# CAFB 2003



GARY E. JOHNSON GOVERNOR State of New Mexico ENVIRONMENT DEPARTMENT

Hazardous Waste Bureau 2905 Rodeo Park Drive East, Building 1 Santa Fe, New Mexico 87505-6303 Telephone (505) 428-2500 Fax (505) 428-2567 www.nmenv.state.nm.us



JOHN D'ANTONIO, Jr. SECRETARY

## CERTIFIED MAIL RETURN RECEIPT REQUESTED

December 9, 2002

Colonel Robert Yates Commander 100 S. DL Ingram Blvd Suite 108 Cannon AFB, New Mexico 88103-5214

# RE: NOTICE OF DEFICIENCY RCRA PERMIT APPLICATION - PART A & PART B CANNON AIR FORCE BASE EPA ID NO. NM7572124454 CAFB-99-005

Dear Colonel Yates:

The New Mexico Environment Department (NMED) has completed its technical review of the Cannon Air Force Base (CAFB) December 10, 2001 response to NMED's November 6, 2001 Request for Supplemental Information and has determined that CAFB did not adequately address all of NMED's RSI comments; specifically, those contained in Comment 12. NMED has also determined that CAFB must supply additional detail in their Waste Analysis Plan to meet the requirements specified in 20.4.1.900 NMAC, incorporating 40 CFR 270.14(b)(3) and 20.4.1.500 NMAC, incorporating 40 CFR 264.13(b). Therefore, we are issuing this Notice of Deficiency (NOD) to CAFB. NMED's numbered comments are included as ATTACHMENT 1.

Please submit a revised Permit Application or replacement pages within forty-five (45) calendar days of your receipt of this NOD. In addition, please include a response letter that indicates precisely where revisions have been made, cross-referencing NMED's numbered comments.

Colonel Yates December 9, 2002 Page 2

If CAFB's revisions are found to be technically adequate, NMED will issue a draft permit for public comment. If you have any questions concerning this NOD, please call either Mr. Steve Pullen at 505-428-2544 or Mr. Glenn von Gonten at 505-428-2551.

Sincerely,

James P. Bearzi Chief Hazardous Waste Bureau

JPB:gvg [CAFB-99-005]

cc: D. Cobrain, NMED HWB J. Kieling, NMED HWB P. Allen, NMED HWB G. von Gonten, NMED HWB S. Pullen, NMED HWB Denny Timmons, CAFB 27 CE/CEVP Don White, CAFB 27 CE/CEVP Vera Wood, CAFB 27 CE/CEVP Laurie King, EPA 6PD-N

Reading File and CAFB Red File [CAFB-99-005]

**ATTACHMENT 1** 

# **ATTACHMENT 1**

The following numbered comments comprise NMED's second technical review of CAFB's Permit Renewal Application. As noted above, please provide a written response to each numbered comment as well as the actual revisions to the application.

#### **GENERAL COMMENTS:**

**Comment 1.** CAFB's WAP does not identify the applicable waste characterization regulations necessary to store wastes at a permitted facility. CAFB must revise their WAP to identify those regulations in the introduction to CAFB's WAP and must also consider these regulatory requirements when establishing Data Quality Objectives (DQOs) for all waste characterization, including real time waste sampling and analysis, acceptable knowledge (AK), or a combination of the two. Furthermore, CAFB's WAP must be revised to include a description of how installation personnel will ensure that all DQOs have been met in the Quality Assurance/Quality Control (QA/QC) section. NMED has provided a portion of CAFB's waste characterization DQOs in Appendix 1 to this Attachment.

