggested that the name of the Prime Contractor be specified only in the introduction to the permit.

3. General comment

Comment: Change "Building Superintendent" to Building Manager" throughout the Contingency Plan.

Suggested Change: This term appears on pages 214, 237, and 238 in the draft permit: See Attachment VI-1 for suggested changes.

Explanation: Building Manager is the correct term.

4. General comment

Comment: Delete references to specific group names at Rocky Flats Plant, such as Environmental Analysis and Control or HS&E.

Suggested Change: See Attachment VI-1 for suggested changes.

Explanation: The group names have changed or are likely to change in the future. Groups should be named generically (i.e. the environmental group) or changed to "the Permittee" or "the facility".

5. General comment

Comment: The plant public address system should be referred to consistently as the Life Support/Plant Warning (LS/PW) system.

Suggested Change: This term appears on pages 206, 213, 214, 237, and 238 in the draft permit. See Attachment VI-1 for suggested changes.

Explanation: This change is for consistency.

RESPONSE TO DOE COMMENTS PART V-PROC. TO PREVENT HAZARDS

all firefighters consisting of equipment such as polyvinyl chloride (PVC) hip boots, self-contained breathing apparatuses (SCBAs), helmets, and different types of fully encapsulating suits. SCBAs are also located in the production buildings on the plant. Part VI of this permit contains additional information regarding personnel protective equipment and storage locations.

Explanation: Including wording to generalize the types of personnel equipment on-site allows for changes in types of equipment to be made without undergoing a permit modification.

RESPONSE: The permit has been modified to generalize the references to personnel protective equipment, and require that an up-to-date list of this equipment be maintained at the facility.

56. V.D.5. Personnel Protective Equipment, 3rd paragraph of section, page 90.

Comment: Reword as follows.

Suggested Change: Each storage facility is equipped with personnel protective equipment kept in storage with spill response equipment, or has the equipment readily available in the building. A cargo container or storage shed at the main hazardous waste storage area, which is located northwest of the production areas, is used for storage of emergency personnel protective equipment. The equipment includes items such as goggles, face shields, inner and outer gloves, respirators with different types of cartridges, and Tyvek and Saranex suits. There is adequate equipment for two people during an emergency.

Explanation: Treatment facilities are not included in this permit. If spill response equipment is not located at the facility or unit, spill response equipment is always available for use in case of an emergency. Appendix F does not include contents of spill kits and locations.

RESPONSE: The permit has been revised as in the suggested change to more accurately describe preparations regarding emergency equipment.

IV.E. PREVENTION OF REACTION OF IGNITABLE, REACTIVE, AND INCOMPATIBLE WASTES

57. IV.E. General Waste Handling Precautions, page 90, 2nd paragraph, 1st and last sentences.

Comment: Delete reference to Section C of the permit application.

Suggested Change: Part IV of this permit provides procedures used at Rocky Flats to identify ignitable, reactive, and incompatible wastes. This procedure, along with the unit-specific waste characterization procedures given in Part IV provide the operator with the information needed to avoid mixing incompatible waste.

Explanation: The information cited can be referenced to Part IV of the permit. It is not necessary to reference the permit application.

RESPONSE: The permit has been revised as in the suggested change to reference the requirements of Part IV concerning waste compatibility.

RESPONSE TO DOE COMMENTS PART VI-CONTINGENCY PLAN

VI.A. PURPOSE OF PLAN

6. VI.A. Purpose of Plan, page 94.

Comment: Change section to Purpose of Plan.

Suggested Change: See Attachment VI-1.

Explanation: The general plant information was provided in the permit introduction, and serves no useful purpose here. It is suggested to change this section to briefly discuss the purpose of the Contingency Plan.

VI.B. EMERGENCY COORDINATORS

7. VI.B. Emergency Coordinators, page 94.

Comment: Add coordination of emergency response activities to the list of duties in the first paragraph, and Change "Senior Plant Protection Officer" to "Senior Fire Protection Officer" in the second paragraph.

Suggested Change: See Attachment VI-1.

Explanation: The list of EC responsibilities was incomplete. During incidents involving implementation of the RCRA Contingency Plan, the Senior Fire Protection Officer would be called on if the Shift Superintendent was unavailable. The Senior Plant Protection Officer would be called on if an incident involved security matters, but would not usually be called in a RCRA emergency.

VI.C. IMPLEMENTATION OF PLAN

8. VI.C. Implementation of the Plan, page 94.

Comment: Rewrite to include a discussion of the Rocky Flats Emergency Plan, and how it relates to the RCRA Contingency Plan. Include the Notification Flow Diagrams (in Appendix G-7 of draft permit) as Figures 1 and 2, and update the text to match the diagrams.

Suggested Change: See Attachment VI-1.

Explanation: This change relates the Contingency Plan to the Emergency Plan, which is a much more comprehensive plan dealing with all types of emergencies, including but not limited to RCRA incidents at the Rocky Flats Plant. It should be noted that the Rocky Flats Emergency Plan is not a part of the RCRA Contingency Plan; the opposite is true. Therefore the Emergency Plan is not intended to be incorporated, either by reference or by inclusion, in this permit.

VI.D. EMERGENCY RESPONSE PLAN

9. VI.D. Emergency Response Procedures, 2nd dash, page 98.

Comment: Change "potentially" to "suspected"

Suggested Change: - Identification of released or suspected released materials.

RESPONSE TO DOE COMMENTS PART VI-CONTINGENCY PLAN

Explanation: Potentially released materials covers too broad a spectrum to be useful. Suspected released materials would include those stored in proximity to the incident location, or materials for which there is probable cause to believe they may have been involved in an incident.

10. VI.D.1. Notification, general comment, page 98.

Comment: Suggest dividing this section into two subsections for on-site and off-site notification.

Suggested Change: See Attachment VI-1.

Explanation: On-site and off-site notification procedures are distinctly different and serve different purposes. This change makes the distinction between the two.

11. VI.D. 1.a. On-site Notification, general comment, page 98.

Comment: The point should be made that extension 2911 is called in life-threatening emergencies, and that the Shift Superintendent is called on extension 2914 in non life-threatening situations.

Suggested Change: See Attachment VI-1.

Explanation: This change is consistent with plant procedures and training.

12. VI.D.1.a. Notification, last paragraph, page 99.

Comment: Rewrite sentence beginning "The EOC is activated ..." to add the Public Address System and digital pagers.

Suggested Change: See Attachment VI-1.

Explanation: This suggested change is more accurate and detailed than what was previously written.

13. VI.D.1.b. Off-site Notification, general comments, page 99.

Comment: This section was reorganized. It was specified that the EC could either call outside agencies himself, or request the EOC to notify them. The sentence on reporting air releases was deleted.

Suggested Change: See Attachment VI-1.

Explanation: The EC may contact agencies in situations when the EOC is not activated. The reporting of air releases does not need to be listed separately, because it is included in releases to the environment (soil, water, and air).

14. VI.D. Emergency Response Procedures, page 103.

Comment: This section has also been modified to include reference to the Emergency Plan.

Suggested Change: See Attachment VI-1.

Explanation: See Comment 5.

15. VI.D.2. Identification of Hazardous Substances/Wastes, page 102.

Comment: Change the title to Identification of Hazardous Substances/Wastes, and rewrite

RESPONSE TO DOE COMMENTS PART VI-CONTINGENCY PLAN

the last paragraph to update information.

Suggested Change: See Attachment VI-1.

Explanation: The raw materials inventory and MSDSs are available at other locations in addition to Building T452D. Also, there is no position called "Hazardous Waste Director"; this should be changed to waste group (generic name).

16. VI.D.3. Hazard Assessment, 1st paragraph, page 102.

Comment: Suggest adding MSDS sheets and other specialists to the list of resources available to the EC.

Suggested Change: See Attachment VI-1.

Explanation: Other groups besides HS&E may be called on by the EC to provide assistance during an incident response. The response groups should be named generically, as in Comment 4.

17. VI.D.4.a. Fire and/or Explosion, last paragraph, page 103.

Comment: Rewrite to include hazardous wastes, and change "will" to "may" in three places.

Suggested Change: See Attachment VI-1.

Explanation: Hazardous wastes should be included, because they may be relocated or sprayed with fire suppressants in addition to any hazardous materials present. Changing "will" to "may" leaves these options to the discretion of the individual in charge of the situation.

18. VI.D.4.b. Spills and Leakage, page 104.

Comment: Change title to Spills, Leaks, or Other Releases

Explanation: This change is for consistency with the notification flow diagrams presented in Figure G-1. The bullets listed on page 213 have been changed as well.

19. VI.D.4.b. Spills and Leakage, first bullet, page 104.

Comment: Indicate that the employee will call 2914 if the supervisor is not available, unless the situation is life threatening, in which case he will call 2911 immediately.

Suggested Change: See Attachment VI-1.

Explanation: This change is consistent with plant procedures and training.

20. VI.D.4.b. Spills and Leakage, second bullet, page 104.

Comment: Change supervisor's duties, and change phone number for Emergency Coordinator to 2914.

Suggested Change: See Attachment VI-1.

Explanation: The supervisor is not responsible for determining whether the incident involves a hazardous waste or hazardous material, although they may assist in this determination.

RESPONSE TO DOE COMMENTS PART VI-CONTINGENCY PLAN

21. VI.D.4.b. Spills and Leakage, first bullet, page 104.

Comment: Specify that a reportable quantity has not been released to the environment.

Suggested Change: See Attachment VI-1.

Explanation: This change clarifies procedures used for spills of less than RQ to the environment.

22. VI.D.4.b. Spills and Leakage, second bullet, page 104.

Comment: Specify that a reportable quantity has been released to the environment, and delete the reference to fire, explosion or injury.

Suggested Change: See Attachment VI-1.

Explanation: This section, VI.D.4.b. specifically addresses spills and material releases. Fires and/or explosions were covered in VI.D.4.a.

23. VI.D.4.b. Spills and Leakage, second bullet, 4th dash, page 104.

Comment: Change Fire Department personnel to response personnel.

Suggested Change: See Attachment VI-1.

Explanation: Personnel from other groups besides the Fire Department may be assisting in the response.

24. VI.D.4.b. Spills and Leakage, second bullet, 8th dash, page 105.

Comment: The EC does not do this.

Suggested Change: See Attachment VI-1.

Explanation: The EC does not instruct anyone to establish a committee; he advises management of the situation, and they take care of reporting and investigation.

25. VI.D.4.b. Spills and Leakage, first paragraph, page 105.

Comment: Update information and reference NPDES discharge permit.

Suggested Change: See Attachment VI-1.

Explanation: The suggested rewrite updates information.

26. VI.D.4.b. Spills and Leakage, third paragraph, page 106.

Comment: The text does not reflect the actual procedures that will be implemented in the case of a spill.

Suggested Change: See Attachment VI-1.

Explanation: This change will make this document consistent with the Environmental Restoration Program. This change is also consistent with typical procedures at other spill sites, and is protective of human health and the environment.

27. VI.D.4.c. Power or Equipment Failure, second paragraph, page 107.

Comment: Change "fire" to "smoke detection", and change "activated by" to "connected to".

Suggested Change: Smoke detection, criticality, glovebox overheat, and alpha air monitor alarms are immediately connected automatically to the uninterrupted power supply system

RESPONSE TO DOE COMMENTS PART VI-CONTINGENCY PLAN

in the event of a power failure.

Explanation: "Fire alarms" is not specific enough; not all fire alarm boxes or phones are connected to battery backups, but the smoke detectors are. Use of the term "activated by" may falsely imply that these alarms are set off by a power failure. They are immediately automatically connected to their emergency battery backup power supplies, and send a "trouble" signal to the Fire Station indicating that the normal power supply was lost, but they do not actually alarm.

28. VI.D.5. Prevention of Recurrence or Spread of Fires, first parag, page 107.

Comment: Add hazardous wastes, and change "will" to "may" in two places.

Suggested Change: See Attachment VI-1.

Explanation: Hazardous wastes should be included, because they may be relocated or sprayed with fire suppressants in addition to any hazardous materials present. Changing "will" to "may" leaves these options to the discretion of the individual in charge of the incident.

29. VI.D.5. Prevention of Recurrence or Spread, 1st paragraph, page 107.

Comment: Change from all emergency equipment to "at least the minimum required for safe operation" to be in place prior to resuming operations.

Suggested Change: See Attachment VI-1.

Explanation: It is not always true that all equipment used in an area will be repaired or replaced prior to resuming operations. The suggested change will meet safety requirements while not being unduly restrictive.

30. VI.D.5. Prevention of Recurrence or Spread of Fires, 2nd parag, page 107.

Comment: Move this paragraph, with bullets, to Part VI.H.1. Plan Review and Update.

Suggested Change: See Attachment VI-1.

Explanation: Part VI.H.1. is a more logical place for this discussion.

31. VI.D.8. Post Emergency Equipment Maintenance, 2nd paragraph, page 108.

Comment: Change from all emergency equipment to "at least the minimum required for safe operation" to be in place prior to resuming operations.

Suggested Change: See Attachment VI-1.

Explanation: It is not always true that all equipment used in an area will be repaired or replaced prior to resuming operations. The suggested change will meet safety requirements while not being unduly restrictive.

VI.E. LOCATION DESCRIPTION AND CAPABILITIES OF EMERGENCY EQUIPMENT

32. VI.E. Location, Description, and Capabilities of Emergency Equipment, pg 108.

Comment: Add a bullet for heavy equipment. The equipment listed in the last paragraph

RESPONSE TO DOE COMMENTS PART VI-CONTINGENCY PLAN

should say "items such as" before the specific lists.

Suggested Change: See Attachment VI-1.

Explanation: Heavy equipment was listed in Table G-2, but not in the text. The current list of equipment is too specific, and should instead address the general types of spill control material available. Specifying materials such as "3M Oil Sorbent" in the permit is unduly restrictive.

VI.F. COORDINATING AGREEMENTS

33. VI.F. Coordinating Agreements, page 111.

Comment: Delete requirement to certify agreements are still in effect; such certification is provided by these comments.

Suggested Change: Delete Item 3.

Explanation: The agreements with Saint Anthony's Hospital and the University of Colorado Health Sciences Center are currently in effect.

34. VI.F. Coordination Agreements, page 111.

Comment: Delete reference to Appendix G-2, and add a sentence saying the Permittee will maintain these agreements or other equivalent agreements with other facilities.

Suggested Change: See Attachment VI-1.

Explanation: The facility would be willing to submit updated agreements to CDH, but under separate cover and not attached to the permit. See Comment 33.

VI.G. EVACUATION PLAN

35. VI.G. Process Area Shutdown, page 111.

Comment: Move the information on evacuation to the next subsection. Also, delete the reference to bullhorns.

Suggested Change: See Attachment VI-1.

Explanation: This section is dealing with process area shutdown, not evacuation. Plant Protection does not keep bullhorns available on site. They do have some public address units installed in vehicles.

36. VI.G.1.b. Building Evacuation, page 111.

Comment: Rewrite to include information moved from Process Area Shutdown, and clarify the language in the 3rd sentence.

Suggested Change: See Attachment VI-1.

Explanation: This consolidates and clarifies information on building evacuations.

VI.H. REQUIRED REPORTS

37. VI.H.1. Plan Review and Update, page 113.

RESPONSE TO DOE COMMENTS PART VI-CONTINGENCY PLAN

Comment: Add a section on plan review, which was moved from Section G-4e on page 223 (comment 38), specifying that the committee may be appointed (not necessary in all cases). Delete the first bullet (list of emergency coordinators).

Suggested Change: See Attachment VI-1.

Explanation: A specific list of emergency coordinators was not included in this draft permit, because there will always be a Shift Superintendent on duty at the plant.

38. VI.H.1. Plan Review and Update, 1st paragraph, page 113.

Comment: Change "the President of Rocky Flats" to "the General Manager of the Prime Operating Contractor".

Suggested Change: See Attachment VI-1.

Explanation: There is no President of Rocky Flats per se.

VI.I COMPLIANCE SCHEDULE

39. VI.I. Documents to be Maintained on Site as part of Permit, page 114.

Comment: The lists of satellite and 90-day units are generator requirements. The list of permitted units should only include the 9 permitted units and need not be included here because it is included earlier in the permit.

Suggested Change: Delete all tables in Appendix G-1.

Explanation: The facility must maintain current lists of satellite, 90-day, and permitted (interim status) units for use by emergency response personnel, but these lists should not be included in this permit. Current lists of these units will be provided to CDH on request. If these lists were in the permit, a permit modification would be required in order to change a non-permitted unit.

COMMENTS TABLES AND FIGURES

40. Figures 1 and 2, page 96 and 97.

Comment: Change reference to Appendix G-7 to Figures G-1 and G-2.

Suggested Change: Section G-3 of the attached contingency plan is modified by the addition of two notification decision trees in Figures G-1 and G-2.

Explanation: The figures have been incorporated in Section G-3 where they are referenced.

41. Figure 1 and 2. Offsite notification flowcharts, page 96 and 97.

Comment: Suggest including these figures in Part VI.D. where they are referenced. Also, updated figures are provided.

Suggested Change: Delete Appendix G-7, and include updated figures in Section G-4a as Figures 1 and 2.

Explanation: Since all the other Appendices are suggested for deletion, and since Appendix G-7 only has two pages, it seems simpler to include these figures in the text. The attached figures have been updated.

RESPONSE TO DOE COMMENTS PART VI-CONTINGENCY PLAN

42. Table 1. Emergency Response Contacts, page 100.

Comment: Delete requirement to update telephone numbers; the updated list is included with these comments.

Suggested Change: Delete Item 2.

Explanation: The list of emergency phone numbers has been updated. This list appears on page 105 in the attached Contingency Plan.

43. Table 1. Emergency Response Contacts, page 100.

Comment: The updated emergency telephone lists are included in Attachment VI-1, on pages 105 and 106.

Suggested Change: See Attachment VI-1.

Explanation: See Comment 41.

44. Table 2. Typical Materials and Equipment for Spill Containment and Cleanup, page 106.

Comment: Change the title from "Current" to "Typical" Equipment. Change the overpack drum to 85 gallon capacity, and delete "non-corrosive" from the description of the tanker truck usage.

Suggested Change: See Attachment VI-1.

Explanation: It would be more appropriate to call this list of material "typical", since the list is fairly general. A complete list of current materials and equipment would be far more detailed. The other suggested changes are more accurate than what was previously provided.

45. Table 3. Typical Fire Fighting Equipment, page 110.

Comment: Add ambulance to the equipment the Fire Department can dispatch.

Suggested Change: See Attachment VI-1.

Explanation: This suggested change is more accurate and detailed than what was previously written.

46. Table 3. Typical Fire Fighting Equipment, page 110.

Comment: Make more general; delete numbers of EMTs and fully encapsulating suits, and change title to Typical Fire Fighting Equipment.

Suggested Change: See Attachment VI-1.

Explanation: Including the specific numbers of EMTs or protective suits in the permit is unnecessarily restrictive.

DELETED SECTIONS, TABLES & APPENDICIES

47. Figure G-1.

RESPONSE TO DOE COMMENTS PART VI-CONTINGENCY PLAN

Comment: Delete Figure G-1.

Explanation: The Emergency Response On-site Notification procedures are fully described in the text. The flow chart provided in Figure G-1 is overly simplified and is therefore inaccurate. In order to make the figure accurate, it would be very complicated, due to the interrelationships and various notification pathways between the groups involved.

48. Decontamination. Last paragraph page 216 through top of page 222.

Comment: Delete entire section and reference Appendix I-1 of the Closure Plan (Part VIII in the draft permit).

Suggested Change: See Attachment VI-1.

Explanation: The identical information is provided in Appendix I-1 of the Closure Plan, including the information in Tables G-2 and G-3.

49. Figure G-3

Comment: Delete Figure G-3.

Explanation: This figure is outdated, and is more detail than is needed in the RCRA permit. Surface water discharges are outside the domain of the Colorado Hazardous Waste Management Regulations, and are covered by conditions in the facility NPDES permit.

50. Container Spills, and G-4j Tank Spills

Comment: Delete these sections.

Suggested Change: See Attachment VI-1.

Explanation: The preceding description covered all types of releases, spills and fires at any unit.

51. VI.G. Deleted Reference to Offsite Evacuation.

Comment: Delete reference to Appendix G-5.

Suggested Change: See Attachment VI-1.

Explanation: There is no need for the Jefferson County/Boulder County Emergency Response Plan to be included as a part of the facility contingency plan. CDH will be provided with a current copy of the plan on request. See comment 56.

52. References in text.

Comment: Delete references to Table G-5, Plate G-III, Table G-7, Appendix G-3, and Appendix G-4.

Suggested Change: See Attachment VI-1.

Explanation: See comments 44, 46, and 55. Plate G-III and Appendix G-3 were not included in the draft permit (because they contain UCNI information), and should not be referenced.

53. Table G-5

RESPONSE TO DOE COMMENTS PART VI-CONTINGENCY PLAN

Comment: Delete Table G-5.

Explanation: The locations of the fire hydrants, while important information for the Fire Department, should not be included in the RCRA Operating Permit. The locations or numbers of hydrants do not change often, but the numbering system indicated in Table G-5 has changed. The facility would be willing to submit updated lists of the hydrant numbers and locations to CDH, but under separate cover and not attached to the permit.

54. Table G-7

Comment: Delete Table G-7.

Explanation: The information in Table G-7 may change periodically. Including the specific numbers of survival units in the permit is unnecessarily restrictive.

55. Agreements with U. of C. Health Sciences Center and St. Anthonys Hospital

Comment: These agreements should not be included in the permit.

