

DRAFT

DRAFT

DRAFT

Dr. Frederick R. Dowsett
Monitoring and Enforcement
Hazardous Materials and Waste Management Division
Colorado Department of Health
4210 East 11th Avenue
Denver, Colorado 80220

Mr. Gary Baughman
Hazardous Waste Facilities
Hazardous Materials and Waste Management Division
Colorado Department of Health
4210 East 11th Avenue
Denver, Colorado 80220

Robert L. Duprey, Director
Hazardous Waste Management Division
U. S. Environmental Protection Agency, Region VIII
999 18th Street, Suite 500, 8HWM
Denver, Colorado 80202

CHANGES TO INTERIM STATUS

The U. S. Department of Energy (DOE) is providing justification for requests for change to interim status for hazardous and mixed waste storage and treatment units at the Rocky Flats Plant (RFP). This justification supports both previous requests and new requests for additional Environmental Protection Agency (EPA) waste codes in storage and treatment areas at RFP. Since DOE is requesting approval to store toxicity characteristic (TC) wastes in several units, this justification is being submitted to both the Colorado Department of Health (CDH) and EPA.

Requests for change to interim status have previously been submitted to CDH and EPA as follows: (1) May 1991 (Hazardous & Low Level Mixed Waste Part A, Rev. 7 (CDH only)); (2) June 1991 (Hazardous & Low Level Mixed Waste Part A, Rev. 8 and TRU Mixed Waste Part A, Rev. 6) and (3) August 1991 [Combined Part A, Rev. 1 (CDH only)]. Subsequent to these submittals, CDH requested additional justification for these requests. While compiling this additional justification and considering the interrelationship between storage and treatment units at RFP, all interim status units were analyzed to determine the appropriate waste codes required to operate each unit in accordance with the Colorado Hazardous Waste Regulations. Therefore, in addition to justification for previous requests, new waste code requests and justification are also included with this submittal.

Justification for previous requests for change to interim status for the addition of new storage and treatment units is not included in this request, since those changes will be requested in future permit modification requests to your office.

As stated in the Colorado Hazardous Waste Regulations, 6 CCR 1007-3, Sections 100.11(d)(1) and (2)(i), the Part A application must be updated to reflect the treatment and storage of additional wastes not previously identified in the Part A. Also, Section 100.20(b)(3)(ii), states that changes to interim status may be approved if the owner justifies the request because it is necessary to comply with federal, state or local requirements. These proposed changes are required in order to maintain compliance with Section 100.40(a)(9), which specifies the need to identify the hazardous wastes designated under Part 261 of the regulations which are to be stored or treated at the facility.

Specifically, the waste codes requested and the Part A Applications in which they were originally requested are listed in Enclosure 1. Also indicated ("New") are waste codes which are being requested for the first time in this submittal. Justification for previous requests is provided in Enclosure 2; justification for new requests is provided in Enclosure 3; and withdrawal of certain previous requests are included in Enclosure 4.

If you have any questions, please contact Tom Lukow at 966-4561 or Debbie Mauer at 966-5598.

Enclosures:
As Stated (5)

cc:

T. E. Lukow	-	DOE, RFO
D. L. Mauer	-	DOE, RFO
M. Hestmark	-	EPA
D. Maxwell	-	EPA
P. W. Edrich	-	EG&G
A. L. Schubert	-	EG&G

WASTE CODES REQUESTED

<u>UNIT</u>	<u>WASTE CODE REQUESTED</u>	<u>PART A APPLICATION CONTAINING REQUEST</u>
11 Building 776, Rm 134 Container Storage	D002	Haz & LL, Rev 8; TRU, Rev 6
	D003	New
	D004	New
	D005	New
	D010	New
	D011	Haz & LL, Rev 8; TRU, Rev 6
	D022	New
	F005	Haz & LL, Rev 8; TRU, Rev 6
	F006	New
	F007	New
	F008	New
	F009	New
	P Series	New
	U Series	New
19 Building 374, Rm 3813 Container Storage	D001 (Request Withdrawn)	
	D003 (Request Withdrawn)	
	D005	Combined Rev 1
	D010	Combined Rev 1
	D011	Combined Rev 1
	D022	New
	F008	New
	P Series	Combined Rev 1
U Series	Combined Rev 1	
20 Building 664 Container Storage	D010	New
	D022	New
	F008	New
	P Series	New
	U Series	New
25 750 Pad Container Storage	D004	Haz & LL, Rev 7
40 Process Waste Transfer System	D003	New
	D006	New
	D009	New
	D010	New
	D022	New
	F005	New
	F008	New
	P Series	New
U Series	New	