**Comment 2.** CAFB's WAP does not sufficiently specify how CAFB will comply with the land disposal restrictions (LDRs, see 20.4.1.800 NMAC, incorporating 40 CFR part 268). WAP § 7, Paragraph 1 specifies that CAFB will identify underlying hazardous constituents (UHCs) but does not provide a description of how CAFB will accomplish this. Furthermore, CAFB's WAP does not address the requirement to identify the hazardous constituents in listed wastes, such as the constituents of concern in F001–F005 wastes (see 20.4.1.800 NMAC, incorporating 40 CFR 268.7). Specific deficiencies regarding LDR requirements are discussed in the *Specific Comments* section below.

**Comment 3.** Part B § 3 (Waste Analysis Plan) has numerous waste characterization commitments that are either not included in, or are inconsistent with, CAFB's Hazardous Waste Analysis Plan (WAP). Because CAFB's WAP is a stand-alone document that will be attached to their operating permit in order to identify CAFB's waste characterization requirements, it must be complete and accurate. CAFB must revise their WAP as follows:

- WAP § 4.2.2 states that "...all samples will be collected in consultation with ASTM standard collection methods ....." However, Part B § 3.1 specifies that sampling will be "...conducted in accordance with the requirements specified in *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods* (US EPA Publication SW-846)." CAFB must revise their WAP to resolve this inconsistency. CAFB must use SW-846 methods where they are available or justify to our satisfaction the use of another method. If CAFB is able to justify the use of an alternative method, then CAFB must attach a copy of that method to their WAP.
- WAP § 2.2.2 specifies that CAFB will characterize high volume waste streams by *possibly* (emphasis added) collecting "... several samples so that enough data can be assembled to be statistically significant." However, Part B § 3.3.2 specifies that CAFB will analyze each waste

stream "three consecutive times" for apparently the same reason. CAFB must revise their WAP to resolve this inconsistency.

• Part B § 3 contains the following waste characterization descriptions that are not in CAFB's WAP; Part B Table 3-1 (Maximum Concentration of Contaminants for the Toxicity Characteristic); Part B § 3.4.1 (list of sampling equipment); and Part B Table 4-1 (list of relevant sample containers, preservation, and holding times). CAFB must revise their WAP to resolve these inconsistencies.

**Comment 4.** CAFB describes numerous waste characterization activities in several sections of their Part B, but does not address these activities in their WAP. At a minimum, CAFB must revise their WAP to include the waste compatibility and hazard class discussion detailed in Part B § 15.1.2.

Other parts of CAFB's Part B describe waste management activities that are directly related to the waste characterization requirements. CAFB must revise their WAP to address these. The waste management issues include:

- Air emission waste characterization (or the rationale for why it is not necessary) as addressed at Part B §§ 8.6 and 15.1;
- Free liquids in wastes as addressed at Part B § 15.3;
- Permitted and prohibited waste as addressed at Part B § 1.2.1; and,
- Waste compatibility characterization as addressed at Part B § 9.1.

**Comment 5.** CAFB does not adequately address the characterization of remediation wastes in their Part B. CAFB's WAP must be revised to address when and how a hazardous waste determination will be made on contaminated soils or ground waters that are managed as wastes. With respect to the LDR status of contaminated soils, CAFB's WAP should be revised to reference the alternative treatment standards pursuant to 20.4.1.800 NMAC, incorporating 40 CFR 268.49.

**Comment 6.** CAFB does not adequately address the characterization of reactive wastes in WAP § 3.3.4. NMED believes that wastes with a reactivity characteristic are generally most appropriately characterized using acceptable or process knowledge, due to human health and safety concerns. CAFB may address this option in their revised WAP, recognizing the need to identify all possible underlying hazardous constituents (UHC) in wastes that might remain in treatment residues.

**Comment 7.** NMED suggests that CAFB revise their WAP by specifying how CAFB will determine whether sorbents commingled with hazardous wastes at the facility are biodegradable. Operators of disposal facilities must determine whether a hazardous waste

generator has added a biodegradable sorbent to the waste in the container pursuant to 20.4.1.500 NMAC, incorporating 40 CFR 264.13(c)(3). This regulation does not apply directly to CAFB, but this type of information is easily obtained through AK, is easily included in waste characterization documentation provided to the operator of a disposal facility, and possibly would reduce CAFB's disposal costs.