Suggested Change: Delete Appendix G-2.

Explanation: The facility must maintain current agreements with hospitals, but these agreements should not be included in this permit. Copies of current agreements will be provided to CDH on request.

56. Rocky Flats Fire Department Hazmat Manual

Comment: This manual should not be included in the permit.

Suggested Change: Delete Appendix G-4.

Explanation: The facility maintains an up-to-date hazardous materials response program, contained in the Rocky Flats Fire Department Hazardous Materials Response Team Manual (current version 1/18/89). A copy of the current version of the manual will be provided to CDH on request, but it should not be included in this permit.

57. Jefferson County/Boulder County Emergency Response Plan

Comment: This plan should not be included in the permit.

Suggested Change: Delete Appendix G-5.

Explanation: The facility keeps a current copy of this plan on site. A copy of the current plan will be provided to CDH on request, but it should not be included in this permit.

RESPONSE TO COMMENTS 1-57: The permit has been revised as in the suggested changes to incorporate the revised RCRA Contingency Plan submitted with the facility's comments as Part VI of the permit and the IAG. The revised RCRA Contingency Plan is also known as Attachment VI-1 in the responses to comments. New permit conditions have been added as compliance schedule items at the end of Part VI to replace certain items dropped from the permit, such as the list of fire hydrants, or as a result of public comment, such as the up-to-date list of phone numbers in the EOC.

RESPONSE TO DOE COMMENTS PART VII-PERSONNEL TRAINING

GENERAL COMMENTS

1. General Comment, inaccurate terminology.

Comment: The term "position roster" has no specific definition at the Rocky Flats Plant.

Suggested Change: Substitute the wording "position description list" for "position roster."

Explanation: The wording "position description list" accurately describes a position roster in terms commonly used at Rocky Flats Plant.

RESPONSE: The wording has been changed as suggested.

VII.A. INTRODUCTION

2. VI.A. Introduction, last paragraph, page 116.

Comment: Insert the clause "unless under direct supervision" in the sentence.

Suggested Change: Facility personnel shall not handle or otherwise manage hazardous or mixed waste unless under direct supervision until the applicable training requirements for that individual's position are met.

Explanation: This is inconsistent as written with regards to the requirements of the Colorado Hazardous Waste Regulations and to other references in this section.

RESPONSE: The permit has been revised as in the suggested change to clarify that personnel may work under direct supervision prior to meeting all training requirements.

3. VI.A. Introduction, 3rd paragraph, page 116.

Comment: Change "transuranic" to "non-RCRA regulated".

Suggested Change: Other employees either have no interaction with these materials or deal only with non-RCRA regulated waste.

Explanation: The statement was written before transuranic mixed waste was regulated. The important point for this section is that they are wastes whose regulation is beyond the scope of RCRA.

RESPONSE: The permit has been revised as in the suggested change to provide accurate wording regarding waste types.

VII.B. RCRA TRAINING OFFICER

4. VII.B. 1.a. Qualifications of RCRA Training Officer, page 116.

Comment: The Training Officer should be required to have a degree or sufficient experience.

Suggested Change: The RCRA Training Officer shall possess a four-year science or engineering degree or have sufficient experience in hazardous and mixed waste management to oversee the requirements of the training program, as modified by this permit.

Explanation: It is not essential that the Training Officer possess a college degree. An employee with experience in hazardous waste management would be capable of carrying out the responsibilities of the RCRA Training Officer.

RESPONSE: The permit has been revised as in the suggested change to accurately reflect

RESPONSE TO DOE COMMENTS-PART VII

the requirements for the RCRA training officer.

5. VII.B.1.a. Qualifications of RCRA Training Officer, page 116.

Comment: Delete the word "Section" after Waste Operations.

Suggested Change: The RCRA Training Officer shall be knowledgeable of the waste operations procedures.

Explanation: This does not make sense as written. The Training Officer needs to be aware of how waste operations function.

RESPONSE: The permit has been revised as in the suggested change to utilize correct terminology relating to waste operations.

6. VII.B.2. Responsibilities of RCRA Officer, page 116.

Comment: Replace "He" with "The Officer". Delete "outside courses".

Suggested Change: The Officer establishes qualifications policy, approves qualification requirements, course curricula, instructors, and ensures proper implementation of the program.

Explanation: This language is sexist and may not always be accurate. The RCRA Training Officer is not responsible for outside training. As written, the sentence is inconsistent with RFP practices.

RESPONSE: The permit has been revised as in the suggested change to be consistent with current RFP training procedures.

7. VII.B.2.c.i. Responsibilities of RCRA Officer, page 116.

Comment: Replace "The Human Resources Department " with "the Permittee".

Suggested Change: The Permittee is responsible for course development and revision.

Explanation: Rocky Flats Plant undergoes frequent personnel reorganization. The specific title or the person who performs a task related to personnel training is subject to recurrent change. It would be unduly burdensome for the facility to undertake a permit modification request every time this changes.

RESPONSE: The permit has been revised as in the suggested change to reference the Permittee rather than a specific department.

8. VII.B. RCRA Training Officer, page 116.

Comment: Replace "the Directors of HS&E, Plutonium Operations and Human Resources" with "appropriate personnel at the directors level of management".

Suggested Change: The implementation of OJT is the responsibility of the line supervisors and foremen most familiar with RFP's operation; however, all training remains the ultimate responsibility of the RCRA Training Officer as delegated by the appropriate personnel at the Director level of management.

Explanation: Rocky Flats Plant undergoes frequent personnel reorganization. The specific title or the person who performs a task related to personnel training is subject to recurrent change. It would be unduly burdensome for the facility to undertake a permit modification

RESPONSE TO DOE COMMENTS-PART VII

request every time this changes.

RESPONSE: The permit has been revised as in the suggested change to clarify that appropriate management personnel are responsible for the training program.

VII.C. RCRA TRAINING.

9. VII.C.3.x. Objectives, page 118.

Comment: Change "100 percent" to "80 percent".

Suggested Change: The trainee must achieve an 80 percent proficiency level to pass the CAI.

Explanation: This condition is unreasonable. The CHWR do not specify that facility employees take a test, let alone pass with 100% proficiency. Rocky Flats has voluntarily elected to have its employees take an exam and has historically used the 80% level as acceptable.

RESPONSE: The permit has been revised as in the suggested change to incorporate 80% as an acceptable passing level.

10. VII.C.3.c. Objectives, page 118.

Comment: Insert "the Rocky Flats" in front of "facilities" and remove "dispose".

Suggested Change: The objectives of the CAI shall include: recognition of the requirements pertaining to the Rocky Flats facilities which generate, treat, or store hazardous or mixed waste; ...

Explanation: Employees need to be knowledgeable about hazardous and mixed wastes management as it pertains to the site. As written, the condition is too broad and burdensome. No disposal of hazardous or mixed waste occurs on plantsite.

RESPONSE: The permit has been revised to make the condition more specific to Rocky Flats. However, the requirement that employees be familiar with hazardous/mixed waste disposal has been retained in order to assure that their RCRA training is sufficient.

11. VII.C.2.e.vii. On the Job Training, page 118.

Comment: Delete (i), remove "overflow" in (vi), and delete (vii).

Explanation: Item (i) and the reference to overflow in (vi) refer to tank operations, which are beyond the scope of this permit. Regarding (vii), it is not necessary that every employee on the line who deals with hazardous waste be familiar with the Waste Analysis Plan as part of their on-the-job training.

RESPONSE: The permit has been revised to clarify that on-the-job personnel training requirements are job specific. This would include familiarity with the waste analysis plan.

12. VII.C.2.f. Training Documentation, page 122.

Comment: Per Rocky Flats procedures, records of employee training are not kept by the RCRA Training Officer; they are maintained by plant training.

Suggested Change: A roster of all facility personnel involved in hazardous waste and mixed waste management shall be maintained by plant training, including their titles and job

RESPONSE TO DOE COMMENTS-PART VII

descriptions.

Explanation: This condition is not consistent with current Rocky Flats procedures.

RESPONSE: The permit has been revised to accurately reflect plant procedures for maintaining training records.

13. VII.C.4.a. Training Documentation, page 122.

Comment: "The Permittee shall maintain...required by 6CCR 1007-3, Section 264.16(d) and (e)." Write out the specific requirements of those sections, such as: "the Permittee shall maintain the following documents...etc."

Explanation: The purpose of the permit is to specify the conditions and requirements that a facility must comply with. Simply restating the regulatory reference leaves both the facility and CDH vulnerable to misinterpretation.

RESPONSE: The permit specifically lists the training documents required in this section. The regulatory reference is unnecessary and has been deleted.

14. VII.C.4. Training Documentation, page 122.

Comment: Delete this condition or incorporate it with paragraph (b) above.

Explanation: See Comment #12. It is redundant to restate this.

15. VII.C.4.h. Update Position Description List, page 122.

Comment: Delete this condition.

Explanation: This condition is too broad and should not be included within the scope of a permit. It would be difficult to comply with and to enforce.

RESPONSE: The permit has been modified to clarify that newly identified positions involved in waste management will have the training requirements identified at the time the position is created.

16. VII.C.3. Computer Aided Instruction, page 120.

Comment: Replace "approximately one hour of instruction" with "computerized instruction".

Suggested Change: The RCRA CAI course consists of computerized of instruction, embedded questions, and a mastery test.

Explanation: This time is only an estimate and was included with the permit application and is subject to change. It was not intended that it become part of the permit document and thus subject to the permit modification regulations. The statement as written is unduly restrictive.

RESPONSE: The permit has been revised as in the suggested change to more accurately describe the CAI course.

17. VII.C.3.c.ix. Labeling Requirements, page 120.

Comment: Delete "waste packaging and". Insert "for drums which are" after "requirements".

Suggested Change: Recognize the labeling requirements for drums which are applicable to the various waste streams at RFP.

RESPONSE TO DOE COMMENTS-PART VII

Explanation: Not every employee who undergoes RCRA training will need to have knowledge of waste packaging. These specifics can be addressed during on-the-job training for those individuals whose job involves waste packaging. This permit only addresses drum storage.

RESPONSE: The permit has been revised to require that employees recognize the applicable labeling requirements for all packages, DOT-approved containers, and other storage and/or shipping containers used at the RFP. Previous comments have referenced other DOT approved containers.

18. VII.C.2.e. On the Job Training Checklist, page 118.

Comment: Replace the references to TA&A with "plant training".

Suggested Change: Once the employee and supervisor have completed the on-the-job training and signed the checklist, it is sent to plant training. Plant training maintains all employee training records.

Explanation: This statement is not consistent with current Rocky Flats procedures.

RESPONSE: The permit has been revised as in the suggested change to reference current procedures for the on-the-job checklist.

19. VII.C. RCRA Training, first paragraph, page 118.

Comment: Change "40 CFR" to "6CCR 1007-3".

Explanation: All references should be to the applicable Colorado regulations.

RESPONSE: The permit has been revised as in the suggested change to reference the Colorado Hazardous Waste Regulations where appropriate.

20. VII.C.2. On the Job Training, page 118.

Comment: Move this sentence to Part IV.C.2. On-the -Job Training.

Explanation: This paragraph belongs with the OJT Section.

RESPONSE: The permit has been revised as in the suggested change by moving the reference to on-the-job training to an appropriate section of the permit.

21. VII.C.3.e. Annual Review, page 122.

Comment: Revise this sentence to read as below.

Suggested Change: All employees who undergo RCRA training as presented in the CAI program are subject to annual recertification.

Explanation: It is not a requirement of the CHWR that the training be recertified, only that employees be annually retrained.

RESPONSE: The permit has been revised as in the suggested change to clarify that employees are required to have annual training.

22. VII.C.1. Certification, page 118.

Comment: Delete the wording after "mandatory".

Suggested Change: Annual training is mandatory.

RESPONSE TO DOE COMMENTS-PART VII

Explanation: The CHWR only require that an employee must not work in unsupervised areas until they have received initial training, not their annual update.

RESPONSE: The permit has been revised as in the suggested change to clarify that only initial training and OJT is required prior to working unsupervised.

23. VII.C.4. Training Documentation, page 122.

Comment: Change "40 CFR" to "6CCR 1007-3" and "his" to "the".

Suggested Change: 6 CCR 1007-3 264.16(d) requires that records be maintained for each employee with RCRA duties as defined by the specific job description.

Explanation: All references should be to the applicable Colorado regulations. This language is sexist and may not always be accurate.

RESPONSE: The permit has been revised as in the suggested change to reference the appropriate Colorado Hazardous Waste Regulations, and generalize the reference to "his".

24. VII.C.2.g. Attendance, page 122.

Comment: Revise the sentence to read as below.

Suggested Change: Attendance is verified using an attendance sheet or is automatically entered into the Rocky Flats computer system.

Explanation: RFP included the name of the computer system and a copy of the attendance sheet in the original permit application for the sake of completeness regarding all aspects of RFP operations related to hazardous waste management. It was not intended that they become part of the permit document and therefore subject to the permit modification regulations of 6 CCR 1007-3, Section 100.6.

RESPONSE: The permit has been revised as in the suggested change to generalize the reference to computerized recordkeeping systems.

25. VII.C.4.d. Training Documentation, page 122.

Comment: Change "the RCRA Training Officer" to "plant training"

Suggested Change: Plant training maintains a computerized list of all employees requiring RCRA training.

Explanation: This condition is not consistent with current Rocky Flats procedures.

RESPONSE: The permit has been revised as in the suggested change to incorporate the correct reference for maintenance of training records.

DELETIONS

26. Deletion, reference to courses available.

Comment: Delete "nearly 700".

Suggested Change: At RFP, training courses are presently used to ensure that personnel are properly prepared to work at this complex facility.

Explanation: This number is subject to change and it has no real relevance to RCRA training as addressed in this section. Therefore, it is unduly specific to include this phrase in the permit.

RESPONSE TO DOE COMMENTS-PART VII

RESPONSE: The permit has been revised as in the suggested change to omit reference to a specific number of training courses.

27. Deletion, reference to group names.

Comment: Delete the specific references to group names.

Suggested Change: The RCRA training program is directed and approved by appropriate personnel at the director level of management.

Explanation: Rocky Flats Plant undergoes frequent personnel reorganization. The specific title or the person who directly oversees training is subject to recurrent change. It would be unduly burdensome for the facility to undertake a permit modification request every time this changes.

RESPONSE: The permit has been revised as in the suggested change to allow flexibility in training program direction without the necessity for a Class 1 permit modification.

28. Deletion, reference to number of workers with hazardous waste contact.

Comment: Change "roughly 60 percent" to "the majority".

Suggested Change: A thorough review of the RFP personnel roster indicates that a majority of all employees have some interaction with hazardous materials, wastes and radioactive mixed wastes.

Explanation: That percentage is only an estimate and was only submitted as anecdotal information and is subject to change. The statement as written is unnecessarily restrictive.

RESPONSE: The permit has been revised as in the suggested change to omit the reference to a specific percentage of workers.

29. Deletion, tables deleted.

Comment: This paragraph refers to Tables H-1, H-2 and H-3 which describe plant job descriptions and educational requirements. Remove the tables and revise the paragraph to read as below.

Suggested Change: The RCRA Training Officer reviews the many job classifications at RFP and makes a determination as to which employees should receive initial RCRA training. Additionally, supervisors may request that employees receive RCRA training. Employees are then scheduled with plant training to receive the training. The date training is completed is entered in the RFP computer system. Job titles, job descriptions, the name of the employee filling the job and records of training given to employees engaged in hazardous waste management are kept in the plant training and plant employment offices."

Explanation: 6CCR 1007-3, Section 264.16 of the Colorado Hazardous Waste Regulations requires that a facility maintains personnel training records at the facility. 6CCR 1007-3, Section 100.41 of the CHWR which describes the required contents of the RCRA permit, states that a facility must submit an outline of how the facility will meet the requirements of 264.16. This suggested change, along with the rest of the information in this section, will meet that requirement. These tables, which listed job descriptions, etc., were included with the original permit application for the sake of completeness regarding all aspects of RFP

RESPONSE TO DOE COMMENTS-PART VII

operations related to hazardous waste management. It was not intended that they become part of the permit document and therefore subject to the permit modification regulations of 6 CCR 1007-3, Section 100.6.

RESPONSE:The permit has been revised as in the suggested change to delete the outdated tables, and substitute the above language.

See response to Comment 26.

30. Deletion, names of specific course titles.

Comment: Revise this sentence to read as below and delete the listings of the specific course titles.

Suggested Change: Once again, the program includes the basic RCRA training courses plus other related courses.

Explanation: 6CCR 1007-3,Section 100.41 of the CHWR which describes the required contents of the RCRA permit, states that a facility must submit an outline of how the facility will meet the requirements of 264.16. This suggested change, along with the rest of the information in this section, will meet that requirement. The names of these courses were included with the original permit application for the sake of completeness regarding all aspects of RFP operations related to hazardous waste management. It was not intended that they become part of the permit document and therefore subject to the permit modification regulations of 6 CCR 1007-3, Section 100.6. See #15.

RESPONSE:The permit has revised as in the suggested change to delete the titles of related courses not required by this permit.

31. Deletion, estimated numbers.

Comment: Delete the sentence "This includes approximately 3800 people".

Explanation: This number is only an estimate, was included as anecdotal information with the permit application and is subject to change. It was not intended that it become part of the permit document and thus subject to the permit modification regulations. The statement as written is unduly restrictive.

RESPONSE:The permit has been revised by deletion of the reference to a specific number of employees, and to Rockwell.

32. Deletion, nonexistent committee.

Comment: Delete this sentence.

Explanation: This statement is not accurate. This committee does not exist.

RESPONSE:The permit has been revised as in the suggested change by deleting the reference to a non-existent committee referenced in the facility's permit application.

33. Deletion, table deletion.

Comment: Delete from the second sentence until the end of the paragraph and replace as below.

Suggested Change: The RCRA training is designed to meet those requirements through the

RESPONSE TO DOE COMMENTS-PART VII

computer aided instruction course, whose goals and objectives are described in Part VII.C.2 and 3. Computer Aided Instruction and On-the-Job Training as described in this permit.

Explanation: 6CCR 1007-3, Section 100.41 of the CHWR which describes the required contents of the RCRA permit, states that a facility must submit an outline of how the facility will meet the requirements of 264.16. This suggested change, along with the rest of the information in this section, will meet that requirement. These tables, which listed job descriptions, etc., were included with the original permit application for the sake of completeness regarding all aspects of RFP operations related to hazardous waste management. It was not intended that they become part of the permit document and therefore subject to the permit modification regulations of 6 CCR 1007-3, Section 100.6.

RESPONSE: The permit has been revised as in the suggested change to reference Part VII.C.2. and Part VII.C.3. of the permit rather than incorporate tables which are subject to change or cover non-RCRA/CHWA requirements.

34. Deletion, out of date information.

Comment: Delete the first three sentences.

Explanation: These statements are no longer accurate.

RESPONSE: The permit has been revised as in the suggested change to delete references to out-of-date information.

35. Deletion, nonexistent committee.

Comment: Delete the reference to the RCRA Training and Observation Committee.

Suggested Change: It is the responsibility of the RCRA Training Officer to ensure that all personnel with RCRA responsibilities are trained within six months of their effective date in a position and are annually updated.

Explanation: There is no such Committee. Therefore, as written, the statement is inaccurate.

RESPONSE: The permit has been revised as in the suggested change by deleting the reference to a non-existent committee which was contained in the facility's permit application.

36. Deletion, tables.

Comment: Delete this sentence.

Explanation: 6CCR 1007-3, Section 264.16 of the Colorado Hazardous Waste Regulations requires that a facility maintains personnel training records at the facility. 6CCR 1007-3, Section 100.41 of the CHWR which describes the required contents of the RCRA permit, states that a facility must submit an outline of how the facility will meet the requirements of 264.16. The information in this section, will meet that requirement. This table was included with the original permit application for the sake of completeness regarding all aspects of RFP operations related to hazardous waste management. It was not intended that it become part of the permit document and therefore subject to the permit modification regulations of 6 CCR 1007-3, Section 100.6.

RESPONSE TO DOE COMMENTS-PART VII

RESPONSE: The permit has been revised as in the suggested change to delete Table H-3 as it is an unnecessary and restrictive permit condition. The requirements of this section are addressed by the requirements of other permit conditions.

37. Deletion, tables.

Comment: Change "contained in Tables H-1 and H-2" to "maintained by plant employment"
Suggested Change: Summary job descriptions for all personnel with RCRA responsibilities are maintained by plant employment.

Explanation: 6CCR 1007-3, Section 264.16 of the Colorado Hazardous Waste Regulations requires that a facility maintains personnel training records at the facility. 6CCR 1007-3, Section 100.41 of the CHWR which describes the required contents of the RCRA permit, states that a facility must submit an outline of how the facility will meet the requirements of 264.16. This suggested change, along with the rest of the information in this section, will meet that requirement. These tables, which listed job descriptions, etc., were included with the original permit application for the sake of completeness regarding all aspects of RFP operations related to hazardous waste management. It was not intended that they become part of the permit document and therefore subject to the permit modification regulations of 6 CCR 1007-3, Section 100.6.

RESPONSE: The permit has been revised as in the suggested change to delete references to Tables H-1 and Table H-2.

38. Deletion, redundant paragraph.

Comment: Delete this paragraph.

Explanation: This is redundant.

RESPONSE: The permit has been revised as in the suggested change to delete the redundant paragraph.

39. Deletion, tables and appendix.

Comment: Delete these tables.