UNIT	WASTE CODE REQUESTED	PART-A APPLICATION CONTAINING REQUEST
4 2 Building 374 Process Waste Treatment	D003	Combined Rev 1
	D006	Combined Rev 1
	D010	Combined Rev 1
	D022	Combined Rev 1
	F005	Combined Rev 1
	F008	New
	P Series	Combined Rev 1
	U Series	Combined Rev 1
4 3 Process Wastewater Tanks	D003	New
	D006	Combined Rev 1
	D009	Combined Rev 1
	D010	New
	D011	Combined Rev 1
	D022	Combined Rev 1
	F005	Combined Rev 1
	F007	New
	F008	New
	P Series	Combined Rev 1
	U Series	Combined Rev 1
5 5 Building 774 Process Waste Treatment	D003	Combined Rev 1
	D022	New
	F005	Combined Rev 1
	F007	New
	F008	New
	F009	New
	P Series	Combined Rev 1
	U Series	Combined Rev 1
5 6 Building 774 Organic Waste Immobilization	D002 (Request Withdrawn)	Combined Rev 1
	D003 (Request Withdrawn)	Combined Rev 1
	D004 (Request Withdrawn)	Combined Rev 1
	D005 (Request Withdrawn)	Combined Rev 1
	D006	Combined Rev 1
	D007	Combined Rev 1
	D008	Combined Rev 1
	D009 (Request Withdrawn)	Combined Rev 1
	D010 (Request Withdrawn)	Combined Rev 1
	D011 (Request Withdrawn)	Combined Rev 1
	D022	New
	F002	Combined Rev 1
	F005	Combined Rev 1
	P Series	Combined Rev 1
	U Series	Combined Rev 1

<u>UNIT</u>	<u>WASTE CODE REQUESTED</u>	<u>PART A APPLICATION CONTAINING REQUEST</u>
57	D006	Combined Rev 1
Building 774	D008	Combined Rev 1
Miscellaneous Waste	D009	Combined Rev 1
Handling and Immobilization	D022	New
	F005	Combined Rev 1
	F007	New
	F008	New
	F009	New
	P Series	Combined Rev 1
	U Series	Combined Rev 1
59	D010	New
Building 569	D022	New
Crate Counting Facility	F008	New
	P Series	New
	U Series	New
61 & 62	D001	TRU Rev 6
Building 776	D003	New
Size Reduction and	D004	New
Advanced Size Reduction	D005	New
Facilities	D007	TRU Rev 6
	D010	New
	D022	New
	F006	New
	F007	New
	F008	New
	F009	New
	P Series	New
	U Series	New
69	D001	New
Building 776, Rm 154	D002	New
Container Storage	D003	New
	D005	New
	D010	New
	D011	New
	D022	New
	F006	New
	F007	New
	F008	New
	F009	New
	P Series	New
	U Series	New

PREVIOUS WASTE CODE REQUESTS

The following information provides an explanation of each request on a unit-by-unit basis. Because several storage and treatment areas support identical waste streams, there may be redundancy among the explanations for different units. In no case is storage or treatment capacity being increased and existing interim status requirements will continue to be met in these areas.

These previous waste code requests are identified with asterisks in the enclosed revised Part A Application for combined hazardous waste, low-level mixed waste, TRU mixed waste and mixed residue units.

UNIT 11

Unit 11 is a container storage area in Building 776, Room 134. Adjacent to Unit 11 are Units 61 (Size Reduction Vault) and 62 (Advanced Size Reduction Facility). Units 61 and 62 are the only treatment units on plantsite which are used to repackage waste such as High Efficiency Particulate Air (HEPA) filters and to volume reduce large pieces of equipment. Because of the close proximity of these units, the fact that Unit 11 is used as a storage area in support of Units 61 and 62, combined with the likelihood that Units 61 and 62 may be used to treat a variety of hazardous waste which exists at the Rocky Flats Facility, Units 11, 61 and 62 must have interim status for the same group of waste codes. These units must also be approved to store and treat (Units 61 and 62) various types of hazardous waste which may exist at the Facility. Therefore, the following additional waste codes are required for Unit 11:

- D002 - Corrosive Waste
- D011 - Silver Waste
- F005 - Non-halogenated Solvent Waste