**Comment 8.** CAFB proposes to use either acceptable knowledge (AK) or process knowledge, but does not specify the processes that will be followed, nor how AK will be assessed for usability, and when sampling and analysis will occur if it is determined that AK is not adequate. CAFB's WAP must be revised to ensure that waste characterization using AK conforms to NMED's AK policy (see Appendix 2 to this Attachment).

**Comment 9.** CAFB must revise their WAP to include the notice/record keeping requirements with respect to the LDR status of the waste (e.g. wastewater/non-wastewater category, etc.). Please note that the generators LDR notice must include the information indicated in column "§268.7(a)(3)" of the *Generator Paperwork Requirements Table* specified in 20.4.1.800 NMAC, incorporating 40 CFR 268.7(a)(4), and the required certification statement, signed by an authorized representative.

**Comment 10.** CAFB must revise WAP § 8 to provide additional discussion regarding the requirement to provide and to document the training for all personnel involved in waste characterization, including generators and initial accumulation point (IAP) managers. This is particularly important because each waste's LDR status must be determined at the point of generation. Part B § 12 (Personnel Training) is inconsistent with CAFB's WAP because it addresses only HWSF personnel. CAFB must revise their Part B and WAP appropriately to address to inconsistency.

**Comment 11.** Please note that NMED intends to attach the table in Appendix 3 to this Attachment to CAFB's WAP for inspection purposes. CAFB may comment on this proposal.

## **SECTION SPECIFIC COMMENTS:**

**Comment 12.** WAP § 1.1, Sentence 2 cites the outdated title "New Mexico Hazardous Waste Management Regulation - EIB/HWMR-7." CAFB must revise their WAP to refer to "New Mexico Hazardous Waste Management - 20.4.1 NMAC."

**Comment 13.** WAP § 2.1, Sentence 2 states that each waste stream "...will have its characterization reviewed once every 12 months at a minimum." Permit Condition C.2.f (1) of CAFB's current operating permit requires that continuous waste generating processes be sampled at least annually. WAP Table A-3 indicates that 11 of the 28 wastes listed are past due for characterization (i.e., last profiled greater than one year of the date of the table). CAFB must

explain why these waste streams have not been re-evaluated at least annually, as required by their permit. In addition, CAFB must identify and establish a quality assurance process that ensures that the waste characterization re-evaluation will occur as scheduled.

**Comment 14.** WAP § 2.1, Sentence 3 states "The frequency of actual sampling and analysis will depend on the variability of the waste's constituents and the applicability of chemical analysis to the waste's characterization." WAP § 4.2.3.2 indicates that waste streams have significant degrees of variability that might warrant composite sampling. CAFB must clarify what is meant by "the variability of the waste's constituents." CAFB must specify when a waste stream variation will constitute a new waste. If particular wastes have a range of constituent concentrations, then CAFB must specify how they will address the LDR status of a waste, which might change with the slightest change of constituent concentration. Please clarify whether CAFB will identify the degree of chemical variability of each waste stream. Please note that EPA's SW-846 Chapter 9 addresses waste variability.

**Comment 15.** CAFB is required to specify a waste characterization re-evaluation frequency that is independent of, and in addition to, the characterization that is required whenever a new waste is created, pursuant to 20.4.1.500 NMAC, incorporating 40 CFR 264.13 (b)(4). NMED further interprets this regulation as requiring regularly scheduled re-characterization. CAFB must revise their WAP § 2.1 to conform to NMED's re-evaluation criteria (see Appendix 4 to this Attachment) or must propose an acceptable alternative.

**Comment 16.** The last sentence in WAP § 2.2 states "...a characterization review is required for any waste whose generating process changes." CAFB must provide additional discussion on the procedures that they have implemented to ensure that waste stream changes are identified.