Explanation: 6CCR 1007-3, Section 264.16 of the Colorado Hazardous Waste Regulations requires that a facility maintains personnel training records at the facility. 6CCR 1007-3, Section 100.41 of the CHWR which describes the required contents of the RCRA permit, states that a facility must submit an outline of how the facility will meet the requirements of 264.16. The information in this section, will meet that requirement. These tables, which listed job descriptions, the RCRA course text, etc., were included with the original permit application for the sake of completeness regarding all aspects of RFP operations related to hazardous waste management. It was not intended that they become part of the permit document and therefore subject to the permit modification regulations of 6 CCR 1007-3, Section 100.6.

RESPONSE: The permit has been revised as in the suggested change by deleting Tables H-1, H-2, and H-3.

RESPONSE TO DOE COMMENTS PART VIII-CLOSURE OF PERMITTED UNITS

VIII.A. CONTAINER STORAGE CLOSURE OVERVIEW AND REVISIONS

OVERVIEW: Part VIII-Closure and its two appendices, I-1 and I-2, of the draft permit has been restructured as Parts VIII, IX, and X respectively in the final permit. In addition, each section has been renumbered. Comments and responses refer to the new numbers, and can be correlated with the draft permit as the comment is reprinted entirely rather than summarized.

1. VIII.A.3.b. Unit Decontamination, page 125.

Comment: The use of only background numbers for the verification of decontamination is unnecessarily restrictive.

Suggested Change: The permittee shall implement the procedures detailed in Part IX-Decontamination to verify that the unit undergoing closure has been decontaminated to either background levels or risk levels of no more than 1×10^{-6} for organic hazardous constituents and radioactive constituents, whichever is the less restrictive.

Explanation: The use of risk-based clean-up standards meets the intent of the RCRA closure regulations by protecting human health and the environment, and is also consistent with recent discussions of risk-based clean-up levels in the Inter-Agency Agreement (IAG).
RESPONSE: The permit has been revised to allow use of risk based determinations for unit closure where appropriate, with adequate supporting documentation. This section has been moved to VIII.B.5.

2. VIII.A.3.e. Unit Decontamination, page 126.

Comment: The condition is vague regarding what area of the secondary containment must be decontaminated.

Suggested Change: If the building is used for secondary containment for a unit, decontamination of that portion of the building serving as secondary containment for the unit must also be completed during the closure period for the unit.

Explanation: The new statement cannot be interpreted as requiring decontamination of the entire building if only a portion of the building is used for secondary containment.

RESPONSE: The permit has been revised to clarify that the secondary containment area will be decontaminated as part of the unit closure. Investigation of potential releases beyond the **physical boundary of the permitted unit** will follow the procedures set forth in **the approved closure plan, the corrective action requirements of this permit, the IAG, or a combination of these mechanisms.**

3. VIII.A.4.a and b. Soil Sampling, page 126.

Comment: Condition a and b are misarranged with respect to which condition would first prevail. Further, condition b, as written, could be interpreted to require soil sampling at all areas undergoing closure and for a great distance from the unit in an effort to establish a limit of contamination which may not necessarily be related to the unit.

RESPONSE TO DOE COMMENTS-PART VIII CLOSURE PLAN

Suggested Change: Rearrange the section to have existing condition 1 become condition 2, and existing condition 2 become condition 1. Also, modify existing condition 2 to read as follows:

Soil sampling as a closure activity will be required under the circumstances outlined in Part X-Soil Sampling. When soil sampling is necessary, the soil immediately beneath and within the horizontal limits of the unit will be sampled, as specified in Part X-Soil Sampling.

Explanation: The new statement cannot be interpreted as requiring soil sampling in areas not directly related to the permitted unit.

RESPONSE: Permit condition VIII.A.4. has been rearranged as a result of this comment. All units undergoing closure are required to be screened for certain contaminants, following the process in Part X-Soil Sampling. This screening will generally be performed prior to any actual soil sampling taking place.

Permit condition VIII.A.4.b. has been revised to clarify that soil sampling will be performed to determine if the unit has released hazardous or mixed waste, or hazardous or mixed waste constituents to the soil **beyond** the physical boundaries of the unit. Further investigations of releases to the environment from the unit will be investigated under the the closure plan, terms of the IAG, the corrective action requirements of the permit, or a **combination of these mechanisms**. **The choice of an investigative mechanism will be determined at the time a potential release from the unit has been identified, but investigation during the closure process is the preferred alternative.** Contamination which cannot clearly be linked to operation of the unit may be more appropriately investigated under the other two alternatives.

4. VIII.A.4.c. Soil Sampling, page 126.

Comment: This condition, as written, could be interpreted to require soil sampling at all storage pads.

Suggested Change: Modify the condition to read as follows:

The Permittee shall sample all permitted storage pads for underlying or adjacent soil contamination whenever the unit undergoing closure has had spills or releases of hazardous waste to the environment. The Permittee shall core through the asphalt pad to obtain soil samples for those asphalt storage pads that have had spills or releases of hazardous waste to the environment and will remain in place after closure of the unit. A more detailed discussion of soil sampling requirements is found in Part X-Soil Sampling.

Explanation: This change will clarify the condition, and fully comply with the criteria for determination of the need for soil sampling presented in Part X.

RESPONSE: Permit condition VIII.A.4.c has not been revised as a result of this comment. During preparation of the draft permit, it was agreed with Rocky Flats personnel that soil samples would be taken by coring through the asphalt at all asphalt storage pads to be left in place, not only those with known spills or releases. This is the only satisfactory action to determine clean closure at these units.

RESPONSE TO DOE COMMENTS-PART VIII CLOSURE PLAN

5. VIII.A.7. Criteria for Determining Post Closure Care, page 127.

Comment: The section wanted the criteria defined for determining when some unit would require closure.

Suggested Change: Replace criteria VIII.A.7. with: The criteria used to determine if a unit undergoing closure will be certified closed or follow post-closure procedures will be based upon the presence of groundwater contamination caused by the unit. If groundwater contamination caused by the unit is identified, then the unit will follow post-closure procedures. In all other cases, any contaminated soils at a unit will be cleaned to either background levels or risk levels equivalent to 1×10^{-6} , whichever is less restrictive.

Explanation: This strategy will protect human health and the environment, as well as be consistent with discussions related to the Inter-Agency Agreement at the Rocky Flats Plant.
RESPONSE: The permit has been revised to clarify the criteria to be used by the Permittee to determine when a unit would require post-closure care as opposed to being clean closed, or meeting the closure performance standard.

VIII.B. REGULATORY REQUIREMENTS AND PERFORMANCE STANDARDS

6. VIII.B.4. Facility Contact, page 127.

Comment: The draft permit makes reference to a specific individual for the closure plan contact.

Suggested Change: Make the facility contact the job position of the DOE Area Manager rather than a specific person.

Explanation: This change will make the draft permit more flexible so that as the DOE area manager changes the permit will not need to be revised.

RESPONSE: The permit has been revised as in the suggested change to generalize the reference to DOE Rocky Flats Office Manager.

7. VIII.B.5. Closure Performance Standard, page 128.

Comment: There appear to be references to units not included in this permit.

Suggested Change: Replace the first paragraph with the following.

This closure plan provides for closure of the hazardous and mixed waste storage units, listed in Table 1, in a manner that minimizes the need for further maintenance and controls, minimizes or eliminates threats to human health and the environment, and minimizes or eliminates the post-closure escape of hazardous waste, hazardous waste constituents, leachate, contaminated rainfall or waste decomposition products to the ground or surface waters or to the atmosphere. This closure plan is written in accordance with Part 264, Subpart G and other subparts of State and Federal regulations pertaining to closure of container storage areas.

The closure performance standards establish concentrations of constituents that are protective of human health and the environment. When the closure performance standard is exceeded the following actions may be undertaken: decontamination or removal of containment system components, decontamination or removal of ancillary equipment,

RESPONSE TO DOE COMMENTS-PART VIII CLOSURE PLAN

decontamination or removal of soil, removal of hazardous waste and removal of hazardous waste residues to a level that will meet the above requirements.

The closure performance standard for rinsate will be based on the background concentration levels of "rinsate" or risk levels of 1×10^{-6} , whichever is the greater. Background concentration levels of the rinsate are based upon the mean plus three standard deviations of those parameters listed in Table 3 of Part IX-Decontamination. Selection of these parameters will be based on the specific wastes stored at the unit, these wastes are presented in Part III of this permit.

The closure performance standard for soil is based on the background soil concentrations or risk levels of 1×10^{-6} , whichever is greater. These background soil concentrations are those obtained under the Background Hydrogeochemical Characterization & Monitoring Plan being implemented, and any additional background soil sampling approved by the Colorado Department of Health.

Explanation: The new statement is intended to clarify what the purpose of the closure performance standards are and what actions may be undertaken to comply with them.

RESPONSE: The permit has been revised to clarify definition and application of the closure performance standard. **The closure performance standard has been stated more specifically, and a necessary distinction has been made between carcinogenic and non-carcinogenic hazardous constituents.**

8. VIII.B.5. Closure Performance Standards, page 128.

Comment: The closure performance standard should be modified to reflect the current approach to unit clean-up at the Rocky Flats Plant.

Suggested Change: Add the following to the end of the paragraph of this section carried over to this page.

Groundwater contaminated by a RCRA closure unit will be addressed as a portion of Inter-Agency Agreement being negotiated for the Rocky Flats Plant.

Explanation: Mention of the IAG makes the document current.

RESPONSE: The permit has been revised to clarify that ground water contaminated by a RCRA unit will be addressed under the approved closure plan, the corrective action requirements of the permit, and/or the IAG. **See response to comment # 3 above.**

9. VIII.B.6. Amendment of Plan, page 130.

Comment: The section on amendment of the closure plan does not address all instances in which the closure plan would be amended.

Suggested Change: Add the following to the end of the paragraph that completes this section.

Further, any major change to closure identified during the implementation of required closure activities will also require an amendment of the existing closure plan. For

RESPONSE TO DOE COMMENTS-PART VIII CLOSURE PLAN

instance, soil contamination is not anticipated at any permitted unit undergoing closure. However, soil sampling and analysis will be required at some of the units undergoing closure in order to verify the absence of soil contamination. Should soil sampling identify contaminated soils associated with an area undergoing closure, a request for modification of the closure plan will be submitted, along with the anticipated schedule for submission of the amended closure plan. The request for modification of the closure plan will be made within 30 days of identification of the event that causes modification of the closure plan to be necessary, as required by 6 CCR 1007-3, Part 264.112(c)(3) and 40 CFR 264.112(c)(3).

Explanation: With this change the section now addresses all instances under which the closure plan would be amended.

RESPONSE: The permit has been revised to address the procedure for modifications to the closure plan which may be necessary under the specified conditions.

VIII.C. CLOSURE SCHEDULES, PARTIAL AND FINAL CLOSURE ACTIVITIES

10. VIII.C.1. Closure Schedule, page 130.

Comment: This paragraph makes an extended reference to units not covered by this draft permit.

Suggested Change: Replace the paragraph with the following.

The Closure Plan for each of the permitted units consists of the following information: unit description, maximum inventory, closure schedule, closure personnel, partial closure and final closure.

Explanation: The original paragraph was confusing and contradictory.

RESPONSE: The permit has been revised to clarify the content of the RCRA closure plans for units in the permit.

11. VIII.C.2. Deletion.

Comment: This sentence is specifically addressing closure of the process waste treatment system.

Suggested Change: Delete the sentence.

Explanation: The unit addressed in this sentence is not included in this draft permit.

RESPONSE: The permit has been revised to delete references to units not included in the permit. However, Figure 1-Master Closure Schedule has been retained to show the relationship of the process waste treatment system to the container storage unit closure, as these units are closely integrated.

12. VIII.C.2. Deletion.

Comment: This paragraph makes an extended reference to closing the Process Waste Collection and Treatment system in Building 374.

Suggested Change: Delete all portions of the paragraph that follow the beginning of the

RESPONSE TO DOE COMMENTS-PART VIII CLOSURE PLAN

first sentence on the page.

Explanation: The paragraph is confusing and contradictory since it makes reference to units not covered by this draft permit.

RESPONSE: See response to comment # 11 above.

13. VIII.C.2.e. Final Closure Schedule, page 130.

Comment: This section, since it discusses the closure activities, should mention the analytical analyses that will be conducted.

Suggested Change: Add the following sentence onto the end of the paragraph.

Analyses will be performed in accordance with approved EPA procedures or other generally accepted analytical procedures for those analyses for which the EPA does not have an approved procedure.

Explanation: This change will specifically address the issue of analytical procedures.

RESPONSE: The permit has been revised to clarify that EPA or other CDH approved analytical methods, such as plant L-procedures, will be used.

14. VIII.C.2. Final Closure, deletions.

Comment: These paragraphs make an extended reference to closing units that are not included in this draft permit.

Suggested Change: Delete these paragraphs.

Explanation: These paragraphs are confusing and contradictory.

RESPONSE: See response to comment #11 above.

15. VIII.C.3. (a-d) Partial Closure, page 131.

Comment: The section discussing partial closure activities is confusing.

Suggested Change: Replace the section discussing partial closure activities with the following.

Partial closure pertains to closing one hazardous waste management unit at a facility as opposed to closing the entire hazardous waste management facility. This may occur if the useful life of a unit has been expended, or operations have changed obviating the need for the unit, or if amendments to the State or Federal RCRA laws or regulations mandate closure of a portion of the units at the facility.

Partial closure actions are not anticipated at the Rocky Flats Plant. However, should partial closure become necessary, the procedures described in this section of the permit would be followed. Units operating under interim status that require closure will be closed following the procedures outlined in an interim status closure plan. Interim status closure plans must be approved by the Colorado Department of Health prior to implementation of the plan and certification of closure.

When portions of a unit are replaced with a like unit or replaced with an upgraded unit, the part removed will be handled as a hazardous waste or a mixed waste depending

RESPONSE TO DOE COMMENTS-PART VIII CLOSURE PLAN

upon the wastes managed by the unit. Alternatively, the part removed could be handled according to the procedures for closure described in this section of the permit. The part would be replaced immediately so as not to affect the operation of the permitted unit. In the case of replacement of a portion of a unit, the criterion used to determine whether the actions constitute major reconstruction of a unit will be as specified in 6 CCR 1007-3, Part 100, and 40 CFR 270.72(e). These requirements state that major reconstruction of a unit occurs when the capital investment in the replacement activities exceeds 50% of the replacement capital cost of a comparable entirely new hazardous waste management unit. In the case of major reconstruction of a unit, the original unit will undergo closure, and the new unit will receive approval to operate prior to operation. When increasing the capacity of an existing unit through expansion of its area or appurtenances, the unit need not go through closure regardless of the cost of the improvements.

Explanation: This re-write of the partial closure section is less confusing.

RESPONSE: The permit has been revised as in the suggested change to reflect more accurate language regarding partial closures. A sentence has been added to clarify that certain modifications require a permit modification pursuant to 6 CCR 1007, Section 100.6. It is interesting that the Permittee expects no partial closures at the facility, yet plans to build a centralized low-level mixed waste storage facility.

16. VIII.C.6. Closure of Containers, page 132.

Comment: There should be a subheading for facility description.

Suggested Change: Insert the following subheading immediately after I-2c: I-2c(1) Facility Description.

Explanation: This will make identification of the contents of each section clearer.

RESPONSE: The permit has been modified to incorporate a new subheading.

17. VIII.C.6.b. Closure of Containers, page 132.

Comment: This paragraph makes reference to storage of Pondcrete and Saltcrete which are not permitted for long-term storage.

Suggested Change: This paragraph should be replaced as follows.

There are two general types of permitted container storage areas at the facility; areas which store hazardous waste and areas which store mixed waste. Hazardous waste is generally stored in enclosed cargo containers which are stored outdoors. Solid and liquid mixed waste is generally stored inside buildings or in enclosed cargo containers which are placed outside. Detailed facility descriptions of each container storage area covered by this permit are found in Section D of the Part B Permit Application or in Part III of this permit.

Explanation: This should avoid confusion by the reader by removal of units which are not included in the permit.

RESPONSE: The permit has been revised to delete references to units not included in the permit.

RESPONSE TO DOE COMMENTS-PART VIII CLOSURE PLAN

18. VIII.C.8.b. Closure Schedule, page 133.

Comment: The last sentence of the first paragraph contradicts the closure performance standard and recent negotiations for the Inter-Agency Agreement.

Suggested Change: Replace the last sentence of the first paragraph of the section with the following.

These areas will be closed in a manner to ensure that the closure performance standard, stated in Part VIII (B)(7) Closure Performance Standards, will be met. Closing a unit to meet the closure performance standards is protective of human health and the environment.

Explanation: The change to the section is indicative of the requirements of the RCRA regulations as well as being protective of human health and the environment.

RESPONSE: The permit has been revised as in the suggested change to reference the closure performance standard rather than the outdated language used in the Part B permit application.

19. VIII.C.8.c and d. Closure Schedule, page 133.

Comment: The second paragraph of the section is confusing.

Suggested Change: The reference to Table 1 being in "the Part B Permit Application" to "this Part B Permit" and other changes as noted will allow for ease of understanding this section. The paragraph should be changed to read as follows.

The Colorado Department of Health and the EPA Regional Administrator will be notified of the intent to close each container storage area listed in Table I-1 of this Part B Permit forty-five days prior to the initiation of closure activities.

Closure of each container storage area listed in Table 1 will begin within 30 days of the receipt of the last volume of waste at each area and will proceed in accordance with the closure schedule presented on Figure 1.

Decontamination of containers and containment will be implemented as soon as empty containers or bare containment areas are available.

Explanation: Significant differences exist between the Part B Permit Application submitted by the Rocky Flats Plant and the Draft Part B Permit prepared by the Colorado Department of Health. Also, decontamination should proceed at the earliest possible opportunity in order that unforeseen problems have the least likelihood of causing non-compliance with the closure schedule.

RESPONSE: The permit has been revised to clarify closure notification and unit decontamination timeframes. It is unclear how the permit and application differ significantly, as the permit was based upon the information submitted in the application, with minor language changes.

20. VIII.C.8.g. Closure Schedule, page 133.

Comment: Soil removal and decontamination cannot be completed within 160 days from

RESPONSE TO DOE COMMENTS-PART VIII CLOSURE PLAN

the beginning of closure.

Suggested Change: Insert the following in place of the last sentence of the section.

Soil sampling and analysis will also be accomplished within 160 days from the beginning of closure. It is not currently anticipated that contaminated soil will be identified by soil sampling at any unit undergoing closure. If, however, soil sampling does identify contaminated soil, a request for modification of the closure plan will be submitted within 30 days of identification of the contaminated soil. The closure plan must be modified because it will not be possible to remove contaminated soils from a closure area within the 180 closure period. The closure plan and schedule for that unit will be amended to address the complete identification and removal of contaminated soil. Similarly, a request for modification of the closure plan will be submitted within 30 days of the identification of any other problem requiring amendment of the closure plan identified during the implementation of partial or final closure.

Explanation: This change makes the section more accurate with respect to what is anticipated to occur during closure activities.

RESPONSE: The permit has been revised to more accurately reflect the process for addressing closure plan modifications based on soil sampling results. Soil sampling and analysis activities have been reduced to 120 days to ensure their completion within the 180 closure period.

21. VIII.C.8.e. Closure Schedule, page 133.

Comment: Decontamination of equipment will require a maximum of 10 additional days.

Suggested Change: Replace the first full sentence on the page with the following:

The decontamination of equipment will follow the last expected use of the equipment in closure activities. It is expected that decontamination of equipment will take no longer than 10 days total.

Explanation: This change will allow the Rocky Flats Plant greater flexibility in meeting its schedule for closure and complies with all regulations.

RESPONSE: The permit has been revised as in the suggested change to reflect anticipated procedures and timeframes for equipment decontamination.

22. VIII.C.8.h. Closure Schedule, page 134.

Comment: The paragraph makes reference to certification of closure by a independent certified registered engineer.

Suggested Change: ... independent professional engineer, registered in the State of Colorado, ...

Explanation: This statement would be consistent with the statement made on page 136 VIII.B.6.q. Regulatory Requirements.

RESPONSE: The permit has been revised as in the suggested change to specify that closure certification will be done by a professional engineer registered in Colorado.

RESPONSE TO DOE COMMENTS-PART VIII CLOSURE PLAN

23. VIII.C.9. Closure Personnel, page 134.

Comment: This section makes reference to waste management units that are not included in the draft permit.

Suggested Change: Delete the last three sentences of the paragraph. These sentences make reference to Unit 25 and to the pond crete storage at Unit 15.

Explanation: These units are already covered by interim status closure plans submitted to the CDH and EPA in September 1989. Unit 15 will be included in this draft permit, but only the container storage activities in cargo containers.

RESPONSE: The explanation for this comment is in contradiction to the Permittee's intent to store solidified mixed waste in crates at Unit 15-A. The permit has been modified to clarify that the pad area north of the berm will be a permitted closure unit, and must be decontaminated. The remaining pad area, Unit 15-B, will be closed under interim status. The closure requirements for Unit 15-B have been deleted.

24. VIII.C.9. Closure Personnel, page 134.

Comment: This section discusses personnel requirements for closure, but does not specifically state that additional personnel may be placed on one of these projects in order to ensure compliance with the closure schedule.

Suggested Change: Add the following paragraph on the end of this section.

This section and Table I-2 specify the number of personnel expected to be used on closure activities. However, if it is found that decontamination or other closure activities necessarily take longer than expected, additional qualified personnel may be required to ensure implementation of closure within the approved time schedule.