UNIT 19

Unit 19, located in Building 374, Room 3813, serves as the drum storage area for waste generated in the aqueous waste treatment facility in Building 374, Unit 42. Wastes generated from treatment in Unit 42 include vacuum filter sludge and saltcrete. These solid waste forms, stored in Unit 19, may contain the same hazardous constituents as wastes entering Unit 42, and therefore must also be identified with the approved waste codes for Unit 42. Therefore, Unit 19 requires approval for the following additional waste codes:

- D010 - Selenium Waste
- D011 - Silver Waste
- P Series Waste
- U Series Waste

See the justification provided for Unit 42 for further information on why these waste codes are being requested for that unit.

UNIT	WASTE CODE REQUESTED	PART A APPLICATION CONTAINING REQUEST
73 Building 774, Rm 241 Container Storage	D001	Combined Rev 1
	D002	Combined Rev 1
	D003	Combined Rev 1
	D005	Combined Rev 1
	D010	Combined Rev 1
	D011	Combined Rev 1
	D022	New
	F005	Combined Rev 1
	F007	New
	F008	New
	F009	New
	P Series	Combined Rev 1
	U Series	Combined Rev 1

UNIT 25

Unit 25, a mixed waste storage area located on the 750 pad, stores pondcrete generated during the 207 series solar evaporation pond sludge removal efforts and saltcrete from the Building 374 process waste treatment facility. The waste code for the toxicity characteristic for arsenic is requested for this unit based upon characterization of pondcrete. Analysis indicates that arsenic may exceed toxicity characteristic levels in unsolidified pondcrete which has historically been stored at Unit 25 since sludge removal efforts from the solar evaporation ponds were initiated. The following additional waste code is requested:

D004 - Arsenic Waste

UNIT 42

Unit 42, the process waste treatment facility in Building 374, stores and treats all plant aqueous process waste.

In support of remedial investigation activities conducted in accordance with the Environmental Restoration Interagency Agreement, the remedial action decontamination pad (Unit 18.01) and the granular activated carbon treatment system (Unit 18.02) were approved for interim status storage and treatment by your office on August 30, 1991. Wastewaters generated during these environmental restoration activities will be managed at Building 374 (Unit 42). It is therefore necessary that waste approved for storage at Unit 18.01 and for treatment at Unit 18.02 be approved for storage and treatment at Unit 42.

Based on characterization of the wastewaters, it was determined that in addition to certain waste codes already approved for Unit 42, waste exhibiting the toxicity characteristic for cadmium (D006) and chloroform (D022) may also be present. Additionally, toluene and carbon disulfide which are in the form of spent solvents (F005) have been identified in the wastewater.

Analytical operations have historically occurred in laboratories located in Buildings 371, 559, 771 and 881. These labs have performed and will continue to perform characterization of wastes generated throughout plantsite in support of the Waste Stream and Residue Identification and Characterization program and perform metals analyses including cadmium (D006) and selenium (D010). Waste resulting from such testing may also exhibit the toxicity characteristic for these metals as a result of preparing spiked samples in addition to the metals contained in the analytes. Additionally, during efforts to package excess chemicals for shipment off site, the laboratories must perform a screening of radioactivity content before the chemicals can be properly segregated for interim storage and ultimate shipment. Because very small amounts of these chemicals which result from the screening are eventually transferred to Unit 42 for treatment, it is imperative that Unit 42 be approved for P Series and U Series wastes.

Please note that the request for P and U Series wastes is made to support the treatment of residues resulting from the sampling of excess chemicals. Rocky Flats does not intend to dispose of significant quantities of excess chemicals through the aqueous waste treatment system. It is anticipated that the majority of these chemicals will be packaged for offsite storage or disposal.

Other operations supported by the laboratories include the solution treatment program for process buildings at the facility. This program is intended to treat excess waste solutions presently in storage in both containers and tanks. The laboratories also perform radioactive analyses on cyanide solutions which result in the generation of solutions which exhibit the reactivity characteristic (D003). In the future, the laboratories will be required to provide radioactive analyses and characterization in support of anticipated decontamination and

decommissioning of the facility. These programs will result in the generation of waste identified with waste codes which exist throughout the facility, and these aqueous wastes must eventually be treated at Unit 42.