**Comment 17.** CAFB must specify whether individuals or groups generating wastes are trained to identify what constitutes a waste stream change. A review of CAFB's WAP § 8 (Training Requirements) and Part B § 12 (Personnel Training) revealed no such commitment. CAFB must revise WAP § 2.2 appropriately.

**Comment 18.** WAP § 2.2.1, Sentence 10 refers to a prohibition on waste disposal without a "valid characterization performed within the past 12 months." CAFB must also specify that annual waste characterization will be documented in a written schedule (Waste Stream Review Schedule).

**Comment 19.** WAP § 2.2.2, Sentence 1 refers to "...high volume waste streams." CAFB must revise their WAP to clarify that these wastes are identified in Table 3-1 (Analysis Parameters). This comment also applies to the low volume wastes addressed in the next section.

**Comment 20.** WAP § 2.2.2, Sentence 3 implies that high volume waste streams might not be re-evaluated annually. Regularly scheduled re-characterization is required pursuant to 20.4.1.500 NMAC, incorporating 40 CFR 264.13 (b)(4). CAFB must revise their WAP in accordance with NMED's re-evaluation criteria (see Appendix 4 to this Attachment) or must propose an acceptable alternative.

**Comment 21.** WAP § 3.1.1, Paragraph 3, Sentence 5 notes that laboratory analysis will usually be required to determine whether a waste contains an UHC. Because this is one of the few WAP references to using laboratory analysis of a waste to determine its LDR status, CAFB must substantially elaborate on this subject. CAFB must revise their WAP to address the requirement that an LDR status determination is more than just determining whether a waste contains an UHC. The goal is to determine whether the waste must be treated before it can be land disposed. To do this, *all* LDR regulated hazardous constituents must be identified, including the regulated constituents in listed wastes as identified in the table of *Treatment Standards for Hazardous Wastes* at 20.4.1.800 NMAC, incorporating 40 CFR 268.40.

NMED often sees analyses performed for determining whether a waste is hazardous that fall short of identifying the other regulated constituents in the waste. This problem can be overcome by simply expanding the laboratory reporting requirements to include those constituents. Furthermore, any analysis must also determine whether the regulated constituent meets its respective treatment standard identified at 20.4.1.800 NMAC, incorporating 40 CFR 268.40 and/or 268.48. This requires that the appropriate treatment standard be identified and that the analytical method detection limit be sufficiently low to measure concentrations in the range of the treatment standard.

**Comment 22.** WAP § 3.1.1, Paragraph 3, Sentence 5 states that testing will not normally be required for listed wastes produced from processes that will not add additional hazardous characteristics. CAFB must explain how the LDR status of listed wastes is determined without analytical testing when the regulated hazardous constituent may be present at concentrations near the applicable treatment standard.

**Comment 23.** WAP § 3.1.1, Paragraph 3, Sentence 6 inappropriately cites only 20.4.1.300 NMAC, incorporating 40 CFR 262.11. CAFB must also include 20.4.1.800 NMAC, incorporating 40 CFR 268.7 in this section or repeat the discussion and add the regulatory citation in WAP § 7.

**Comment 24.** WAP § 3.1.3, Paragraph 2, Sentence 1 briefly mentions a number of very important waste characterization considerations applicable to permitted waste storage, including the consideration of waste compatibility between wastes and with its containers, pursuant to 20.4.1.500 NMAC, incorporating 40 CFR 264.13 (b)(6). At a minimum, CAFB's WAP must be revised to characterize wastes for the following compatibility groups: oxidizers, corrosive acids,

wastes reactive with water, and corrosive bases. EPA's guidance document "A Method of Determining the Compatibility of Hazardous Wastes" (EPA-600/2-80-076) contains procedures that are to used to qualitatively evaluate the compatibility of various categories of waste. CAFB's Part B § 3 presents a more detailed discussion on waste compatibility that CAFB should incorporate when revising WAP § 3.1.3.