Explanation: The inclusion of the above statement allows the RFP to allocate personnel as necessary to comply with the closure schedule.

RESPONSE: The permit has been revised to clarify that the necessary personnel will be utilized to ensure adequate implementation of closure activities. The revised version of Table 2. Personnel Required for Closure of Container Storage Areas has been included in the permit Part VIII.

25. VIII.C.10. Replacement with Like Equipment, page 134.

Comment: This section makes reference to cleaning the units to a point that "...no hazardous or mixed waste nor hazardous or mixed waste residues will remain.". This section would be better served if it made reference to Section I-1f (Closure Performance Standard).

Suggested Change: Replace the first two sentences of the paragraph with the following sentences.

This section presents programs for the final closure of the container storage areas listed in Table I-1. The closure plans are based on the assumption that as part of closure each container storage area listed in Table I-1 will be decontaminated, to levels consistent with the closure performance standard.

Explanation: These changes are more consistent with the Permit as a whole and satisfy RCRA regulations.

RESPONSE TO DOE COMMENTS-PART VIII CLOSURE PLAN

RESPONSE: The comment appears to mistakenly reference Section I-2c(5) rather than I-2c(6). Part VIII.C.10. Partial Closure of Container Areas, has been revised to appropriately reference the closure performance standard, and is now called Replacement with Like Equipment, to distinguish it from Part VIII.C.4.

26. VIII.C.11. Final Closure of Container Areas, page 134.

Comment: As written this paragraph limits the permittee to only commercial treatment and disposal facilities.

Suggested Change: There should be a statement added that would allow for treatment and disposal at any permitted treatment and disposal facility.

Explanation: This change may allow for a larger selection of treatment and disposal facilities.

RESPONSE: The permit has been revised as in the suggested change to clarify that any appropriately permitted or interim status facility may be used for treatment, storage, or disposal of the hazardous waste.

27. VIII.C.11.f. Final Closure of Container Areas, page 134.

Comment: This paragraph as written is difficult to understand. The paragraph makes reference to waste liquids with levels of organics unsuitable for recycling to be sent to OSCO for recycle.

Suggested Change: Change the paragraph to read as follows. Liquid wastes that, based on the waste characteristic, are suitable for recycle will be sent to OSCO in Henderson, Colorado, for recycle, or to another approved recycle facility.

Explanation: This change will minimize confusion, and allows greater flexibility in the treatment or disposal of organic wastes while still protecting human health and the environment.

RESPONSE: The permit has been revised as in the suggested change to clarify the wastes which may be sent to OSCO in accordance with their permit or the applicable regulations.

28. VIII.C.11.g. Final Closure of Container Areas, page 134.

Comment: This section specifies that only the five facilities listed will be used for off-site treatment or disposal of waste. This appears excessively restrictive.

Suggested Change: Replace the period in the sentence with a comma, and add: "...or another authorized facility."

Explanation: This change will make the permit less restrictive. The use of any authorized off-site facility for treatment or disposal of wastes would be protective of human health and the environment, since all authorized facilities must meet minimum operating conditions protective of human health and the environment.

RESPONSE: The permit has been revised as in the suggested change to allow use of other authorized treatment, storage, or disposal facilities for waste management.

RESPONSE TO DOE COMMENTS-PART VIII CLOSURE PLAN

29. VIII.C.11.i. Final Closure of Container Areas, page 134.

Comment: This paragraph is excessively restrictive.

Suggested Change: Replace this paragraph with the following. Mixed low-level wastes will be disposed at the DOE Nevada Test Site facility, or at another approved facility.

The approximate distances to various authorized off-site treatment and disposal facilities are listed below.

Explanation: These replacement paragraphs will more accurately reflect the current situation and the addition of the word "various authorized" in the second paragraph will be less restrictive.

RESPONSE: The permit has been revised as in the suggested change to clarify that other authorized facilities may be used for off-site treatment, storage, and disposal of low-level mixed wastes.

30. VIII.C.11.l. Final Closure of Container Areas, page 134.

Comment: This section does not accurately describe the anticipated decontamination procedure.

Suggested Change: End the second to last sentence of the paragraph after the word washing. Insert the following immediately after the second to last sentence of the paragraph. It is currently believed that a single wash and rinse cycle will be adequate to decontaminate the structures at a unit. However, the schedule currently presented is adequate to allow triple wash and rinse of the unit.

Explanation: The sentence will now more accurately reflect the actual decontamination procedures used. The unit to be used for decontamination has been identified and is an effective decontamination unit proven at other nuclear facilities.

RESPONSE: The permit has been revised as in the suggested change to reflect the anticipated decontamination procedure.

31. VIII.C.11. Deletion of Tables, Final Closure of Container Areas.

Comment: This paragraph makes reference to Tables I-5, 7, 8, 9 and 10. These tables are not a part of this draft permit.

Suggested Change: Delete references to the tables.

Explanation: Table I-5, would have had information on the maximum waste inventory in container storage areas. This information is presented in Part III, Storage in Containers of the draft permit. Section I-2c(2) of this section already informed the reader to reference Part III of the draft permit for maximum waste inventory. Tables I-7, 8, 9 and 10 contain information about the maximum waste inventory of tank systems. Tank systems are not included in this draft permit.

RESPONSE: The permit has been revised as in the suggested change to delete references to units not included in the permit, and refer to Part III for maximum inventory of container storage areas.

RESPONSE TO DOE COMMENTS-PART VIII CLOSURE PLAN

32. VIII.C.11.n. Final Closure of Container Areas, page 134.

Comment: A number of sections are referenced in the sentence that starts: "The waste volumes ..." that are not included in this draft permit.

Suggested Change: Rewrite sentence to read. The waste volumes generated from closure decontamination activities for each unit are given in the subsections of this closure plan for individual units.

Explanation: The sentence, as it currently reads, makes reference to a number of units that are not included in the draft permit.

RESPONSE: The permit has been revised as in the suggested change to delete references to units not included in the permit.

VIII.D. UNIT CLOSURE ACTIVITIES

33. VIII.D.1.a. Main Hazardous Waste Storage Unit 1, page 137.

Comment: These paragraphs are excessively detailed regarding operations at the unit, and are also confusing and contradictory.

Suggested Change: Replace these four paragraphs with the following.

Drums in the Main Hazardous Waste Drum Storage Area (1) are stored in cargo containers or outside in drum racks. Wastes stored at this area typically contain hazardous wastes such as solvents, coolants, organics, acids, and waste machining, combustible solids, cutting and lubricating oils, and solvent containing wipes. No mixed waste is stored at the Main Hazardous Waste Storage Area. Removal of the waste inventory will follow normal operating procedures for the unit. A more detailed description of the operations at this unit and the wastes managed is given in Part III of this permit.

Based upon the composition of the wastes, Waste Operations will make arrangements to transport the waste for treatment, storage, disposal or recycling. Wastes will be either pumped into a tanker truck or placed on a truck for transport. Drums containing residues of hazardous or mixed waste will either meet the RCRA requirements for disposal as an empty container, or will be transported off-site to an approved treatment or disposal facility as discussed in this section. If the drums meet the definition of an empty container they may be disposed in the Rocky Flats sanitary landfill. Alternatively, drums containing residues of hazardous or mixed waste will be washed as described below.

Explanation: This revision will correct some confusing and contradictory aspects of the original section.

RESPONSE: The permit has been revised as in the suggested change to clarify operations at Unit 1.

34. VIII.D.1.c Main Hazardous Waste Storage Unit 1, page 137.

Comment: Empty drums do not require steam cleaning unless they do not meet certain requirements. The steam cleaning step is not required.

Suggested Change: Replace the paragraph that starts at the bottom of page I-41 with the

RESPONSE TO DOE COMMENTS-PART VIII CLOSURE PLAN

following: Empty drums will be inspected to ensure that they meet the requirements of 6 CCR 1007-3, 261.7. The requirements of this section state that all wastes have been removed using common practices, no more than one inch of residue remains in the container and no more than three percent by weight of the total capacity of the container remains in the container or inner liner. Any drums that do not meet this requirement will be steam cleaned three times prior to disposal. Rocky Flats manages no acute hazardous wastes and therefore there are no drums that require triple rinsing prior to being considered a non-hazardous waste. All spent steam condensate (approximately 21 gallons for each drum triple cleaned) will be collected and treated on-site in the process waste treatment system. If the spent steam condensate is highly concentrated in organics, then the waste may go offsite for treatment or disposal. After the triple rinsing procedure the drums can be reused or disposed in a sanitary landfill as non-hazardous waste. If any drums do not meet the requirements of Part 261.7, described above, then the drums will be disposed at an approved site as a hazardous waste.

Explanation: This unit manages only hazardous wastes; this management system for drums that had contained strictly hazardous waste is in compliance with all requirements of the regulations.

RESPONSE: The permit has been revised as in the suggested change to accurately reflect procedures for management of empty and not empty drums.

35. VIII.D.1.d. Main Hazardous Waste Storage Unit 1, page 137.

Comment: The requirement for washing down the unit with decontamination fluid specific to each waste present in each container is excessively restrictive.

Suggested Change: Replace this requirement with a requirement for washing the unit with a decontamination fluid specific to the dominant waste form that had been managed at the unit.

Explanation: Decontamination of the unit with a fluid specific to the dominant waste form managed at the unit will be adequate to protect human health and the environment.

RESPONSE: The permit has been revised as in the suggested change to allow use of a cleaning solution specific to the predominant waste type managed at the unit. If this does not prove entirely effective, other solutions will be used.

36. VIII.D.1.f and h. Main Hazardous Waste Storage Unit 1, page 137.

Comment: The gallons of cleaning effluent that will be generated during closure will vary from that stated in the text.

Suggested Change: Replace the first sentence of the third full paragraph of page 444 following as (f) page 138:

The cleaning effluent generation rate will be between 110 and 6910 gallons for each 20 foot long cargo container, and between 200 and 12670 gallons for each 40 foot container, assuming a single cycle of washing and rinsing with steam cleaning equipment. The most probable generation rates are expected to be 614 and 1126 gallons for the 20 and 40 foot cargo containers, respectively. The generation rate of

RESPONSE TO DOE COMMENTS-PART VIII CLOSURE PLAN

cleaning effluent will vary depending upon the geometry of the surface to be decontaminated as well as the type of contamination potentially present on the surface. For instance, an outdoor concrete or asphalt surface caked with soil will have a greater cleaning effluent generation rate than a clean, epoxy coated concrete surface in a building.

Similarly replace the third to last sentence of the third full paragraph of page 444 with the following as (h) page 139:

Pad washing activities will generate cleaning effluent at the rate of between 24 and 360 gallons while decontaminating 150 square feet with a single wash and rinse cycle using steam cleaning equipment. The most probable generation rate is expected to be 50 gallons per 150 square feet with a single wash and rinse cycle.

Explanation: The type of cleaning unit to be used in these closure activities has been identified, and these generation rates reflect its design and specifications.

RESPONSE: The permit has been revised as in the suggested change to modify the cleaning solution generation rates.

37. VIII.D.1.i. Main Hazardous Waste Storage Unit 1, page 139.

Comment: The draft permit makes reference to sampling asphalt for the determination that the asphalt can be decontaminated.

Suggested Change: Delete three sentences in this paragraph that make reference to sampling asphalt for decontamination purposes. The three sentences to be deleted begin, "To verify..." and end, "...described in Part IX-Decontamination." Explanation: Analysis of asphalt will identify contaminants since a number of semi-volatile contaminants are found in asphalt. This has been discussed with the CDH as an issue for the interim status closure plans for Pad 750 and Pad 904.

RESPONSE: The permit has been revised to allow screening of the asphalt pad for volatile organic contaminants and radioactive parameters. For asphalt pads to be left in place following unit closure, soil samples beneath the asphalt are required. See response to Comments #3 and #4.

38. VIII.D.1.c. Main Hazardous Waste Storage Unit 1, page 137.

Comment: The sentence references the section in which the sentence is found.

Suggested Change: End the sentence after the word "site."

Explanation: The sentence is confusing as it currently reads.

RESPONSE: The permit has been revised as in the suggested change to improve the logic of the sentence.

39. VIII.D.1.k. Main Hazardous Waste Storage Unit 1, page 139

Comment: This paragraph makes reference to soil sampling in areas beyond the limits of the unit.

Suggested Change: Replace the first sentence with the following.

Closure of the Main Hazardous Waste Storage Area (Unit 1) may involve collection of

RESPONSE TO DOE COMMENTS-PART VIII CLOSURE PLAN

soil samples, from an area limited to that which is bounded by vertical planes extending from the horizontal boundaries of the unit. The need for soil sampling will be predicated by criteria listed in Part X-Soil Sampling.

Explanation: This change may eliminate the sampling of soil which is contaminated by a source which is not related to Unit 1.

RESPONSE: See response to comments #2 and #3.

40. VIII.D.2.a. Unit 10, Building 561, Drum Storage Area, page 140.

Comment: The beginning of this section provides a relatively detailed description of operations at Unit 10. Also, Table I-3 is referenced but is not included in the draft permit.

Suggested Change: Replace the first two paragraphs of the section with the following.

The Building 561 Drum Storage Area (Unit 10) is adjacent to Building 561. Wastes are stored in 55 gallon drums inside cargo containers. Removal of the waste inventory will follow normal operating procedures for the unit. A more detailed description of operations at this unit, and a more specific description of the wastes stored at this unit are given in Part III of this permit.

Also change section numbering to VIII.D.2.a.

Explanation: These changes give the needed information for the unit while referencing the reader to the much more detailed discussions available in other Parts of the Permit.

RESPONSE: The permit has been revised as in the suggested change to condense the description of Unit 10.

41. VIII.D.2.d. Unit 10, Building 561, Drum Storage Area, page 140.

Comment: The quantity of solutions to be generated by closure are different from those stated in the draft permit.

Suggested Change: Replace the second full paragraph of the page with the following.

Approximately 614 gallons of cleaning effluent will be produced for each 20 foot long cargo container, and 1126 gallons for each 40 foot container, assuming a single cycle of washing and rinsing with steam cleaning equipment. The drums or trucks of cleaning effluent will be transported to 374 or 774 for treatment. The drums or trucks will be emptied, and the cleaning effluent will be treated through the process waste treatment system in either Building 374 or 774. Since the unit held low-level mixed waste, the emptied cleaning effluent drums will either be steam cleaned to ensure they are decontaminated, or they will be transported to Building 776 for size reduction and disposal as a low-level mixed waste.

Explanation: These changes accurately reflect the closure activities that will take place at Rocky Flats, and these changes comply with all regulations.

RESPONSE: The permit has been revised as in the suggested change to accurately describe the management of wastes generated during unit cleaning.

42. VIII.D.3.a. Unit 12, Building 776, Drum Storage Area, page 141.

Comment: The description given for operations at Unit 12 is too detailed.

Suggested Change: Replace the first paragraph of the section with the following.

RESPONSE TO DOE COMMENTS-PART VIII CLOSURE PLAN

The Building 776 Drum Storage Area (Unit 12) is located on the second floor of Building 776. The area manages low-level radioactive mixed wastes stored in drums. Removal of the waste inventory will follow normal operating procedures for the unit. A more detailed description of the operations at the unit and the wastes managed can be found in Part III of this permit.

Explanation: This description of the unit is sufficiently detailed for purposes of the closure section. The revised passage also makes reference to the more detailed discussion found elsewhere in the permit.

RESPONSE: The permit has been revised as in the suggested change to condense the unit description and refer to Part III of the permit.

43. VIII.D.3.b. Unit 12. Building 776, Drum Storage Area, page 141.

Comment: The draft permit does not accurately reflect the equipment that will be used at Rocky Flats for closure.

Suggested Change: Replace the second full paragraph of the section with the following. The area will be vacuumed to remove dust and solids. Solution E from Table 2 of Part IX-Decontamination will be used for steam cleaning of the area. The cleaning solution will be collected by a vacuum unit as decontamination proceeds. Used cleaning solution will be generated at a rate of 50 gallons while completing a wash and rinse cycle on 150 square feet. The used solutions will be transferred to Building 374 or 774 for treatment.

Also, this section needs to be changed to VIII.D.3.b.

Explanation: The above changes accurately reflect closure activities at RFP.

RESPONSE: The permit has been revised as in the suggested change to accurately reflect decontamination procedures at the unit.

44. VIII.D.4.a. Unit 13. Building 884 Mixed Waste Storage Area, page 142.

Comment: The description of Unit 13 is too detailed.

Suggested Change: Replace the first two paragraphs of the section with the following. Building 884 (Unit 13) is a mixed waste storage facility. Removal of the waste inventory will follow normal operating procedures for the unit. A more detailed discussion of the operating procedures and wastes managed in the area can be found in Part III of this permit.

Explanation: This description of the unit is sufficiently detailed for the closure section and the passage makes reference to where a more detailed discussion of the unit can be found.

RESPONSE: The permit has been revised as in the suggested change to condense the unit description and refer to Part III of the permit.

45. VIII.D.4.c. Unit 13. Building 884 Mixed Waste Storage Area, page 142.

Comment: The text does not accurately reflect closure activities that will take place.

Suggested Change: Replace the second and third full paragraphs of the section with the following. Cleaning effluent will be generated at the rate of 50 gallons while completing a single wash and rinse cycle on 150 square feet of the building. The drums or trucks of

RESPONSE TO DOE COMMENTS-PART VIII CLOSURE PLAN

cleaning effluent will be transported to Building 374 or 774 for treatment. Auxiliary equipment, such as the drum hugger unit or truck used for loading the drums, will be cleaned using steam cleaning methods in accordance with the methods outlined in Part IX-Decontamination. Also, this section needs to be changed to VIII.D.4.c.

Explanation: These changes more accurately reflect the closure procedures that will be implemented and the quantities of cleaning effluent that will be generated.

RESPONSE: The permit has been revised as in the suggested change to more accurately reflect unit decontamination procedures.

46. VIII.D.5.b Unit 23, Gas Cylinder Storage Building 952, page 143.

Comment: There is a state of uncertainty regarding the continued operation of a sanitary landfill exclusively for the use of the Rocky Flats Plant.

Suggested Change: Modify the second to last sentence of the second paragraph of the section to read as follows. Disposal of these containers will therefore take place in the Rocky Flats sanitary landfill or an offsite sanitary landfill.

Explanation: This change will allow the Rocky Flats Plant greater flexibility in the disposal of wastes and fully complies with all regulations.

RESPONSE: The permit has been revised as in the suggested change to reference use of an approved off-site landfill.

47. VIII.D.5.d Unit 23, Gas Cylinder Storage Building 952, page 143.

Comment: The text does not accurately reflect the quantities of cleaning solution that will be generated.

Suggested Change: Replace the second to last sentence of the third full paragraph of the section with: Approximately 50 gallons of cleaning solution will be generated while completing a single wash and rinse cycle on 150 square feet. Also change the section number to VIII.D.5.

Explanation: The changes will more accurately reflect the cleaning solution generation rate.

RESPONSE: The permit has been revised as in the suggested change to more accurately reflect decontamination procedures.

48. VIII.D.5.f Unit 23, Gas Cylinder Storage Building 952, page 143.

Comment: The fourth full paragraph of this section makes reference to itself.

Suggested Change: End the section after the words, "...off-site facility."

Explanation: The self reference is confusing, and does not add to the technical merit of the section.

RESPONSE: The permit has been revised as in the suggested change to improve the logic of the sentence.

49. VIII.D.5.f Unit 23, Gas Cylinder Storage Building 952, page 143.

Comment: The sixth full paragraph of this section makes reference to soil sampling at this unit.

RESPONSE TO DOE COMMENTS-PART VIII CLOSURE PLAN

Suggested Change: Delete the paragraph requiring soil sampling.

Explanation: The requirement for soil sampling at a unit that contains only gases is not technically required. Since only gases have been held at this unit no soil contamination from this unit will be present.

RESPONSE: The permit has been modified to clarify that the soil screening step for volatile organic compounds will be performed. This is not a burdensome requirement. The physical state of a material is temperature and pressure dependent, and consequently some materials in cylinders may have condensed if released at cold temperatures.

50. VIII.D.6.a Unit 24, Building 964, Mixed Waste Storage Area, page 144.

Comment: The first paragraph discussion of Unit 24 is not needed for the closure section.

Suggested Change: Replace the first paragraph of the section with the following.

Building 964 (Unit 24) is a mixed waste storage facility. Removal of the waste inventory from the unit will comply with normal operating procedures for the unit. A more detailed discussion of the operations of the unit and the wastes managed is found in Part III of this permit.

Explanation: These changes supply the needed information for the closure section, and reference the parts of the permit in which more detailed discussions can be found.

RESPONSE: The permit has been revised as in the suggested change to condense the unit description and refer to Part III of the permit.

51. VIII.D.6.b Unit 24, Building 964, Mixed Waste Storage Area, page 144.

Comment: The text does not accurately reflect the generation rate of cleaning solution.

Suggested Change: Replace the second to last sentence of the second full paragraph of the section with: Cleaning solution will be generated at a rate of 50 gallons while completing a single wash and rinse cycle on 150 square feet of surface.

Also change the section number to VIII.D.6.b.

Explanation: This change will more accurately reflect the generation rate of cleaning solution.

RESPONSE: The permit has been revised as in the suggested change to more accurately reflect the decontamination procedure for the unit.

52. VIII.D.6.d Unit 24, Building 964, Mixed Waste Storage Area, page 144.

Comment: The third full paragraph of this section makes reference to itself.

Suggested Change: End the section after the words, "...at an appropriate site."