The following additional waste codes are therefore requested for Unit 42:

- D003 - Reactive Waste
- D006 - Cadmium Waste
- D010 - Selenium Waste
- D022 - Chloroform Waste
- F005 - Non-halogenated Solvent Waste
- P Series Waste
- U Series Waste

UNIT 43

Unit 43, process wastewater storage tanks, is located immediately outside Building 374 (Unit 42) and is used to stage low-level radioactive mixed liquid waste for eventual treatment in Unit 42. Liquids are constantly transferred between Units 42 and 43 depending on factors such as (1) waste flow rates to Unit 42 and (2) equipment operability and availability in Unit 42.

Because of the interrelationship between these units, it is essential that the waste codes approved for these two units be identical. The following additional waste codes are therefore requested for Unit 43:

- D006 - Cadmium Waste
- D009 - Mercury Waste
- D011 - Silver Waste
- D022 - Chloroform Waste
- F005 - Non-halogenated Solvent Waste
- P Series Waste
- U Series Waste

UNIT 55

Unit 55, aqueous process waste treatment and storage in Building 774, operates in parallel to Unit 42, primarily treating process waste from Building 771, which is the main plutonium recovery facility. In addition to receiving process waste from Building 771, Unit 55 also occasionally receives laboratory waste from Buildings 371, 559, 771 and 881. Since the laboratories perform a variety of functions (see justification for Unit 42), it is essential that Unit 55 be approved for storage and treatment of waste generated by the laboratories including solutions exhibiting the characteristic for reactivity (D003), primarily from cyanide solutions in existing interim status and permitted areas. Also, the laboratories have analyzed spent solvent solutions containing toluene (F005). The actual residues will be treated in Unit 42. Additionally, during efforts to package excess chemicals for shipment off site, the laboratories must perform a screening of radioactivity content before the chemicals can be properly segregated for interim storage and ultimate shipment. Because very small amounts of these chemicals which result from the screening are eventually transferred to Unit 55 for treatment, it is imperative that Unit 55 be approved for P Series and U Series wastes.

Please note that the request for P and U Series wastes is made to support the treatment of residues resulting from the sampling of excess chemicals. Rocky Flats does not intend to dispose of significant quantities of excess chemicals through the aqueous waste treatment system. It is anticipated that the majority of these chemicals will be packaged for offsite storage or disposal.

In summary, the following additional codes are requested:

- D003 - Reactive Waste
- F005 - Spent Solvent Waste
- P Series Waste
- U Series Waste

UNIT 56

Unit 56, organic waste immobilization in Building 774, receives organic waste from production areas in Buildings 707 and 777 and analytical laboratories in Buildings 371, 559, 771 and 881. Wastes from Buildings 707 and 777 are transferred via pipeline to Unit 56 for subsequent solidification. The laboratories are required to characterize organic wastes such as oils contaminated with solvents (F002 and F005) and other toxicity characteristic contaminants (including D006, D007 and D008). Based on the characterization of waste oils currently in storage, it is anticipated that the waste codes currently identified will also be utilized in the future and these same codes must be approved for treatment of laboratory residues in Unit 56. Additionally, excess organic chemicals are planned to be solidified in Unit 56 in preparation for offsite disposal. Therefore, the following additional waste codes are required for this unit:

- D006 - Cadmium Waste
- D007 - Chromium Waste
- D008 - Lead Waste
- F002 - Spent Solvent Waste
- F005 - Non-halogenated Solvent Waste
- P Series Waste
- U Series Waste

Previous requests for the following waste codes are being withdrawn due to process knowledge or analytical data indicating that these contaminants are not present:

- D002 - Corrosive Waste
- D003 - Reactive Waste
- D004 - Arsenic Waste
- D005 - Barium Waste
- D009 - Mercury Waste
- D010 - Selenium Waste
- D011 - Silver Waste

UNIT 57

Unit 57, miscellaneous waste handling and immobilization in Building 774, receives waste from analytical laboratories in Buildings 371, 559, 771 and 881. These labs have performed and will continue to perform characterization of wastes generated throughout plantsite in support of the Waste Stream and Residue Identification and Characterization program and can occasionally discard small amounts of off-specification or excess reagents during the analytical process. Laboratory waste from these operations is typically generated in small (4 liter or less) bottles

which are normally placed in a glovebox for solidification and not directly into a tank system. Unlike Units 42 and 55, Unit 57 is designed to handle and treat liquid waste in individual bottles from throughout plantsite, and must be approved for those waste codes which exist plantwide and have been found during previous characterization efforts. Wastes containing these waste codes, which are being stored in several interim status and permitted storage units, include cadmium (D006), lead (D008) and mercury (D009) in excess of toxicity characteristic levels and spent non-halogenated solvents such as toluene (F005).