Explanation: The self reference is confusing, and does not add to the technical merit of the section.

RESPONSE: The permit has been revised as in the suggested change to improve the logic of the sentence.

53. VIII.D.7.a Unit 15-A, 904 Pad Mixed Waste Storage Area, page 145.

Comment: The title given to Unit 15 is no longer correct, and the introduction of the unit

RESPONSE TO DOE COMMENTS-PART VIII CLOSURE PLAN

does not contain all information needed for the closure section.

Suggested Change: Replace the title of the section with the following.

Pad 904: Mixed Waste Storage Area (Unit 15-A)

Replace the first paragraph of the section with the following.

The Pad 904 Storage Area (Unit 15-A) is used for storage of mixed wastes. Removal of the waste inventory will follow normal operating procedures for the area. A more complete description of the wastes managed at this area and the management methods can be found in Part III of this permit.

Explanation: These changes will reference the unit according to its current name. These changes will also reference that part of the permit where a more detailed discussion of the unit can be found.

RESPONSE: The permit has been revised as in the suggested change to condense the description of the unit and refer to Part III of the permit.

54. VIII.D.7.d Unit 15-A, 904 Pad Mixed Waste Storage Area, page 145.

Comment: The text does not accurately reflect the generation rate of cleaning solution.

Suggested Change: Replace the first sentence of the second full paragraph on the page with: Approximately 614 gallons of cleaning solution will be generated by a single wash and rinse cycle on each 20 foot cargo container, and 1126 gallons for each 40 foot cargo container. Also change section number to VIII.D.7.a.

Explanation: This change will more accurately reflect the generation rate of cleaning solutions.

RESPONSE: The permit has been revised as in the suggested change to more accurately reflect unit decontamination procedures.

55. VIII.D.7.e Unit 15-A, 904 Pad Mixed Waste Storage Area, page 145.

Comment: The second full paragraph is vague with respect to the disposal of the cleaning and rinse solutions.

Suggested Change: Replace the fourth sentence of the paragraph with the following:

The cleaning solutions and rinsate solutions will be removed by a portable vacuum unit, and placed in 55-gallon drums or a tanker truck. The waste will then be transferred to Building 374 or 774 for treatment in the process waste treatment system.

Explanation: The suggested change makes this section less vague with respect to treatment/disposal of the waste liquids.

RESPONSE: The permit has been revised as in the suggested change to clarify disposition of wastes generated during unit decontamination. The comment refers to the fourth full sentence; only three could be distinguished.

56. VIII.D.7.g. Unit 15-A, 904 Pad Mixed Waste Storage Area, page 145.

Comment: The closure of unit 15 should only discuss decontamination of cargo container storage of waste.

Suggested Change: Delete the entire fourth and fifth full paragraphs on pages 454 and 455.

RESPONSE TO DOE COMMENTS-PART VIII CLOSURE PLAN

Explanation: The asphalt pad used for storage of pond crete and salt crete at Unit 15 will be closed under interim status. An interim status closure plan was submitted to the CDH and EPA in September 1989.

RESPONSE: This comment appears to contradict the Permittee's stated intention to store crates of solidified mixed waste on the portion of the pad north of the berm. The permit has been revised to clarify that pad decontamination at Unit 15-A will also be performed.

57. VIII.D.8.a. Unit 17, Building 777, Mixed Waste Storage Area, page 147.

Comment: The description of the unit should be modified to make reference to Part III of this permit.

Suggested Change: Replace the first sentence of this section with the following.

Unit 17 is a mixed waste storage facility. Removal of the waste inventory will follow normal operating procedures for the unit. A more complete discussion of the operations at the unit as well as the wastes managed can be found in Part III of this permit.

Explanation: This modification of the section will indicate to the reviewer where a more detailed description of operations and wastes managed at the unit can be found.

RESPONSE: The permit has been revised as in the suggested change to condense the description of the unit and refer to Part III of the permit.

58. VIII.D.8.c. Unit 17, Building 777, Mixed Waste Storage Area, page 147.

Comment: The text does not accurately reflect the generation rate of cleaning solutions.

Suggested Change: Replace the last sentence of the second full paragraph of the section with: Approximately 50 gallons of cleaning solution will be generated while completing a single wash and rinse cycle on 150 square feet of the unit. Also change the section number to VIII.D.8.c.

Explanation: This change will more accurately reflect the actual generation rates of cleaning solution.

RESPONSE: The permit has been revised as in the suggested change to more accurately reflect the generation rate of decontamination solutions.

59. VIII.D.8.c. Unit 17, Building 777, Mixed Waste Storage Area, page 147.

Comment: The third full paragraph references itself.

Suggested Change: End the sentence after the words, "...out-of-state facility."

Explanation: The section is currently confusing.

RESPONSE: The permit has been revised as in the suggested change to improve the clarity of the sentence.

60. VIII.D.8. Unit 17, Building 777, Mixed Waste Storage Area, Deletion.

Comment: The last paragraph of this section makes reference to soil sampling.

Suggested Change: Delete the last paragraph of this section.

Explanation: The soils under a building like 777 can only be sampled after the use of the Building has ceased.

RESPONSE TO DOE COMMENTS-PART VIII CLOSURE PLAN

RESPONSE: The permit has been revised to delete soil sampling under the building as this change is consistent with the IAG, and corrective action requirements of this permit. However, see response to comments #2 and #3.

61. VIII.D.9. Unit 27, Building 776, Mixed Waste Storage Area, Rm 201, pg148.

Comment: The section does not indicate where a complete discussion of operations at the unit can be found.

Suggested Change: Replace the first two sentences of the section with the following.

Unit 27 is a mixed waste storage facility. Removal of the final waste inventory from this unit will follow the same procedures as normal operation of the unit. A more complete description of operations at the unit and the wastes managed at the unit can be found in Part III of this permit.

Explanation: This modification to the section will indicate to the reader where a more detailed discussion of operations at the unit can be found.

RESPONSE: The permit has been revised as in the suggested change to condense the unit description and refer to Part III of the permit.

62. VIII.D.9.c. Unit 27, Building 776, Mixed Waste Storage Area, Rm 201,page 148.

Comment: The text does not accurately reflect the generation rate of cleaning solution.

Suggested Change: Replace the first sentence on the page with:

Used cleaning solution will be generated at a rate of 50 gallons while decontaminating 150 square feet with a single wash and rinse cycle. Also change the section number to VIII.D.9.c.

Explanation: This change will more accurately reflect the generation rate of cleaning solution.

RESPONSE: The permit has been revised as in the suggested change to more accurately reflect generation rate of decontamination solutions.

TABLES AND FIGURES

63. Table 1, Permitted Units Receiving Part 264 Closure, page 151.

Comment: The table references Unit 10 as if it were in Building 561.

Suggested Change: Replace "561" in the table with "Adjacent to 561."

Explanation: This will avoid confusion concerning the exact location and status of Unit 10.

RESPONSE: The permit has been revised as in the suggested change to clarify the location of Unit 10.

64. Table 1. Permitted Units Receiving Part 264 Closure, page 151.

Comment: This table makes reference to a number of units not covered by this draft permit, and is somewhat restrictive by specifying individual cargo containers.

Suggested Change: Replace with the Table I-1 attached.

Explanation: Reference to units not covered by this draft permit is contradictory. The information and description of each unit, such as the number of cargo containers, is

RESPONSE TO DOE COMMENTS-PART VIII CLOSURE PLAN

contained in Part III of this permit.

RESPONSE: The permit has been revised as in the suggested change to replace Table 1 (Permitted Units receiving closure plans), page 155.

65. Figure 1. Master Closure Schedule, page 149

Comment: This figure has needed information.

Suggested Change: Rename this Figure I-3.

Explanation: This figure replaces the Figure I-3 deleted above.

RESPONSE: Figure 1 is now "Master Closure Closure", and Figure 2 is "Container Areas Closure Schedule".

66. Table 2. Personnel Required for Closure, page 152.

Comment: Table I-6 is missing.

Suggested Change: Insert the attached table.

Explanation: The table describing the personnel involved in closure was missing from the draft permit. The appropriate number for this table is I-2.

RESPONSE: The permit has been revised as in the suggested change to insert the revised Table 2.

DELETIONS

67. Deletion.

Comment: This sentence makes specific reference to a number of units not covered by this draft permit.

Suggested Change: Delete the sentence.

Explanation: Reference to units not covered by this draft permit is contradictory.

RESPONSE: The permit has been revised by deleting references to units not included in the draft permit.

68. Deletion, old number I-10 Section I-1e.

Comment: The second full paragraph does not add anything useful to this section.

Suggested Change: Delete the entire second full paragraph of the section.

Explanation: Deletion of the second full paragraph will minimize the amount of extraneous information in this section.

RESPONSE: The permit has been revised as in the suggested change to delete the unnecessary information.

69. Deletion, Figure I-3, old numbers.

Comment: This figure references units not covered by this draft permit.

Suggested Change: Delete this version of Figure I-3.

Explanation: This figure is confusing and contradictory.

RESPONSE: See response to comment # 65 above.

RESPONSE TO DOE COMMENTS-PART VIII CLOSURE PLAN

70. Deletion, unit not included in permit.

Comment: The draft permit does not include this unit.

Suggested Change: Delete the section.

Explanation: The section currently makes reference to closure procedures for a unit that is not included in the draft permit. This is inconsistent with the permit.

RESPONSE: The permit has been revised as in the suggested change to delete references to units not included in the permit.

71. Deletions, Units not covered by permit.

Comment: These sections refer to units not covered by the draft permit.

Suggested Change: Delete these sections from the draft permit.

Explanation: The units covered in these sections are not units included in the draft permit. Also, the Record of Amendments is not included in this draft permit.

RESPONSE: The permit has been revised as in the suggested change to delete references to units not included in the permit, and the record of amendments.

72. Deletion, Units not in this permit.

Comment: The units described in these sections are not included in the draft permit.

Suggested Change: Delete the sections.

Explanation: The sections currently make reference to units that are not included in the permit. This is inconsistent with the rest of the permit.

RESPONSE: The permit has been revised as in the suggested change to delete references to units not included in the permit.

73. Deletion, Units not in this permit.

Comment: The units described in these sections are not included in the draft permit.

Suggested Change: Delete the sections.

Explanation: The sections currently make reference to closure procedures for units that are not included in the draft permit. This is inconsistent with the rest of the draft permit.

RESPONSE: The permit has been revised as in the suggested change to delete references to units not included in the permit.

74. Deletion, Unit not in this permit.

Comment: The unit described in this section is not included in the draft permit.

Suggested Change: Delete the section.

Explanation: The section currently makes reference to closure procedures for a unit that is not included in the draft permit. This is inconsistent with the rest of the draft permit.

RESPONSE: The permit has been revised as in the suggested change to delete references to units not included in the permit.

RESPONSE TO DOE COMMENTS PART IX-DECONTAMINATION

IX.B. COMMON DECONTAMINATION PROCEDURES

1. IX.B.1.c. Usefulness of Techniques, page 154.

Comment: The words "...sacrificial protection," should be changed.

Suggested Comment: Change the words "...sacrificial protection," to "... surficial coating,".

Explanation: This change better describes the materials which may be encountered.

RESPONSE: The permit has been revised as in the suggested change to reflect the materials encountered during decontamination.

2. IX.B.1.h.i. Usefulness of Technique, page 154.

Comment: The first point is vague.

Suggested Change: Add this sentence onto the existing point. For instance, when decontaminating an outdoor asphalt pad, plastic sheets will be placed along the edges of the pad in order to minimize the area potentially contaminated by any overspray of decontamination fluids.

Explanation: This additional sentence makes the entire point clearer and easier to understand.

RESPONSE: The permit has been revised to clarify the referenced point.

3. IX.B.1.h.v. Usefulness of Technique, page 154.

Comment: This sentence is not a complete thought.

Suggested Change: Delete the text after "... wastes" and replace with "... and be consistent with the decontamination objectives."

Explanation: This change will make the permit easier to understand.

RESPONSE: The permit has been revised to clarify the referenced point.

4. IX.B.3. Hydroblasting, page 155.

Comment: Change units of measure to english units (eg. metric to english).

Suggested Change: First paragraph change "... (3,500 to 350,000 kPa)" to "... (500 to 5,000 psi)". Second paragraph change "... 1/2 to 1 cm" to "...1/4 to 1/2 inch". Fourth paragraph, second sentence change "... 4 square meters per hour" to "... 40 square feet per hour". Fourth paragraph, last sentence change "... 12 gallons per square meter" to "... 1 gallon per square foot".

Explanation: These changes will make the document easier to understand.

RESPONSE: The permit has been revised to use consistent English units as suggested by this comment.

5. IX.B.4. Foam Cleaning, page 156.

Comment: Change units of measure to english units (eg. metric to english).

Suggested Comment: Change "... 1.5 gallons per square meter" to "... 0.1 gallon per square

RESPONSE TO DOE COMMENTS PART IX-DECONTAMINATION

foot".

Explanation: This change will make the document easier to understand.

RESPONSE: The permit has been revised as in the suggested change to use consistent units.

6. IX.B.5.d. Steam Cleaning, page 158.

Comment: The description of steam cleaning units does not reflect the equipment that Rocky Flats will use for steam cleaning.

Suggested Change: Replace the first full paragraph of page 462 with the following paragraph. The steam cleaning equipment to be used at the Rocky Flats Plant will produce superheated water pressures of 250 psi with temperatures up to 300 Fahrenheit. The fluid discharge rate is in the range of 0.2 - 3.0 gpm. This equipment has an integral vacuum unit for collection of decontamination waters. This system minimizes the decontamination fluid runoff problems and makes for more efficient man-hour expenditures during closure. This vacuum and collection unit will also be fitted with High Efficiency Particulate Air (HEPA) Filters for greater protection of human health and the environment.

Explanation: The steam cleaning unit described above has been approved by the Health Safety and Environment (HS&E) department as safe for use at the Rocky Flats Plant. This unit has been used at other nuclear facilities and has proven cost-efficient and effective in the decontamination of facilities.

RESPONSE: The permit has been revised to address the projected steam cleaning method to be utilized at the facility.

7. IX.B.5.f. and g. Steam Cleaning, page 158.

Comment: The use of a photoionization detector (PID) as a screening device assess may not be the best choice of screening equipment. PID's are sensitive to high humidity environments causing erroneous readings.

Suggested Change: Replace paragraphs three four and five with the following. Steam cleaning may not be appropriate for volatile contaminants. Steam cleaning under these conditions could create a hazardous condition for the personnel involved in closure, or for other nearby personnel. Hydroblasting may be a better decontamination technique in these situations. The use of steam cleaning for units contaminated with volatile organic compounds will be carefully scrutinized. An organic vapor detector will be used to monitor the breathing zone when steam cleaning is used on units contaminated with volatile organic compounds. The detector chosen will be capable of detecting those compounds suspected of being present in concentrations of concern.

Based on the results of the organic vapor detector readings various levels of personal protective equipment (PPE) will be deployed. The following is a list of the concentrations at which these levels of PPE will be used:

- 0 - Background - Level D

RESPONSE TO DOE COMMENTS PART IX-DECONTAMINATION

- Background - 5 ppmv - Level C
- 5 - 50 ppmv - Level B
- > 50 ppmv - Exit site and inform the Project Manager of the condition.

These levels of PPE are discussed in detail in Part IX-Decontamination. In cases where an organic vapor detector detects no concentrations of volatile organics above background, steam cleaning will be used. For cases where readings above background are expected or are determined, hydroblasting will normally be used in place of steam cleaning. In any event, whenever steam cleaning equipment is used, the appropriate level of personal protection as listed above shall be used.

Explanation: These changes delete references to the exact type of organic vapor detector to be used. These changes also allow for a case by case decision of the type of detector to be used.

RESPONSE: The permit has been revised to allow use of the appropriate vapor detector for the application, as suggested.

IX.C. STANDARD CLEANING SOLUTIONS

8. IX.C.2. Verification, page 161.

Comment: The issues addressed in the second paragraph of this section are addressed in the suggested changes for Section I-1f, Verification.

Suggested Change: Delete the second paragraph of this section.

Explanation: This deletion will avoid redundancy in the document.

RESPONSE: The permit has been revised by deletion of the second paragraph of section I-1e as suggested since verification of rinsate is covered in section IX.C.2.-Verification.

9. IX.C.2.a. and b. Verification, page 161.

Comment: The entire section is inconsistent with Section I-1f of the closure plan (Closure Performance Standard).

Suggested Change: Replace Part IX-C.2.a and b (Verification) with the following.

Verification of the success of decontamination is a critical component of the decontamination procedure. The procedures for decontamination verification discussed below are applicable to all surfaces requiring decontamination.

The success of a decontamination procedure for hazardous materials will be measured by comparing the adjusted concentration of the appropriate substances in the rinsate with the closure performance standard presented in Part VIII of this permit. Testing will be conducted using EPA approved procedures and minimum detection limits. Generally accepted analytical methods will be used in the case of analyses for which no approved EPA

RESPONSE TO DOE COMMENTS PART IX-DECONTAMINATION

procedure exists.

In verification tests, a "rinsate" sample will be collected for analysis of the applicable indicator parameters listed in Table 3. Indicator parameters will be based on the specific constituents, stored at or released from the unit. These constituents are listed in Part III of this permit. The results of these analyses will be used to determine a mean concentration. This mean concentration plus three standard deviations will be considered as a background concentration. Following the decontamination efforts, "used rinsate" samples will be collected and analyzed for identical constituents to those analyzed for background determination. The results of the "used rinsate" will be compared to the closure performance standard presented in Part VIII of this permit.

The unit will be judged to have met the performance standard if the concentration of the used rinsate is less than the background concentration of the rinsate or a risk based level of 1×10^{-6} , whichever is greater.

Explanation: This change is consistent with the closure performance standard and minimizes inconsistencies.

RESPONSE: The permit has been revised both to be consistent with, and to reference, the applicable closure performance standard.

IX.D. REGULATED WASTE AT ROCKY FLATS

10. IX.D. Regulated Wastes, page 162.

Comment: References are made to "Section C" and "the Part B Permit Application".

Suggested Change: Replace the entire paragraph with the following. Table 5 lists the typical mixed wastes stored at permitted units at the facility. Specific descriptions of the types of mixed waste stored at each permitted unit are presented in detail in Part III of this permit.

Explanation: This change allows for consistent referencing throughout the permit.

RESPONSE: The permit has been revised to incorporate the suggested text, which is more accurate.

11. IX.D. Regulated Wastes, page 162.

Comment: This section is long and adds very little to this document.

Suggested Change: Replace all text of section I-2 with the following. The Rocky Flats Plant generates hazardous waste and mixed low-level radioactive and hazardous waste. Table 4 lists the typical hazardous wastes generated at the Rocky Flats Plant along with the appropriate cleaning solutions. The wastes are described in greater detail in Part IV of this permit.

Explanation: This re-write of the section provides the needed information while minimizing text.

RESPONSE TO DOE COMMENTS PART IX-DECONTAMINATION

RESPONSE: The permit has been revised similar to the suggestion to prevent unnecessary information for the closure decontamination section.

IX.E. DECONTAMINATION HAZARDOUS WASTE FACILITIES

12. IX.E.2.g. Decontamination Large Containers, page 166.

Comment: The paragraph is confusing and does not address a decontamination method.

Suggested Change: Remove the paragraph from this section and insert into Part IX (E)(2)(g) page 170.

Explanation: This change makes the points consistent with reference to decontamination only.

RESPONSE: The paragraph has been moved to Part IX (E)(2)-Decontamination.

13. IX.E.1.a. Containers, page 166.

Comment: The section makes reference to drum movement to a facility that was never built.

Suggested Change: Replace the last three sentences of the section with the following.

Drums containing wastes will be transported to the appropriate waste treatment area where they will be emptied and the waste treated. Alternatively, the drums may be emptied into tanker trucks or other suitable units at the pad and the waste transported to the treatment facility. If the empty drums had held strictly hazardous waste then they will be emptied to comply with the requirements of the empty container rule (6 CCR 1007-3, Part 261.7, and 40 CFR 261.7). These drums can then be disposed in a sanitary landfill. There are no acute hazardous wastes managed at the Rocky Flats Plant. Any drums not meeting the above requirements for empty containers, or any drums that held mixed wastes, will be decontaminated. This decontamination will be done at the storage unit with a steam cleaner or other suitable equipment, or will be done at a drum decontamination facility to be built at the Rocky Flats Plant.

RESPONSE: The permit has been revised to reference the projected management of drummed wastes and empty drums.

14. IX.E.2.a. Large Containers, page 166.

Comment: Text in this section does not reflect use of the steam cleaning unit that the Rocky Flats Plant would use in decontamination.

Suggested Change: Replace the first full paragraph of this section with the following paragraph. Large containers (such as cargo containers, storage pads and secondary containment structures) that are to be decontaminated in place will require special attention to minimize and collect decontamination fluids. The steam cleaning units to be used will minimize the problems associated with the collection of these fluids; a vacuum unit for decontamination fluid collection is an integral part of the unit. In addition to the steam cleaning units, wet-vacuums will be present at the unit during decontamination activities in case additional collection of the decontamination fluids is necessary. Polyethylene sheets

RESPONSE TO DOE COMMENTS PART IX-DECONTAMINATION

will also be spread around the exterior surfaces of these units to capture over-spray and splashes associated with the decontamination activities. These plastic sheets will be packaged and disposed as a hazardous or a low-level radioactive mixed waste as a portion of the closure actions.

Explanation: These changes will more accurately reflect the closure operations at the Rocky Flats Plant.

RESPONSE: The permit has been revised to incorporate the suggested text on the cleaning unit, which more accurately reflects projected decontamination procedures.

15. IX.E.2.c Large Containers., page 166.

Comment: The item describes a decontamination procedure using three cycles of wash and rinse.

Suggested Change: Start the last sentence of the section with the word "Cleaning," and add the following in after the word "rinsing": activities will continue until testing proves the rinsate to be clean. It is currently believed that a single cleaning and rinsing cycle will be adequate to decontaminate facilities at each unit.

Explanation: This change will make the section more accurately reflect the decontamination activities that will be implemented for closure.

RESPONSE: The permit has been revised to incorporate the suggested text as it is a more accurate description of decontamination activities.

TABLES

16. Table 1. Foam Process Chemicals, page 157.

Comment: The use of only the chemicals listed in Table 1 is not intended.

Suggested Change: Add the following sentence onto the first paragraph of the section.

Table 1 is not a comprehensive list of all chemicals suitable for use. Other chemicals that are more specific to a particular problem, or that have been recently developed, may be used at Rocky Flats.

Explanation: This change will allow the Rocky Flats Plant to use the most suitable chemical for decontamination activities.

RESPONSE: The permit has been revised to allow use of other suitable decontamination chemicals/solutions.

17. Table 2. Standard Cleaning Solutions, page 160.

Comment: Solution E, listed in the table contains a toxic compound.

Suggested Change: Delete hydrazine (N₂H₄) from solution E.

Explanation: Inclusion of a toxic compound in a decontamination fluid is inappropriate. This compound would cause contamination at the unit being cleaned. Further, the use of this compound is not protective of human health and the environment.

RESPONSE: The permit has been revised to delete hydrazine from the decon solution list.

RESPONSE TO DOE COMMENTS PART IX-DECONTAMINATION

GENERAL COMMENTS AND DELETIONS

18. Deletion.

Comment: This paragraph makes reference to both low level and transuranic mixed waste.

Suggested Change: Delete the second sentence of the paragraph.

Explanation: The modified paragraph will more accurately reflect those waste types that are covered by this permit.

RESPONSE: The permit has been revised by deletion of the referenced paragraph.

19. General Comment. Changed Permit Numbering.

Comment: Reference is made to Section C which has been renamed in the permit as Part IV, Waste Analysis Plan.

Suggested Change: The paragraph should be changed to read as follows. The purpose of this appendix is to provide a list of possible decontamination methods which are applicable to the closure of the permitted units listed in this permit. This appendix also specifies which decontamination methods are appropriate for the hazardous and mixed waste types listed in Part IV of this permit.

Explanation: This change allows this paragraph to be consistent with respect to referenced sections.

RESPONSE: The permit has been revised to reflect the correct permit reference.

20. Deletion, reference to tanks.

Comment: This section is specific to tank decontamination.

Suggested Change: Delete this section from the draft permit.

Explanation: This permit only covers storage of hazardous and mixed waste in containers. No tanks are included in this draft permit.

RESPONSE: The permit has been revised by deletion of the references to units not included in the permit.

21. Deletion, Renumber parts if sections are deleted.

Comment: The numbering of this section is not sequential if section I-3b is deleted.

Suggested Change: Renumber this section as I-3b.

Explanation: Numbering of the sections will now be sequential.

RESPONSE: The permit has been revised by renumbering the section.

RESPONSE TO DOE COMMENTS PART X SOIL SAMPLING

X.A. INTRODUCTION AND GENERAL CONSIDERATIONS

1. X.A.1. Introduction.

Comment: The second sentence refers to "... determining the level and areal extent of contamination at any area found to be contaminated. The use of the phrase "any area" is inconsistent with the purpose of this permit which is to deal with only permitted units.

Suggested Change: Replace the second sentence with the following.

Criteria are also presented for determining the magnitude and areal extent of soil contamination within the permitted unit. This volume is bounded by vertical planes extending from the horizontal boundaries of the permitted unit.

Explanation: This change will prevent wasting time and effort delineating the extent of soil contamination from a source unrelated to the permitted unit. These other contaminated areas will be addressed as a part of the clean-up schedules discussed in the Inter-Agency Agreement.

RESPONSE: The permit has been revised to help define the area to be addressed while investigating soil contamination under closure of the permitted units. Areas of contamination beyond the physical boundary of the closure unit will be addressed under the closure plan, corrective action requirements of the permit, or the IAG. See Response to comments #2 and #3 in Part VIII.

2. X.A.3. Soil Decontamination Procedure.

Comment: There is no reference in the first sentence of the first paragraph to the method of determination of what constitutes a contaminated soil.

Suggested Change: Insert following the first word of the sentence the following.

...those soils determined, by methods presented in Part X-Soil Sampling."

Explanation: This change will make the permit clearer.

RESPONSE: The permit has been revised to clarify the methods to be used in the determination of soil contamination, including comparison to the closure performance standard.

3. X.A.3. Soil Decontamination, deletion

Comment: The third sentence of the first paragraph makes reference to SWMU's which are not part of this permit.

Suggested Change: Delete the third sentence of the first paragraph.

Explanation: The paragraph as suggested deals only with issues pertaining to this permit.

RESPONSE: The permit has not been revised since any permitted unit may potentially require investigation under the corrective action portion of the permit, or the IAG. This and other revisions to the plan clarify that not all decontamination at the site will be done as RCRA closures.

RESPONSE TO DOE COMMENTS PART X SOIL SAMPLING

4. X.A.3.b. Soil Decontamination.

Comment: The first sentence of the first full paragraph is confusing.

Suggested Change: Replace the passage "... treatment, containment, and monitoring closure and post-closure care" with the following:

... on-site treatment, on-site containment and post-closure care monitoring.

Explanation: This change makes the passage more precise.

RESPONSE: The permit has been revised to incorporate the clarifying language.

X.B. DETERMINATION OF AREAS OF CONTAMINATED SOIL

5. X.B. Introduction to Determination of Areas of Contaminated Soil.

Comment: It would be helpful to provide a short introduction to this section.

Suggested Change: Insert the following introduction directly following X.B.

This section addresses the method of identification of contaminated soils requiring decontamination during closure of the permitted unit. Generally, this determination will be based on contaminant concentrations in soil as they relate to the closure performance standard. The following sections detail the criteria that will govern collection of soil samples. In addition, screening methods used to select sampling locations for contamination assessment are also detailed.

Explanation: This change allows for a better understanding of the permit.

RESPONSE: The permit has been revised as in the suggested change to add the clarifying language.

6. X.B.1. a. Sampling of Background Soil.

Comment: Much of the text reflects earlier plans for background soils characterization. The "Background Hydrogeochemical Characterization and Monitoring Plan" superseded these plans.

Suggested Change: Delete all section text following the paragraph ending: "...is being conducted in accordance with the above plan."

Explanation: The inclusion of plans not a part of the "Background Characterization Plan" is confusing and contradictory.

RESPONSE: The permit has been revised by deleting the reference to out-dated soils characterization plans.

7. X.B.1.b and c. Sampling of Background Soil.

Comment: This part should include a short synopsis of the "Background Hydrogeochemical Characterization and Monitoring Plan."

Suggested Change: Include the following text:

The background characterization plan is intended to develop representative background data, with sufficient samples collected to characterize spatial background variations across the Rocky Flats Area. Background sampling and analytical procedures will be the same as those used for RCRA and CERCLA samples. This data set will be used to identify

RESPONSE TO DOE COMMENTS PART X SOIL SAMPLING

downgradient data that are significantly different from the background population. The approach used in this plan follows the recommendations of Doctor, Gilbert and Kinnison (1986); Loftis, Harris, and Montgomery (1987); Gilbert (1987); and EPA (1988) for establishing baseline monitoring and detection systems at hazardous waste facilities.

The statistical distribution of this data will be compared with sampling data from contamination assessment monitoring at permitted units undergoing closure. The analytical parameters for background soil analyses are included in Table 1. The background plan assumes that background chemistry is a random statistical distribution of concentration levels, rather than a single concentration (Doctor, Gilbert, and Kinnison, 1986).

Explanation: This information makes the plan more complete.

RESPONSE: The permit has been revised by addition of the suggested material.

X.C. SAMPLING OF POTENTIALLY CONTAMINATED SOIL

8. X.C. Sampling of Potentially Contaminated Soil.

Comment: The name of section I-2b is identical to section I-2a.

Suggested Change: Re-name this Section I-2b "Sampling of Potentially Contaminated Soil," and move this heading to the top of the text on page 489. The text remaining in section I-2b will serve as an introduction and explanation of some of the soil sampling activities to be described later in the text.

Explanation: The text of Part X.C. discusses the sampling of potentially contaminated soil. The introductory section will serve to decrease confusion and increase one's understanding of the sections that follow that discuss soil sampling.

RESPONSE: The permit has been revised as suggested to clarify this section.

9. X.C.a. Screening.

Comment: Section I-2b(1), the soil screening description is ambiguous.

Suggested Change: Replace the first full paragraph of Part X.C.a. with the following.

The objective of soil sampling is to determine whether contamination exists in the soil contained within the permitted area. Soil sampling will also be used to determine the extent and concentration of contaminants in soil if contamination does exist. Soil screening is used for two different purposes related to soil sampling. First, soil screening will be used at units undergoing closure at which soil sampling is required. In these cases soil screening will be used to identify specific locations that will be sampled due to the possible presence of contaminants. Second, soil screening will be used at units undergoing closure which may require soil sampling. At these units soil screening will be used to determine whether or not to sample soils. Any location that soil screening identifies as possibly contaminated, in these areas, will be sampled.

Explanation: This change will clarify the section on soil screening.

RESPONSE: The permit has been revised to clarify the purpose and process of soil screening for contamination. However, as specified in Part VIII of the permit, soil sampling beneath

RESPONSE TO DOE COMMENTS PART X SOIL SAMPLING

all asphalt pads will be conducted.

10. X.C.1.o. Organic Vapor Survey.

Comment: The use of photoionization equipment may not be appropriate for use under all conditions.

Suggested Change: Replace the word "photoionization" with "organic vapor" at all locations in which photoionization is used.

Explanation: Photoionization equipment is sensitive to humidity and may not be appropriate for use in all cases.

RESPONSE: The permit has been revised to generalize the reference to organic vapor equipment. A requirement has been added, condition X.C.1.p. that requires soil gas survey as part of the soil screening procedure. Organic vapor surveys will only detect contamination at the soil surface, but not underlying.

11. X.C.1.r. Screening.

Comment: The section on soil screening should state at the end that any location identified by soil screening as potentially contaminated will be sampled.

Suggested Change: Add one additional paragraph onto the end of section I-2b(1). The suggested paragraph is:

Any location which soil screening identifies as potentially contaminated will be sampled.

Explanation: This additional sentence will clarify the section on soil screening.

RESPONSE: The permit has been revised to clarify that soil screening will typically precede sampling.

12. X.C.2. Sample Point Identification, deletions.

Comment: This section presents an approach to soil sampling based on a statistical analysis of background data available in 1987. A greater amount of background data is now available, and a more rigorous statistical approach is being used as a part of the Background Characterization Plan.

Suggested Change: Delete the remainder of the first paragraph of the section after the second sentence, and delete Table 3.

Explanation: The Background Plan presents a more rigorous and complete approach to determining background, and data generated for RCRA closure activities should be compared with these background levels and analyzed by the appropriate statistical methods.

RESPONSE: The permit has been revised by deletion of old Table 3 and the remaining outdated information.

13.. X.C.2.e. Sample Point Identification.

Comment: These sentences are confusing with respect to soil sampling and soil screening.

Suggested Change: Replace the second and third sentences on the page with the following.

The allocation of sampling locations will first go to locations identified by soil screening as potentially contaminated. For instance, if a specific area of the investigation site has

RESPONSE TO DOE COMMENTS PART X SOIL SAMPLING

discolored soil, higher than background levels of radiation or volatile organics as detected by soil screening activities, the area will be targeted for sampling.

Explanation: These changes will make the section easier to understand and follow.

RESPONSE: The permit has been revised to incorporate the suggested criteria for determining the location of soil sampling locations.

14. X.C.1.o. Organic Vapor Screening.

Comment: The use of photoionization detectors may not be appropriate in all instances. This requirement is also excessively restrictive.

Suggested Change: Replace the words "photoionization detector" with "organic vapor detector."

Explanation: This change will make this section more technically correct and will also make the implementation of closure more flexible.

RESPONSE: The permit has been revised to generalize the reference to organic vapor equipment.

15. X.C.2. Sample Point Identification.

Comment: Extending the sampling grid 5 feet beyond the expected area of contamination may exceed the boundary of the unit as identified earlier.

Suggested Change: Replace the second sentence of the second paragraph on the page with the following.

The grid will extend five feet beyond the expected area of contamination, not to exceed the horizontal limit of the permitted unit undergoing closure. The grid will contain ten times the number of sampling locations (nodes) required to provide a total of five target and random samples.

Explanation: These changes will make the section more consistent with previous suggested comments.

RESPONSE: The proposed language is adequate for an initial investigation, but is not consistent with the rest of the closure plan as approved by the Division. The permit has been revised to clarify the extent of the unit under investigation for closure. For units which released contaminants beyond the horizontal boundary of the unit, the Division will consider the Permittee's request to pursue decontamination under the corrective action requirements of the permit or the IAG as a modification to the approved plan.

16. X.C.2.n. Sample Point Identification.

Comment: This sentence is not consistent with previous sections.

Suggested Change: Replace the period with a comma and add "...not to exceed the horizontal limit of the permitted unit undergoing closure."

Explanation: This change will make the section more consistent with previous changes.

RESPONSE: The permit has been revised to clarify the extent of the unit. See response to Comment #15.

17. X.C.3. Analysis of Data.

RESPONSE TO DOE COMMENTS PART X SOIL SAMPLING

Comment: The section makes no mention of the use of the closure performance standards for clean-up.

Suggested Change: Add the following sentence onto the end of the first full paragraph of the section:

Areas of contaminated soil, once identified, will be compared with the closure performance standard, as defined in Section I-1f of Part VIII, for the determination of which areas will be considered for excavation and offsite disposal, treatment in-place or for post-closure care.

Explanation: This approach is protective of human health and the environment, and is consistent with the approach discussed in the Inter-Agency Agreement meetings.

RESPONSE: The permit has been revised to clarify that the closure performance standard will be used in determining the extent of contamination.

18. X.C.3.d.e.f.and g. Analysis of Data.

Comment: This section does not incorporate the statistical approach outlined in the Background Plan for the identification of contaminated areas.

Suggested Change: Delete the first three sentences of the second full paragraph of the section. Replace these sentences with:

Each soil concentration of metals or radionuclides will be compared with the range (where range is defined as a statistical tolerance interval) of concentrations in background stations. A tolerance interval defines, with a specified probability, a range of values that contain a discrete percentage of the population. Samples from potentially contaminated areas whose concentration fall outside the tolerance interval may indicate an impact has occurred. In order to obtain reliable results, both a high level of confidence (95%) and a high percentage of the population within the interval (95%) have been chosen as statistical parameters.

Explanation: This approach to identification of contaminated soils is more technically rigorous than that presented in December 1987.

RESPONSE: The permit has been revised by specifying that an approved statistical approach will be taken for determining soils contamination.

19. X.C.3. Analysis of Data, Deleted reference to radiological parameters, pg 184.

Comment: The statement that detectable quantities of radiological parameters will identify soil with elevated concentrations of radiological parameters is not technically defensible.

Suggested Change: Delete the words "...or radiological parameter..." from the paragraph.

Explanation: Detectable levels of radiation are found in all materials when analyzed carefully enough. Further, the Background Plan will identify those areas potentially contaminated with radionuclides in a much more technically rigorous and defensible manner. These areas will be identified as being contaminated by comparison with the background levels of radionuclides found in areas uncontaminated by the Rocky Flats Plant.

RESPONSE: The permit has been revised by deletion of the technically poor language. Background determinations are a more appropriate method for comparison with results of

RESPONSE TO DOE COMMENTS PART X SOIL SAMPLING

soils screening or sampling investigations.

20. X.C.3. Analysis of Data.

Comment: The last paragraph on the page requires soil sampling to be conducted until clean soils are found in all directions around contaminated soil areas.

Suggested Change: Add the following onto the end of the last paragraph of the page.

Sampling for the identification of clean versus contaminated soils will only continue until the edge of the RCRA Closure unit is reached. The edge of the RCRA Closure unit is defined as the limit projected in the horizontal plane of the area on which waste was placed or managed during the life of the unit. The boundary of the unit as identified in Part III of this permit is the edge of the RCRA closure area. If contaminated soils exist outside the edge of the RCRA closure unit, those soils will be identified on the Inactive Solid Waste Management Unit (SWMU) list. All SWMU's will be investigated as a portion of Environmental Restoration Program (ERP) activities at the Rocky Flats Plant, and under the IAG.

Explanation: Contaminated soils may exist in and adjacent to RCRA Closure units at the Rocky Flats Plant that were not caused by contamination from a RCRA unit. The area contaminated by such events that is included in a RCRA closure unit will be cleaned-up under the RCRA closure regulations. However, areas outside the edge of the permitted RCRA unit will be cleaned-up as a part of an overall comprehensive Rocky Flats Program. **RESPONSE:** The permit has been revised to make the distinction between the closure and corrective action activities. See response to Comment #15.

21. X.C.4.b. Decontamination or Post-Closure.

Comment: The second sentence of this section does not reflect the approach currently being pursued at the Rocky Flats Plant.

Suggested Change: Replace the second sentence of the section with the following:

Post-Closure care and monitoring will be considered at a RCRA closure unit when groundwater contamination caused by that RCRA closure unit is identified.

Explanation: This change makes the section reflect the current approach being pursued at the Rocky Flats Plant. This approach is the outgrowth of negotiations for the Inter-Agency Agreement. This approach is also protective of human health and the environment.

RESPONSE: The permit has been revised to clarify the conditions under which Post-Closure Care would be considered for a particular closure unit.

TABLES

22. Table 1. Background Soil Sampling Parameters.

Comment: This table of soil sampling parameters is out of date.

Suggested Change: Replace Table 1 in the draft permit with the Table 1 presented in these comments.

Explanation: This change will eliminate inconsistencies.

RESPONSE TO DOE COMMENTS PART X SOIL SAMPLING

RESPONSE: The permit has been revised by insertion of the new Table 1.

23. Table 2. Indicator Parameters.

Comment: Gross alpha, gross beta and gamma radiation detection equipment is typically used for the detection of radionuclides.

Suggested Change: Replace the indicator parameter of specific radionuclide isotopes with the indicator parameters of gross alpha, gross beta and gamma radiation.

Explanation: Gross alpha, gross beta and gamma radiation are typically used indicator parameters for the presence of radionuclide contamination.

RESPONSE: The permit has been revised to allow use of the indicator parameters rather than specific radionuclides during screening.

DELETIONS

24. Deleted units not in this permit.

Comment: The section addresses issues that will not come up in closure of these areas.

Suggested Change: Delete the entire second full paragraph on the page.

Explanation: This change will delete extraneous text.

RESPONSE: The permit has been revised by deletion of the reference to units not addressed in the permit.

REFERENCES

Doctor, P.G., Gilbert, R.O. and R.R. Kinnison, 1986. Ground Water Monitoring Plans and Statistical Procedures to Detect Leaking at Hazardous Waste Facilities, Draft Report for U.S. Environmental Protection Agency, Pacific Northwest Laboratory, Richland, Washington.

EPA, 1988. Statistical Methods for Evaluating Ground-Water Monitoring Data from Hazardous Waste Facilities, Final Rule, Federal Register, Vol. 53, No. 196, October 11, 1988.

Gilbert, R.O., 1987. Statistical Methods for Environmental Pollution Monitoring. Van Nostrand Reinhold Co., New York, NY.

Loftis, J.C., Harris, J., and R.H. Montgomery, 1987. Detecting Changes in Ground Water Quality at Regulated Facilities, Ground Water Monitoring Review, Vol. VII, No. 1.

Loftis, J.C., Montgomery, R.H., Harris, J., Nettles, D., Porter, P.S., Ward, R.C., and T.G. Sanders, 1986. Monitoring Strategies for Groundwater Quality Management, Colorado State University, Fort Collins, CO.

RESPONSE TO DOE COMMENTS PART XI-HSWA REQUIREMENTS

WASTE MINIMIZATION

1. Comment:Section A.1.a (i) of draft permit-DOE recommends changing the waste minimization policy to program, to reference the current name for this effort at the Rocky Flats Plant.

RESPONSE:The final permit reflects the current terminology of the Waste Minimization Program Plan.

2.Comment:Section (iii) of draft permit-Add evaluations of employee suggestions.

RESPONSE:The final permit has been revised to incorporate the suggested wording.

3.Comment: Section B.1.a of draft permit-replace dates generated with dates accumulated.

RESPONSE:The final permit has been revised to reflect the suggested language change which is consistent with the generator requirements of 6 CCR 1007-3, Part 262.

4.Comment: Section C.1.a of draft permit-DOE suggests revision of this condition to require implementation of a system that will track all hazardous materials that will end up as waste ... by June, 1992.

RESPONSE: The Division only partially agrees with the suggested change. Many materials end up as hazardous waste that do not enter a facility as a hazardous material, such as rags, clothing, treatment additives, to name a few. The purpose of the original condition is to require a determine how all materials end up as hazardous waste, and thereby identify opportunities to reduce generation of wastes from all sources, not only those which enter the Rocky Flats Plant as a hazardous material. The final permit has been revised to require that the system implemented track those materials which end up as a hazardous or mixed waste. The tracking system proposed by DOE is a very useful one which should not be redundant with the final permit, but rather accessory to it. The June 1992 date for compliance with this condition will be retained, unless extended by modification of the permit.