Additionally, during efforts to package excess chemicals for shipment off site, the laboratories must perform a screening of radioactivity content before the chemicals can be properly segregated for interim storage and ultimate shipment. Because very small amounts of these chemicals which result from the screening are eventually transferred to Unit 57 for treatment, it is imperative that Unit 57 be approved for P Series and U Series wastes.

Other operations supported by the laboratories include the mixed residue solution treatment program for process buildings at the facility. This program is intended to treat excess waste solutions presently in storage in both containers and tanks. In the future, the laboratories will be required to provide radioactive analyses and characterization in support of anticipated decontamination and decommissioning of the facility. Both of these programs will result in the generation of laboratory waste identified with waste codes which exist throughout the facility, and these wastes may eventually be treated at Unit 57.

In summary, the following additional waste codes are required for Unit 57:

- D006 - Cadmium Waste
- D008 - Lead Waste
- D009 - Mercury Waste
- F005 - Non-halogenated Solvent Waste
- P Series Waste
- U Series Waste

UNITS 61 & 62

Units 61 and 62, the Size Reduction Facility and the Advanced Size Reduction Facility, located in Building 776, are the main solid waste treatment facilities for waste generated inside the Protected Area. This area contains the plutonium production buildings such as Buildings 371, 559, 707 and 771. Units 61 and 62 will serve as the main treatment facilities for solid waste generated during decontamination and decommissioning efforts at the facility.

Units 61 and 62 are also used to repackage waste containers which are sent to Unit 20 (Building 664) for RTR and are found to contain free liquids or other prohibited waste items. This request will ensure that waste which is approved for storage throughout plantsite may be returned to Units 61 and 62 for subsequent treatment or storage if necessary. Based on this information, the following additional waste codes are requested for Units 61 and 62:

- D001 - Ignitable Waste
- D007 - Chromium Waste

UNIT 73

Unit 73, drum storage area in Building 774, Room 241, is the only interim status or permitted container storage area in Building 774. Unit 73 is used to store waste generated in Units 55, 56

and 57 prior to being shipped to other interim status or permitted storage units before shipment to an offsite storage or disposal facility. As a result, it is imperative that Unit 73 be approved for those waste codes which are approved or being requested for each treatment unit in Building 774.

Additionally, solutions being treated in Unit 57 support the mixed residue solution elimination program for Building 771. This program involves treatment of solutions presently in storage in Building 771 in anticipation of future decommissioning. Other solutions requiring treatment in Unit 57 are laboratory waste solutions (described under Units 42 and 57). In order to treat these solutions efficiently, it is preferable to treat large batches at one time rather than treating several smaller batches, which requires that a storage area be available to allow for the accumulation of greater amounts of waste. As a result, the following additional waste codes are requested:

- D001 - Ignitable Waste
- D002 - Corrosive Waste
- D003 - Reactive Waste
- D005 - Barium Waste
- D010 - Selenium Waste
- D011 - Silver Waste
- F005 - Non-halogenated Solvent Waste
- P Series Waste
- U Series Waste

ADDITIONAL WASTE CODE REQUESTS

In addition to the above justifications for previous requests for change to interim status, the facility requests that the following waste codes be added. Justifications for each request are provided below. Sections 100.11(d)(1) and (d)(2)(i) and 100.20(b)(3)(ii) specify the need to identify the hazardous wastes designated under Part 261 of the regulations to be stored or treated at the facility. In no case is storage or treatment capacity being increased, and existing interim status requirements will continue to be met in these areas.

These additional requests are indicated in bold type in the enclosed revised Part A Application for combined hazardous waste, low-level mixed waste, TRU mixed waste and mixed residue units.