5. Comment: Section F.1.a of draft permit-DOE suggests changing periodic review to annual review and specifying that an outside contractor may be used.

RESPONSE: The permit has been revised to require that the review be conducted annually, and that a progress report be submitted which details the waste minimization achievements, reasons for failure to achieve program goals, and efforts to achieve the goals in the future. Nothing in the permit prevents use of an outside contractor, so no change has been made to the permit in this area.

6. Comment: The permit should clarify that the Colorado Hazardous Waste Act does not have regulatory authority over radioactively-only contaminated sites, and that EPA will regulate these sites in accordance with CERCLA.

RESPONSE: The Summary, Section D.1. of Part XI, specifies that CDH does not have

authority over radioactively-only contaminated sites, unless this authority is specifically delegated by federal statute. The Statement of Work also clearly defines the process for investigation and remedy selection at radioactive sites.

RESPONSE TO EPA COMMENTS

1.COMMENT: Part III, Storage in Containers. The permit conditions for all container storage units to be permitted must require that drums must be closed during storage except when necessary to add or remove wastes as stated in 40 CFR 264.173(a).

RESPONSE: 6 CCR 1007-3 Section 264.173 has been added to Part III Section E page 36.

2.COMMENT: Part III.B.4. Unit 13. The permit conditions for Unit 13 must require that incompatible wastes be separated or protected by means of a dike, berm, wall or other device as required by 40 CFR 264.177(c).

RESPONSE: See page 37 This has been adopted as applicable to all units, Part III Section K (3) Special Container provisions for incompatible wastes.

3.COMMENT: PART III.B.6 The permit conditions must specify whether only scintillation cocktail wastes can be stored in this unit. As it is presently written, it is not clear whether other wastes may be stored in this unit. The draft permit states that D001, U239, F001, F002, F003, F005, F008 waste codes may be stored in this unit, as well as solidified scintillation cocktail.

The permit conditions for this unit should address the possibility that the carbon filter inserts may load prior to the disposal or treatment of the drums of scintillation cocktail. The permit should require replacement of the carbon filters prior to loading of the carbon.

RESPONSE: See page 31, the scintillation cocktail may be stored in this unit as well as D001, U239, F001, F002, F003, F005, and D008. Condition i, addresses maintenance of the carbon filter packs.

4.COMMENT: Part III.B.7. The draft permit must address the storage of incompatible gases within this unit. The draft permit should also require that the exterior of the gas cylinders for radiation prior to transfer to the storage area. The maximum volume of gas which may be stored at the unit at any one time is 6400 cubic meters at standard temperature and pressure.

RESPONSE: Everything which leaves buildings containing radioactivity is surveyed. Also this is not a CHWA requirement. Standard temperature and pressure (STP) has been to the 6400 cubic meters.

5.COMMENT: Part III.B.8. The draft permit should clarify whether it is intended that only vacuum filter sludge may be stored at this unit.

RESPONSE: Vacuum Filter Sludge carries the waste codes listed for this unit. Only vacuum filter sludge is stored in this unit.

6.COMMENT: Part III.K.3. The draft permit must require that incompatible wastes be separated by walls, berms, dikes or other devices acceptable to the State.

RESPONSE: This requirement has been adopted as suggested, see page 37, Part III.K.3.

RESPONSE TO EPA COMMENTS

7.COMMENT: Part III, Table 1. The description of Unit 15 does not describe the number or type of cargo containers allowed at this unit. Are the dimensions presented those of the cargo container area or of the entire pad?

RESPONSE: Table 1 dimensions have been corrected. See page 38.

8.COMMENT: Part IV, Section C-2, page 45. The draft permit must define the meaning of "same results" when describing the events which allow a frequency of analysis or analytes required.

RESPONSE: See page 43, 1. Parameters of Analysis, the waste analysis plan has been revised to specify that waste stream characterization must be confirmed quantitatively rather than qualitatively.

9.COMMENT: Part IV, Section C-2.3., page 47. It is stated...that no frequencies greater than annual will be allowed until...This statement should be changed to state.. The draft permit must address the consequences of allowing wastes to flow directly to the drain (and presumably to Building 374) without being sampled.

RESPONSE: The permit has been changed to require recharacterization at least annually, see page 45, Section 3. Frequency of Generator Waste Analysis.

10.COMMENT: Part IV, Figure C-3, page 52 and Section C-2.4 page 54. The figure and narrative refer to Appendix VII. Is Appendix VIII what is required?

RESPONSE: This figure was deleted since in addressed generator waste stream requirements not included in this permit.

11.COMMENT: Part IV, Section C-3 page 55. Where is Table C-1.2?

RESPONSE: Table C-1.2 is not needed in this permit and has been deleted along with the erroneous reference.

12.COMMENT: Part IV, Table C-1.1 page 57-65. Compatibility codes must be assigned after evaluating the results of the full characterization, not through evaluation of the results of the fingerprint testing. The full waste characterization provides far more information of greater accuracy than the fingerprint testing and as such, must be used to assign the waste compatibility codes. Fingerprinting the waste in only a test to verify that the proper waste code has been assigned. There are numerous instances of the Action Alternative describing reactivity with alcohol, yet the method does not require mixing with alcohol, only a 50/50 water mixture. There are also instances of the Action Alternative describing reactivity with oil and halogenated solvents, yet there is not requirement to perform this test. The fingerprint test for waste water should include pH.

RESPONSE: Permittee supplied revised Table C1.1 Fingerprint Tests in its comments on draft permit. CDH and reviewed and approved these tables, pages 58-63. Compatibility codes are to be assigned both generator waste and fingerprinting.

RESPONSE TO EPA COMMENTS

13.COMMENT: Part IV, Section C-5, page 68 and Table C-6 page 71. As gross beta, gamma activity and neutron activity are required as fingerprint parameters, Table C-6 must show methods for these tests.

RESPONSE: Gross alpha, beta, and gamma are required in the Fingerprint test tables, see page 58. TRU mixed waste determination made through alpha activity. Beta and gamma methods are not needed but must be provided on request by CDH.

14.COMMENT: Part IV, Section C-7.4.4., page 82. Data must be archived for a specified period of time or for as long as the waste is kept on-site, whichever is longer.

RESPONSE: See top of page 50, Part IV, Section D(3)(e), Records of analysis, will be maintained at least three years after the waste is shipped off-site or maintained until the facility closes whichever is later.

15.COMMENT: Part IV, Attachment I, page 86 The compatibility code assigned to the drum must also be compared to the compatibility code posted on the outside of the cargo container.

RESPONSE: See page 29, Part II Section B,(5)(1) and page 53, Part IV (C)(3)(b)(iv).

16.COMMENT: Part IV, Table C-1, pages 94-106. The table lists wastes defined as P000 or U000 apparently not needing waste analysis. Waste number 09950 is a mixture of solid waste and listed hazardous waste and is not a P000 or U000 waste. Waste number 01800 is a sump containing a mixture of listed solvents and is not a commercial chemical product, etc..Waste numbers 01350, 04340 and 23890 are mixtures containing listed solvents and are not commercial chemical products,.. These waste streams or alternate similar waste streams must be sampled for full characterization. The draft permit must require the appropriate full characterization analyses and frequency.

RESPONSE: The Permittee has submitted a revised waste analysis plan which eliminates the need for these tables. They have been deleted accordingly. Also see compliance agreement for recharacterization of waste.

17.COMMENT: Part IV, Table C-3, pages 112-129. Table C-3 of the draft permit must incorporate waste streams that are not represented by alternate samples or similar waste streams and are not presently identified for sampling. These waste streams are presented within this document by building as follows:

<u>Building</u>	<u>Waste Numbers</u>
111	06950
122	02530
123	02950,03150
374	20500
377	09950
440	01440
443	01770

RESPONSE TO EPA COMMENTS

444	14080,14240,14710,14160,14700
447	14670
453	11130
454	11900
457	11860
460	00540,01800,00430,23770,01100,01120,01140,23890,01250
551	06260
690T	15380
702	13830
705	20060
707	13630
711	20530
774	09330
788	06060
800	05030,05260
865	04340,05210,05240
881	03240,03400,05430,04540,04650,05080, 05480,05560,05520,05540,05550
883	04850,05400
887	05380
889	05320
980	06550
995	06880

The draft permit must require that these waste streams be fully characterized and fingerprinted in accordance with the draft permit requirements.

RESPONSE: The pages 119-129 of the "Generator Waste Sampling and Analysis Plan" were not necessary for this permit and have been deleted.

18.COMMENT: Part V. Section F-1a(3), page 132. Should the warning signs be written in both Spanish and English as required in Part II, Section D?

RESPONSE: Signs are posted in English only.

19.COMMENT: Part V. Tabel F-1.5 page 138. It is not appropriate for the draft permit only to require initial corrective actions for type I problems within 24 hours. Type one problems are emergencies. The initial corrective actions (i.e. cleanup, spill, overpacking containers, evoke contingency plan, etc.) must be required to take place immediately. For type II problems, the draft permit should require that the work orders, EJO, purchase requisitions or other request must be initiated during the shift when the problem is discovered.

RESPONSE: The contingency plan Part VI was resubmitted April 4, 1991 and included in the permit. See pages 104, and 105. The Permittee will take appropriate response actions within an acceptable timeframe.

RESPONSE TO EPA COMMENTS

20.COMMENT:Part V, Section F-2b(1)(j) page 141, Section F-2b(1)(m)page 142, Section 142, Section F-2b(1)(s) page 143, Section F-2b(1)(t) page 144. If these units are not being permitted they should not be included in draft permit.

RESPONSE: Units not addressed in this permit have been deleted.

21.COMMENT: Part V, Section F-2b (1)(y) page 145. As the pad storage is not to be permitted through this draft permit, it is not appropriate to delineate requirements for the storage of pondcrete and saltcrete. Also, if the inspection requirements are only 0.25% of the boxes shall be inspected weekly, 400 weeks will be required to inspect all of the boxes. This is not consistent with the requirements for inspection of storage areas.

RESPONSE: Units not addressed in this permit have been deleted.

22.COMMENT:Part V, Section F-2b(2), page 147. As tanks are not being permitted through this permit, references to tanks should not be included in this draft permit. This includes Tables F-5 and F-6 on pages 159 and 162.

REPOSE: Units not addressed in this permit have been deleted.

23.COMMENT:Part V, Section F-2d, Table F-3 page 155. The inspection checklist must contain reference to inspection of spill kits.

RESPONSE: The unit specific inspection list contains references to spill kits for the appropriate units.

24.COMMENT:Part V, Table F-10.5 page 167. The draft permit should address the possible requirement of locating an appropriate NFPA fire extinguisher within 20 feet of each permitted storage unit or as standard equipment within the "B" and "C" spill kits. A "B" spill kit must be required for Unit 27 which is to be permitted for the storage of liquid and solid solvent contaminated mixed waste.

RESPONSE: Spill response and fire extinguisher equipment is stored in Building 776 for use at Unit 27. Fire extinguishers are not part of spill kits.

25.COMMENT:Part V, Section F-4 page 170. The draft permit should require that the building indoctrination ensuring that the employee is aware of the emergency procedures and evacuation routes is required and completed prior to unsupervised work in a new building.

RESPONSE:See page 86, all employees are required to attend training reagarding environmental procedures and policies, fire prevention and control procedures and general safety awareness.

26.COMMENT:Part V, Section F-4a, page 175. The reference to tanks not to be permitted through this draft permit should be deleted.

RESPONSE:Units not addressed in this permit have been deleted.

RESPONSE TO EPA COMMENTS

27.COMMENT:Part V, Section F-4b, Table F-13, page 179. The surface water sampling parameters and actions levels must be coordinated with the Interagency Agreement being negotiated with DOE, EPA and the State of Colorado.

RESPONSE: The Surface Water Management Plan has been included as part of the permit.

28.COMMENT:Part V, Section F-4b, page 180. The draft permit states that is contaminated liquids accumulate within bermed areas they will be handled as hazardous waste. Does this mean contaminated with hazardous waste? What if the analysis only indicates the presence of radionuclides? The draft permit states that if the liquid is not contaminated (with what?) it will be pumped to the storm drain.

RESPONSE: If liquids are contaminated with hazardous and/or mixed waste they will be drummed and treated as hazardous waste. See definition of "contaminated".

29.COMMENT:Part V, Section F-4e, page 183. Table F-14 is not provided.

RESPONSE: The permit has been revised to allow flexibility in determining the level of respiratory protection. See response to Comment #54 DOE Part V. Table F-14 has been deleted.

30.COMMENT:Part V Section F-5e, page 185. References to tanks should not be included within this permit.

RESPONSE:References to units not permitted have been deleted.

31.COMMENT:Part VI.2 page 203. Provisions should be made to update the contingency plan as changes within the plant are known.

RESPONSE:The contingency plan Part VI, was resubmitted by the Permittee April 1991 and has been included in the permit.

32.COMMENT:Part VI, Section G-4d(2) page 220. The draft permit should also require that the item being decontaminated be tested to identify if the decontamination has been effective. The rinsate volume generated may not allow detection of the constituent of concern solely due to dilution, regardless of whether the decontamination solution was effective.

RESPONSE:The Decontamination plan has been rewritten to include closure performance standards which addresses EPA's concerns regarding dilution of rinsate.

33.COMMENT:Part VI, Section G-41, page 225. The draft permit should delete references to tanks.

RESPONSE:The reference to units not permitted has been deleted.

RESPONSE TO EPA COMMENTS

34.COMMENT:Part Vi, Section G. The Appendicies referenced within this section should have title pages.

RESPONSE:Decontamination and Soil Sampling have been revised and are included in the permit as Parts IX and X respectively.

35.COMMENT:Part VI, Section G-5 page 227. The draft permit must require the Permittee to finalize the document referenced as Appendix G-4.

RESPONSE:The Fire Department Response Program, the On-Site fire plan has been reviewed and approved by CDH. CDH does not feel it is appropriate to include this as part of the permit.

36.COMMENT:Part VI, Section G-7a(4) page 238. The draft permit must require the Permittee to formalize the document referenced as Appendix G-5. How can the contingency plan be implemented if this document has not been signed by the two affected counties?

RESPONSE:CDH does not feel "The Jefferson County/Boulder Evacuation Plan" needs to be included as part of the permit.

37.COMMENT:Part VI, Section G, Tabel G1-1, page 262. The draft permit must not include units that are not permitted.

RESPONSE: Units not addressed by the permit have been deleted.

38.COMMENT:Part VIII, Section I-1a, page 420. References to contingent post-closure plans for tank systems not to be permitted should not be included within this draft permit.

RESPONSE:Agreed, closure plans for units not permitted should be deleted.

39.COMMENT:Part VIII, Section I-1c, page 424. References to tanks not to be permitted through this permit should not be included within this draft permit.

RESPONSE:Units not addressed by this permit have not been included in the final permit.

40.COMMENT:Part VIII, Table I-1, pages 425-429. Units not to be permitted through this action should not be listed as receiving Part 264 closure plans.

RESPONSE:Units not addressed by this permit have not been included in the final permit.

41.COMMENT:Part VIII, Section I-1e, page 430,page 432. References to tanks, treatment units and landfills not to be permitted through this permit should not be included within this draft permit.

RESPONSE:References to tanks, treatment units and landfills not permitted have been deleted.

RESPONSE TO EPA COMMENTS

42.COMMENT:Part VIII, Section I-2 page 433. References to the second major closure category, storage or treatment in tanks is not appropriate in light of the fact that no tanks are being permitted.

RESPONSE:References to units not addressed in this permit have been deleted.

43.COMMENT:Part VIII, Section I-2a(1). The sequential permitted closure of the plant is not pertinent to this draft permit as not all regulated units are receiving permits. The draft permit closure plan must also recognize that some of the units referenced within this plan are undergoing interim status closure.

RESPONSE: Figure 1. Master Closure Schedule in Part VIII-Closure Plan page 149 was submitted with the Permittee's comments on the draft permit and has been incorporated into the permit. Part VIII-Closure Schedules, Partial and Final Closure activities starts on page 130.

44.COMMENT:Part VIII, Section I-2a(2) page 435. The statement is made that the permitted waste management units are permanent facilities which will be used and maintained throughout the plant operational life. This statement is not consistent with the potential plant plans to consolidate all storage of wastes. The closure plan must recognize this possibility.

RESPONSE:The Closure plan may be modified if conditions change. The permit closure plan must reflect current plant policy.

45.COMMENT:Part VIII, Section I-2c(6) page 442A. Will OSCO accept waste liquids with levels of organics unsuitable for recycle?

RESPONSE: The Closure Plan submitted with the Permittee's comments on the draft permit does not include "Unsuitable" organic recycle.

46.COMMENT:Part VIII, Section I-2c(6) page 443. The permitted closure plan must only address those units being permitted. Is it appropriate to include interim status units in the estimate of maximum waste inventory to be expected?

RESPONSE: Agree, it is not appropriate to include the maximum waste inventory included, this has been deleted from Part VIII Section C(7) Maximum Waste Inventory. The maximum waste inventory is specified for each unit in Part III Storage in containers.

47.COMMENT:Part VIII, Section I-2c(6)(i)page 445. It is inappropriate to require drums from Unit 10 to be transferred to Building 776 for treatment when the treatment unit within 776 capable of treating these waste (FBI) has been withdrawn from the permit application.

RESPONSE:This requirement has been changed. See Part VIII-Section C of the Closure Plan.

RESPONSE TO EPA COMMENTS

48.COMMENT:Part VIII, Sections I-2c(6)(j), I-2c(6)(m), I-2c(6)(n), I-2c(6)(s), I-2c(6)(t), I-2c(6)(u) and I-2c(6)(z). The units referenced within these sections are not receiving a permit.

RESPONSE:References to units not addressed in this permit have been deleted.

49.COMMENT:Part VIII, Appendix I-1, page 459. The last sentence on this page is incomplete.

RESPONSE:This sentence in Part IX-Decontamination now reads as follows, "Methods should be chosen that will minimize the decontamination and be consistent with the decontamination process."

50.COMMENT:Part VIII, Section I-1d, Table 2, page 464. Solution E contains high concentrations of hydrazine. This material is very toxic and should be reconsidered as a constituent of this solution.

RESPONSE:The decontamination solution containing hydrazine has been reformulated to include only constituents which are not listed hazardous wastes.

51.COMMENT:Part VIII, Section I-1f, page 465. Verification methods pertaining to tanks not to be permitted should be deleted from this draft permit. Gross beta should be considered as a verification indicator parameter within Table 3, page 466.

RESPONSE:Verification methods for tanks have been deleted. Table 3 is now located on page 162. If gross alpha is found gross beta will also be detected.

52.COMMENT:Part VIII, Section I-2a(2) Table 4, page 469. The draft permit must require that the permittee present the established procedures referenced within this table.

RESPONSE: Table 4, page 163 has been rewritten as follows, Note 1: Materials to be handled according to established Rocky Flats procedures, CHWA and this permit.

53.COMMENT:Part VIII,Section I-3a(1)page 473. Reference is made to the Building 889 container cleaning facility. Is this appropriate?

RESPONSE:Reference to Building 889 has been deleted.

54.COMMENT:Part VIII, Seciton I-3a(2), page 473. The last sentence on this page is incomplete.

RESPONSE:This typo has been corrected.

55.COMMENT:Part VIII, Section I-3b, page 474. This section should not be in the draft permit.

RESPONSE:Agree, this section has been deleted.

RESPONSE TO EPA COMMENTS

56.COMMENT:Part VIII, Appendix I-2, Section I-1b page 482. The draft permit should address possible mitigation techniques to prevent contaminated soil resuspension during soil excavation activities.

RESPONSE:Part X-Soil Sampling, page 181 references, other procedures as developed by the Environmental Restoration Program. This includes the Standard Operating Procedures for corrective action and the PPCD Plan for Prevention of Contaminant Dispersion.

57.COMMENT:Part VIII, Appendix I-2, Section I-2b(2) page 489. This entire section needs to be coordinated with the Agreement being negotiated between CDH, EPA and DOE.

RESPONSE: "Sample Point Identification" the section referenced by the comment has been deleted. The IAG is referenced on page 171, Part X Soil Sampling, Section A(3)(a).

RESPONSE TO EDF COMMENTS-PART XI- HSWA REQUIREMENTS

Environmental Defense Fund (EDF)-Melinda Kassen

EDF's comments are summarized below.

1. Comment: EDF is disappointed in scope and specificity of draft permit. It does not contain detailed requirements for management, storage, treatment of regulated wastes generated and stored at the facility.

RESPONSE: A 75-day public comment period was held from October 4, 1989 through December 20, 1989, for the draft operating portion of the State RCRA permit. A public hearing was held November 14, 1989. This portion of the permit contains detailed requirements for storage of hazardous low-level mixed wastes in containers for nine waste management units at Rocky Flats. A waste analysis plan, contingency plan, inspection schedules, personnel training plan, and closure plan are included. EDF did not submit written or verbal comments on that portion of the draft permit. Therefore, no responses are contained in this summary regarding the operating permit.

Regarding a "complete blueprint for the regulation of Rocky Flats waste" under the Colorado Hazardous Waste Act, the Division has used a wide variety of mechanisms to enforce hazardous waste regulations at Rocky Flats, including compliance orders, interim status monitoring and enforcement actions, inspections, the Inter-Agency Agreement (IAG), and now a State RCRA permit. The State RCRA permit is but one component of the State's overall program to ensure compliance with applicable statutes and regulations. Future modifications of the permit, or additional permits, will add treatment units, transuranic mixed waste units, and ultimately mixed residues. This is a very complex facility. This is the first step in what will be a long and complex permitting process at Rocky Flats.

2. Comment: EDF is critical of the public comment process for this draft permit.

RESPONSE: The Division will consider any reasonable request to extend or re-open a public comment period in accordance with Section 100.510 of the Colorado Hazardous Waste Regulations. EDF was the only commenter which requested an extension of the public comment period, and did so at the end of the period. The Division believes that EDF's concerns were accommodated given the short notice.

3. Comment: EDF states that failure of the draft HSWA permit to address Land Disposal Restrictions makes the permit "incomplete", and these requirements must be addressed in a final permit.

RESPONSE: At the time of issuance of the draft HSWA permit, the State of Colorado did not have authority for the Land Disposal Restrictions (LDR) under either State law, or under its EPA authorized hazardous waste program. The current LDR compliance agreement (FFCA II) is a policy and enforcement matter between EPA and DOE to which the State of Colorado is not a party. The State agrees with the commenter that compliance with the LDR requirements is an important aspect of Rocky Flats' overall compliance with

RESPONSE TO EDF COMMENTS-PART XI HWSA

the Colorado Hazardous Waste Act and RCRA. The State of Colorado now has adopted Part 268 regulations for LDR, and a new permit condition has been added to require that the Permittee comply with all applicable requirements of 6 CCR 1007-3, Part 268.

The State is required to include corrective action requirements into all State RCRA permits prior to final permit issuance. The operating portion of the State RCRA permit mentioned in response #1 above could not be finalized without containing corrective action requirements. This requirement was complicated by the fact that the Statement of Work of the IAG was to become the corrective action schedule of compliance in the draft permit, in order to prevent duplication or conflicting requirements for DOE in addressing corrective action at the site.

In contrast, the LDR requirements are HSWA provisions and consequently apply to all facilities in all States, regardless of authorization, and with or without a permit. Their inclusion in a RCRA permit is not necessary for either its "completeness" or issuance.

4. Comment: The Waste Minimization requirements in the draft permit are insufficient for a number of reasons:

(a) Waste minimization program required under the permit is not subject to public scrutiny; review and approval of waste minimization program by CDH a closed process:

RESPONSE: In December 1989, DOE submitted a Waste Minimization and Assessment Report to the State as required under the Agreement in Principle between DOE and Governor Romer. This document is a public document and has been available for public scrutiny since that time. The Division reviewed that document, and believed that it contained many of the basic elements of a successful waste minimization program, but lacked in its formal structure. Therefore, the permit requires that DOE review the existing program and improve it where necessary to meet the criteria specified in the permit. Under the compliance schedule, a status report is required, which includes updates to the program to meet the requirements of the permit. This document will be available to the public. The Division is in no way "subverting" the public participation requirements of RCRA, as stated by EDF. In this respect, the required submission under the permit is no different than a ground water monitoring report, or an RFI workplan.

5. Comment: (b) Permit lacks specific waste reduction goals or other criteria to judge success of waste minimization program.

RESPONSE: Neither the State of Colorado nor EPA has statutory authority to set specific limits or waste reduction percentages for any RCRA waste generator. Instead, in accordance with 6 CCR 1007-3, Section 264.73 (b)(9), the Permittee is required to have a

RESPONSE TO EDF COMMENTS-PART XI HWSA

program in place to reduce the volume and toxicity of hazardous waste that he generates to the degree determined by the permittee to be economically practicable (emphasis added). The burden of determining what constitutes practicable reduction has clearly been placed upon the generator/permittee, not the regulatory agencies.

The interim status and permitted unit storage capacities provide a maximum volumetric limit on the amount of certain RCRA waste types which can be stored at the facility. DOE and its operating contractor must take the necessary steps to ensure compliance with these limits, including waste minimization efforts, off-site treatment, storage, and disposal, and on-site treatment technologies.

6. Comment: (c) The extent and content of the waste minimization requirements in the draft permit must provide guidance to DOE, decision makers, and enforcement personnel as to the contents of an acceptable waste minimization program.

RESPONSE: The content of the waste minimization program as specified in the draft permit were taken directly from EPA guidance on the requirements of a waste minimization program.

7. Comment: (d) Permit should indicate how the Division expects DOE to fulfill the requirements of a successful waste minimization program.

RESPONSE: The question of whether to pursue source reduction, on-site treatment, product substitutions, changing worker habits, or other innovative means is best answered by a combination of these efforts. DOE is pursuing treatability studies at the same time as source reduction. The Division prefers source reduction in all cases, but encourages use of treatability studies, Research, Development, and Demonstration permits, and research at other DOE facilities to examine new technologies. The Division has not encouraged use of any specific technology, but realizes that their development and implementation is necessary at this time. The Division will review proposed at the Rocky Flats Plant treatment technologies under the applicable regulatory framework.

The Low-Level Mixed Waste Plan for Rocky Flats, required by the Agreement in Principle, and submitted to CDH in November 29, 1989, provided a status report on overall waste management options for this waste type. This document was updated in November, 1990. At the time of preparation of the draft permit, this document was not considered for inclusion into the draft permit. It has been explicitly required in the final permit in an updated version.

8. Comment: (e) Permit should require technology transfer between DOE and private sector.

RESPONSE: The permit has been revised to require DOE to utilize all resources available to it, including technology transfer with the private sector.

The commenter's concerns are appreciated, and the revisions to the final permit are

RESPONSE TO EDF COMMENTS-PART XI HWSA

designed to add a level of specificity in the requirements not provided previously. Based on the comments provided by EDF, the following revisions have been made to the waste minimization requirements of the permit:

-The written waste minimization program plan is explicitly incorporated into the permit by reference.

-Revisions to the waste minimization policy must be submitted as a Class 1 permit modification with prior approval of the Director.

-The progress report is to be submitted annually to the Director for review and comment, and must detail achievements in waste minimization by the facility, including: percentage reduction, and actual volumetric or mass reduction, for each major RCRA regulated wastestream using the previous year as a baseline, and through what means these were achieved (ie-treatment, source reduction, product substitution, other).

-The Permittee shall revise and update the Low-Level Mixed Waste Plan for the Rocky Flats Plant, and submit this revised report to the Director within 90 days of the effective date of this permit. Updates and revisions to the report are due annually.

-The Low-Level Mixed Waste Plan for the Rocky Flats Plant is incorporated into the permit by reference.

-The permit has been revised to require DOE to utilize all resources available to it, including technology transfer with the private sector.

-Where specific waste reduction goals have not been met, an explanation of the circumstances preventing its achievement, and a strategy to achieve these goals in the next year, must be provided to the Director.

RESPONSE TO LYNETTE REILING COMMENTS

PART III-STORAGE IN CONTAINERS

1. Comment: What material(s) are 55-gallon drums made of?

RESPONSE: The 55-gallon drums are constructed of steel. These drums are Department of Transportation (DOT) approved containers for shipping the stored waste types. The requirements for these containers are contained in Title 49 of the Code of Federal Regulations. The permit has been revised to allow use of other size DOT approved containers, which may be constructed of synthetic materials such as polyethylene, for storing the wastes covered by the permit, since it is not always practical to use 55-gallon drums.

2. Comment: Are the drums coated or lined to slow deterioration?

RESPONSE: Some drums have synthetic liners or bags in which the waste is placed to prevent direct contact with the steel. This would typically be done with a waste having a high moisture content. Corrosive wastes are typically neutralized during a treatment step prior to placement in drums to prevent corrosion of the steel. Permit conditions III.C. and III.D. address this issue by requiring that the containers must be compatible with wastes placed in them, and that the wastes in a container in poor condition must be transferred to one in good condition.

3. Comment: Who will oversee the inspection of and inventory logs of the hazardous waste storage areas?

RESPONSE: Rocky Flats personnel complete the inspection and inventory logs as part of the facility's operating record. See permit conditions I.H. and II.E. CDH's Hazardous Materials and Waste Management Division ("the Division") will continue to perform compliance inspections to assess the facility's compliance with the conditions of the permit, as well as interim status requirements. Inspection and inventory logs are periodically checked during these inspections.

4. Comment: Will the drums fitted with carbon filters stored in Building 777 be inspected for deterioration and be replaced as needed?

RESPONSE: The commentor makes a very good point. The permit has been revised as a result of this comment to require replacement of the carbon filters as necessary to ensure their effectiveness. See condition III.B.6.(i).

5. Comment: What documentation is required to certify compliance with permit conditions III.F., specifying work to be completed in certain storage areas? Will CDH inspect to ensure that these requirements have been met?

RESPONSE: Rocky Flats submitted photographs with their comments on the draft permit showing:

- Installation of ventilation in Unit 23;
- Installation and repair of Unit 23 roof;
- Labeling and chaining of gas cylinders in Unit 23;
- Roof supports and repair in Unit 24.

RESPONSE TO LYNETTE REILING COMMENTS

These items have been checked by the Division, and found to meet the requirements of the draft permit, and have been deleted from the final permit. Subsequent inspections will examine the physical condition of these units, to assess compliance with permit conditions III.B.7.d. and 8.d.

PART IV- WASTE ANALYSIS PLAN

6. Comment: Waste Analysis Plan, Section C-Analysis and Sampling of wastes for compatibility: "wastes which flow directly into process drains will not be sampled."

- (1) Does waste from process drains go to process waste tanks?
- (2) If not, why aren't these wastes tested for compatibility.

RESPONSE: Based on revisions to the waste analysis plan, Part IV, requirements for units not specifically addressed in the permit have been deleted. The process waste treatment and collection system is not the subject of the permit, as only container storage areas are permitted. Future permit actions will address the waste treatment units, and the commentor may raise this comment again, as it appears relevant. Other changes to the waste analysis plan specify under what conditions a waste is analyzed or recharacterized. See Part IV, Sections C. and D.1. Waste recharacterization efforts at Rocky Flats have been and are being conducted under other requirements, including the 1989-1990 Waste Stream Recharacterization, and the Federal Facilities Compliance Agreement (FFCA II) between EPA and DOE.

7. Comment: Would it be appropriate to make some provision to go back to the original test schedule to make sure the variability remains constant?

RESPONSE: The revised generator waste analysis plan specifies under what conditions a waste will be recharacterized. The unit specific waste analysis plan provides a check on these determinations. See Part IV, Sections C. and D.1..

8. Comment: What will be the process to modify the permit when handling new waste streams not covered under EPA hazardous waste code of new waste?

RESPONSE: Rocky Flats must request a permit modification to store new EPA waste codes wastes in the units covered by the permit. For other waste management units, a request for a change to interim status must be approved prior to handling the new waste codes.

9. Comment: Should this process be clearly stated in the permit?

RESPONSE: Permit conditions I.A., IV.D., and IV.C.3. all address this requirement in one way or another. Also, only the waste codes specified in Part III are permitted for a particular unit.

RESPONSE TO LYNETTE REILING COMMENTS

10. Comment: Water sampling parameter levels and action levels for on-site ponds before the water is discharged off-site.

- (1) There is no stated unit of measure to use as a reference point to read the figures.
- (2) All the ponds listed have the listed constituents of gross alpha and beta, uranium, plutonium, and tritium. At this point, there is no criteria in the draft permit for determining the synergistic effects of these constituents. Should that be included in the permit according to OSHA standards of calculation?

RESPONSE: The section of the draft permit pertaining to surface water management has been removed from the draft permit. Detailed requirements for surface water are now specified in a Surface Water Management Plan for Rocky Flats, the IAG, and the facility's discharge permit. The commentor is referred to these documents to answer specific questions regarding current requirements. The permit now references the other guiding documents, so as not to be in conflict with them. Responses to hazardous waste spills and releases are still addressed as part of the facility contingency plan, Part VI.

11. Comment: Under Water Supply protection steps:

- (1) What are the series of basins for surface water control lined with?

RESPONSE: See response to Comment 10 above.

12. Comment: How quickly will spills to soil/surface water be cleaned up?

RESPONSE: Although "quickly" is not defined in the permit, clearly the magnitude of the incident would determine the scope of any clean-up, and the time required to complete. Part IV-Section D.4.b. (page 104-105) of the final permit specifies that the soil must be removed and identified as an Individual Hazardous Substance Site and addressed under the IAG, or under the corrective action requirements of the permit. If the spill poses an immediate threat to human health or the environment, it will be considered for an interim measure/interim remedial action, which is a high priority response. It is the facility's advantage to manage spills so that contamination of soil, surface, or ground water is prevented or minimized.

13. Comment: Emergency measures-Contracts with the University of Colorado Health Sciences Center and St. Anthony hospital Article III Public Information and Release. (reference pages 263-269 of draft permit.)

The commentor challenges the appropriateness of the closed loop between the Regents, University Hospital, DOE, and the managers of Rocky Flats with regards to information under the emergency response agreements. It would seem appropriate to include the Dept. of Health, Rocky Flats employees and the public at large in this information loop. The commentor does not understand how most of this information would put national security in jeopardy.

RESPONSE TO LYNETTE REILING COMMENTS

RESPONSE: The Colorado Hazardous Waste Regulations, 6 CCR 1007-3, Section 264.37, require that the owner or operator of a hazardous waste facility attempt to make certain emergency response agreements. However, only the basic content of the agreements or contracts are specified. The permit has been revised to require only that these agreements be in place. CDH will review the contents of these plans to see that the basic requirements are met. The actual agreements have been removed from the permit because they were outdated and subject to change. If any of the designated emergency response authorities refuses to enter into an agreement, Rocky Flats must notify the Colorado Department of Health within 10 days.

DOE and E.G.&G. policies with respect to their contracts with the University of Colorado Health Sciences Center or other emergency response authority is more appropriately addressed to DOE and E.G.&G. to define what information could be made public as opposed to that which would be withheld by the hospital or other emergency response authority. Rocky Flats must implement the Contingency Plan, Part VI of the permit, under the conditions specified in that plan. These requirements include off-site notification for spills or releases which meet the specified criteria. The designated emergency response authorities and CDH would review any information during a hazardous or mixed waste release which threatens human health or the environment, and on-site or off-site evacuations are one possible response action to safeguard the public health.

Worker health and safety considerations are more appropriately addressed through OSHA requirements which DOE has publically committed to comply with.

RESPONSE TO CITY OF WESTMINSTER COMMENTS-PART XI HSWA

1. Comment: Westminster is concerned about potential impacts to Standley Lake and area residents from clean-up activities under the IAG, and the corrective requirements of the State RCRA permit.

RESPONSE: The Division and EPA, along with DOE, have addressed this concern in the responsiveness summary for the IAG. For corrective action at any individual Solid Waste Management Unit under the requirements of the State RCRA permit, the potential impacts to human health and the environment will be assessed on a site specific basis by CDH during review and implementation of the required workplans and corrective measures. The sitewide plans and standard operating procedures required under the IAG for the Environmental Restoration activities at Rocky Flats are designed to minimize these impacts. CDH will perform periodic monitoring and enforcement inspections to ensure that the required procedures are being followed.

2. Comment: Westminster recommends that a canal be constructed around Standley Lake prior to implementation of the corrective/remedial actions begin under the IAG or State RCRA permit requirements.

RESPONSE: The Division believes that the City's surface water concerns are appropriately being addressed by a variety of mechanisms, including the Surface Water Management Plan for Rocky Flats, the facility's NPDES permitting requirements, considerations given during development and implementation of required RCRA Facility Investigation Workplans and any required corrective/remedial actions.

3. Comment: Westminster would like to see further detail included in the Waste Minimization requirements of the permit.

RESPONSE: The City's concerns are appreciated. The Waste Minimization requirements have been revised to be more specific. See the Response to Comments made by the Environmental Defense Fund.

RESPONSE TO ROCKY FLATS CLEANUP COMMISSION COMMENTS

General Comments: 1> The Cleanup commission understands that the Health Department is proposing to permit only nine of the twenty waste management units at Rocky Flats. We also understand that this action only permits some of the hazardous and low level mixed waste units at the Plant. In addition no documentation has been submitted with regard to TRU mixed waste units at Rocky Flats. All of these units are currently permitted under "interim" status. The Rocky Flats Cleanup Commission does not feel that the permit process should be segmented with separate permits being issued for individual low level and TRU mixed waste units. A comprehensive study should be made of all the waste streams at the plant and action taken on all the waste units.

RESPONSE: There is an ongoing waste stream characterization effort for the entire Rocky Flats plant. The nine units contained in this permit have the same function, they are all container storage units. Addressing these nine units allows more stringent regulation under a permit. The complexity of the facility makes it difficult to permit all units at one time.

2> In order to best address the impacts of the waste streams on the workers and the surrounding community and the alternatives to minimize and treat wastes, the Cleanup Commission is recommending that an Environmental Impact Statement (EIS) be prepared. DOE has already agreed to prepare an EIS before the Savannah River Plant restarts and they should make the same commitment for Rocky Flats. This is the best way to fully analyze the impacts on the workers and the community and to minimize those impacts. Segmenting the permit process through RCRA is not appropriate for Rocky Flats. Rocky Flats is just too complicated to be administered through the RCRA process alone.

Rocky Flats should remain closed until the EIS is completed or at least until the Conway Commission has reviewed the operation of the Plant. Members of this commission are confirmed by the Senate and therefore will have more independent oversight than the present Ahearne Commission whose members are appointed by Secretary Watkins.

RESPONSE: The Department of Energy has committed to compliance with OSHA requirements to protect the safety and health of the workers at Rocky Flats Plant. The NEPA process has been incorporated into the IAG for corrective and remedial action processes where the environment will be impacted. A Site Wide Environmental Impact Statement and a PRMP/Residues Environmental Impact Statement are in process at this time.

Specific Comments:

1> The Supercompactor is not one of the units currently being permitted under RCRA but the Department is considering to give it "interim" status. Because this technology has not previously been given "interim" status, it should be subjected to the full RCRA Process with citizen review and a public hearing.

RESPONSE TO ROCKY FLATS CLEANUP COMMISSION COMMENTS

RESPONSE: CDH determined that the SARF qualified as a change to interim status unit. This decision was subject to a thirty day public comment period from November 5, 1990 to December 5, 1990. An NEPA environmental assessment was performed on the Supercompactor and TRU waste shredder and a Finding of No Significant Impact (FONSI) was issued and published in the Federal Register August 10, 1990. The SARF will be subject to the full RCRA permit process in conjunction with the other TRU treatment units for which Rocky Flats is seeking a permit.

2> The permit is presently being issued to Rockwell International while EG&G will assume responsibility of the Plant in January. We would assume EG&G would have an opportunity to comment on the permit conditions and we would like to receive a copy of their comments along with any other public comments.

RESPONSE: A responsiveness summary of all comments received will be issued with the permit. Copies of the permit and the responsiveness summary will be placed on file at the designated information repositories.

3> A June 28, 1989 agreement between the State Health Department and DOE requires that the waste streams be recharacterized. The information from this study may create the need to change the conditions of the permits for various units. Therefore, we would expect that permits for some of the waste management units will be reevaluated after this study is completed.

RESPONSE: A permit is issued for a specific length of time, and specific operating parameters such as type of wastes allowed, and volumetric capacity. If a facility wishes to operate the unit under conditions differing from those specified in the permit, a permit modification must be filed. Depending on the class of modification, a public comment period may be required prior to finalization.

4> Two of the nine units store solid wastes outdoors. Unit 1 can store a maximum of 450 barrels of non-radioactive wastes outside. Unit 15 can store a maximum of 10,700 cubic yards of radioactive pondcrete and saltcrete in plywood boxes covered only by a tarp. None of these wastes should be subjected to the corrosive elements of Colorado weather and risk exposure to the workers and general public.

RESPONSE: Unit 1 is for solid hazardous waste. No regulatory requirements exist that require indoor or covered storage.

Unit 15 The pondcrete/saltcrete area Unit 15-B is not addressed in this permit. This unit was withdrawn from the permit application and will close under interim status. Currently most of the waste on this pad is covered by temporary buildings.

RESPONSE TO ROCKY FLATS CLEANUP COMMISSION COMMENTS

5> In comparing information presented in the RCRA permit to information in a document entitled "Response to Rocky Flats Environmental Monitoring Council Data Request Received August 1, 1989", there appear to be some inconsistencies. The most glaring inconsistency is the number of barrels of solid and liquid waste that can be stored at Unit 13. The permit shows 864 barrels of liquid waste is the capacity while the report prepared by Rockwell International (in response to questions raised by Walt Hessler) states that only 456 barrels can be stored. In addition the permit shows no barrels containing solid waste can be stored while the Rockwell document identifies 912 barrels as the capacity. What are the correct figures?

RESPONSE: The permitted capacity of Unit 13 is 55,440 gallons of solid low-level mixed waste, which is equivalent to 864 fifty-five gallon drums.

6> Finally, on page 433 a statement is made that DOE estimates closure to occur in the year 2100. This is very disturbing to the public when the DOE 2010 Report stated that Rocky Flats will be phased out over a 15-20 year period. It should not take 90 years to close down these waste management units. This is unacceptable to the citizens of Colorado.

RESPONSE: The Colorado Hazardous Waste Regulations require that permitted treatment, storage and disposal facilities provide an estimate of the year of closure. The hazardous and low-level mixed waste container storage permit has been issued for a five year period, not 90 years as the comment implies. Use of these storage areas must be re-permitted to operate beyond five years. RCRA closure of these units must conform to the schedule in the approved closure plan, Part VIII of the permit.