UNIT 11

Unit 11 is a drum storage area in Building 776, Room 134. This unit serves as a staging area for Units 61 and 62 (see previous explanation and justification for Units 61 and 62) and must therefore be approved for the same codes as have been approved and requested for Units 61 and 62. The following new waste codes are requested for Unit 11:

- D003 - Reactive Waste
- D004 - Arsenic Waste
- D005 - Barium Waste
- D010 - Selenium Waste
- D022 - Chloroform Waste
- F006 - Wastewater Treatment Sludges
- F007 - Cyanide Plating Waste
- F008 - Plating Bath Residue Waste
- F009 - Cyanide Plating Waste
- P Series Waste
- U Series Waste

UNIT 19

Unit 19 serves as the drum storage area for waste generated in the aqueous waste treatment facility in Building 374, Unit 42 (see previous explanation and justification). As a result, wastes stored and treated in Unit 42 will potentially become a solid waste form, either as vacuum filter sludge or as saltcrete, and may exhibit the characteristic for any of the characteristic wastes approved for Unit 42. Therefore, the following waste codes are requested for Unit 19:

- D022 - Chloroform Waste
- F008 - Plating Bath Residue Waste

See the previous justification provided for Unit 42 for further information on why waste code D022 is being requested for that unit.

UNIT 20

Unit 20, the waste shipping storage area in Building 664, is used to store mixed waste in anticipation of shipment to an offsite storage or disposal facility such as the Waste Isolation Pilot Plant or the Nevada Test Site. Unit 20 can therefore store waste which is allowed to be stored in any of the interim status or permitted storage units on plantsite. Because the offsite storage or disposal facilities will not accept waste containing free liquids, all waste is examined for free liquids with Real-Time Radiography (RTR) in Unit 20. Those containers failing the free liquid examination are returned to the generator or storage unit for proper disposition.

In order to properly identify waste stored in Unit 20, the following additional waste codes must be approved for storage:

- D010 - Selenium Waste
- D022 - Chloroform Waste
- F008 - Plating Bath Residue 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)

Selenium, P Series and U Series wastes have been approved (letter from F. Dowsett to R. Nelson, October 24, 1990) for storage in Unit 20 for purposes of performing RTR on hazardous waste. Given that these wastes plus chloroform waste are approved for storage in mixed waste storage units, we request that these waste codes be approved for storage in Unit 20.

UNIT 40

Unit 40, the process waste transfer and collection system, consists of collection tanks at or near the point of waste generation. Unit 40 will, at one time or another, store waste destined for treatment in Unit 42 and must therefore be approved for the following waste codes. See the justification provided for Unit 42 for further information why these additional waste codes are required:

- D003 - Reactive Waste
- D006 - Cadmium Waste
- D009 - Mercury Waste
- D010 - Selenium Waste
- D022 - Chloroform Waste
- F005 - Non-halogenated Solvent Waste
- F008 - Plating Bath Residue Waste
- P Series Waste
- U Series Waste

UNIT 42

Unit 42, the process waste treatment facility in Building 374, stores and treats all plant aqueous process waste. Plating bath residues from the bottom of plating baths (F008) in Building 444 will be treated in Unit 42 when the baths are decommissioned in the future. Therefore, the following waste code must be approved for Unit 42:

- F008 - Plating Bath Residue Waste

UNIT 43

Unit 43, process wastewater storage tanks, is located immediately outside Building 374 (Unit 42) and is used to stage low-level radioactive mixed liquid waste for eventual treatment in Unit 42. Liquids are constantly transferred between Units 42 and 43 depending on factors such as equipment availability in Unit 42, mechanical breakdowns and waste flow rates to Unit 42.

Because of the interrelationship between these units, it is essential that the waste codes approved for these two units are identical, and the following additional waste codes must be approved for Unit 43:

- D003 - Reactive Waste
- D010 - Selenium Waste
- F007 - Cyanide Plating Waste
- F008 - Plating Bath Residue Waste

D003, D010 and F008 have been requested for Unit 42 (see justification for Unit 42 above), while F007 is approved for storage and treatment in Unit 42.

UNIT 55

Unit 55, aqueous process waste treatment and storage in Building 774, operates in parallel to Unit 42, primarily treating process waste from Building 771, which is the main plutonium recovery facility. In addition to receiving process waste from Building 771, Unit 55 also occasionally receives laboratory waste from Buildings 371, 559, 771 and 881, although this waste is primarily immobilized directly at Unit 57. Since the laboratories perform a variety of functions (see justification for Unit 42), it is essential that Unit 55 be approved for storage and treatment of waste generated by the laboratories. Therefore, the following waste codes are requested for Unit 55:

- D022 - Chloroform Waste
- F007 - Cyanide Plating Waste
- F008 - Plating Bath Residue Waste
- F009 - Cyanide Plating Waste

UNIT 56

Unit 56, organic waste immobilization in Building 774, receives waste from analytical laboratories in Buildings 371, 559, 771 and 881. The laboratories are required to characterize organic wastes such as oils contaminated with solvents and other toxicity characteristic contaminants. Based on the characterization of waste oils currently in storage, it is anticipated that the waste codes currently identified will also be utilized in the future and these same codes must be approved for treatment of laboratory residues in Unit 56. Contaminants commonly found in oils characterized as hazardous waste include the following:

- D022 - Chloroform Waste

UNIT 57

Unit 57, miscellaneous waste handling and immobilization in Building 774, receives waste from analytical laboratories in Buildings 371, 559, 771 and 881. These labs have performed and

will continue to perform characterization of wastes generated throughout plantsite in support of the Waste Stream and Residue Identification and Characterization program. Since the laboratories perform a variety of functions (see justification for Unit 42), it is essential that Unit 57 be approved for storage and treatment of waste generated by the laboratories. Therefore, the following waste codes are requested for Unit 57:

- D022 - Chloroform Waste
- F007 - Cyanide Plating Waste
- F008 - Plating Bath Residue Waste
- F009 - Cyanide Plating Waste

UNIT 59

Unit 59, the Crate Counting Facility, located in Building 569, receives waste containers from throughout plantsite for purposes of performing non-destructive assay to determine the amount of radioactive material in the waste container. Since many of the containers sent to Unit 59 are from interim status or permitted storage areas and have exceeded their 90-day accumulation limit, it is essential that Unit 59 be approved to store waste which has been identified in other storage and treatment areas. Therefore, the following additional waste codes are requested for Unit 59:

- D010 - Selenium Waste
- D022 - Chloroform Waste
- F008 - Plating Bath Residue Waste
- P Series Waste
- U Series Waste

UNITS 61 & 62

Units 61 and 62, the Size Reduction Facility and the Advanced Size Reduction Facility, located in Building 776, are the main solid waste treatment facilities for waste generated inside the Protected Area. This area contains the plutonium production buildings such as Buildings 371, 559, 707 and 771. Units 61 and 62 will serve as the main treatment facilities for solid waste generated during decontamination and decommissioning efforts at the facility.

Units 61 and 62 are also used to repackage waste containers which are sent to Unit 20 (Building 664) for RTR and are found to contain free liquids or other prohibited waste items. This request will ensure that waste which is approved for storage throughout plantsite may be returned to Units 61 and 62 for subsequent treatment or storage if necessary. Based on this information, the following additional waste codes are requested for Units 61 and 62:

- D003 - Reactive Waste
- D004 - Arsenic Waste
- D005 - Barium Waste
- D010 - Selenium Waste
- D022 - Chloroform Waste
- F006 - Wastewater Treatment Sludges
- F007 - Cyanide Plating Waste
- F008 - Plating Bath Residue Waste
- F009 - Cyanide Plating Waste
- P Series Waste
- U Series Waste

UNIT 69

Unit 69, container storage area in Building 776, Room 154, functions as a staging area for transferring containers into and out of Unit 11 (Building 776, Room 134). As stated previously, Units 11, 61 and 62 often receive waste from throughout plantsite in anticipation of repackaging and eventual transfer from Building 776. As a result, it is imperative that Unit 69 be approved to store waste which is also approved for Units 11, 61 and 62 (see description of those units for justification). The additional waste codes required include the following:

- D001 - Ignitable Waste
- D002 - Corrosive Waste
- D003 - Reactive Waste
- D005 - Barium Waste
- D010 - Selenium Waste
- D011 - Silver Waste
- D022 - Chloroform Waste
- F006 - Wastewater Treatment Sludges
- F007 - Cyanide Plating Waste
- F008 - Plating Bath Residue Waste
- F009 - Cyanide Plating Waste
- P Series Waste
- U Series Waste

UNIT 73

Unit 73, drum storage area in Building 774, Room 241, is the only interim status or permitted container storage area in Building 774. Unit 73 stores waste generated in Units 55, 56 and 57 prior to being shipped to other interim status or permitted storage units before shipment to an offsite storage or disposal facility. As a result, it is imperative that Unit 73 be approved for those waste codes which are requested for each treatment unit (Units 55, 56 and 57) in Building 774. Therefore, the following waste codes are requested for Unit 73:

- D022 - Chloroform Waste
- F007 - Cyanide Plating Waste
- F008 - Plating Bath Residue Waste
- F009 - Cyanide Plating Waste