CAFB must also address in more detail whether their Permit prohibits a particular waste type. This may be accomplished, in part, by referencing CAFB's Part A. Furthermore, CAFB's HWSF personnel must also characterize their waste for the presence of free liquids and the biodegradability of sorbents used to immobilize free liquids pursuant to 20.4.1.500 NMAC, incorporating 40 CFR 264.314 (c) and (e), respectively. Please note that characterization of the biodegradability of sorbents is most appropriately performed using AK.

Comment 25. WAP § 3.2.1, Sentence 5 states that, for new or unknown wastes, CAFB will determine the waste's major components by identifying in the waste "any hazardous constituent in Appendix VIII of 40 CFR Part 261 present in concentrations over 10,000 ppm (1 percent)." NMED is unaware of any regulatory basis for the above selection criteria. In fact, after a waste have been determined to be hazardous, performing an LDR status determination will require CAFB to measure the constituent concentrations to much lower concentration levels to determine whether the waste meets applicable treatment standards. CAFB must explain the basis for the 10,000-ppm selection criteria or remove the selection criteria. CAFB must revise WAP § 3.2 to include the "LDR status determination" as a waste analysis parameter to be considered.

**Comment 26.** The last sentence in WAP § 3.2.1 is unacceptably vague about the hazardous characteristics for which wastes will be evaluated. NMED recommends that CAFB simply reference the characteristics discussed in WAP § 3.3.

**Comment 27.** WAP § 3.2.2 identifies Table 3-1 as listing the specific parameters that are to be analyzed for each waste stream. CAFB must revise this section by including additional discussion of each waste stream's LDR status determination. Please note that when analyzing a waste's organic constituents for their LDR status, it would be inappropriate to analyze only for TCLP because CAFB must determine the total concentration of all organics (see 20.4.1.800 NMAC, incorporating 40 CFR 268.40 and 268.48).

**Comment 28.** CAFB must explain why "LDR status" is not a hazardous waste characterization parameter addressed in WAP § 3.3.

**Comment 29.** WAP § 3.3.1 implies that only liquids will be tested for ignitability; however, WAP Appendix B lists Method 1030 (Ignitability of Solids). CAFB must revise their WAP to address this inconsistency.

**Comment 30.** CAFB must revise WAP § 3.3.2 to include a description of the relationship of the TCLP sample preparation method to liquid wastes.

**Comment 31.** CAFB must revise WAP § 3.3.3 by defining the acronym "NACE."

**Comment 32.** The last sentence in WAP § 3.3.4 refers to the on-site neutralization of hydrazine. This is a hazardous waste treatment process that requires an operating permit unless the treatment is performed in less than 90 days from the time that the waste was generated and must occur inside a container or tank. NMED believes that fluorescent light bulbs are also being treated at CAFB under a similar regulatory status. If the treatment is meant to meet the LDR treatment standards, then the "… generator must develop and follow a written waste analysis plan" pursuant to 20.4.1.800 NMAC, incorporating 40 CFR 268.7 (a)(5). CAFB must explain the purpose(s) of the treatment processes and whether a separate WAP is required. If a separate WAP is required, then CAFB must explain the relationship between the additional WAP and the WAP currently under review.

**Comment 33.** WAP § 4.2.2 states that a sampling plan for individual wastes streams is presented at Table 4-3; however, Table 4-3 provides plans for only 6 wastes streams. To meet the requirements of 20.4.1.800 NMAC, incorporating 40 CFR 264.13 (b)(3), CAFB must have a sampling plan that addresses the appropriate procedures for each waste stream and these plans must be maintained in CAFB's operating record. See SW-846 Chapter 9 (Sampling Plan) for a discussion of the appropriate contents of a sampling plan. Please note that NMED is not requiring additional sampling plans to be included in CAFB's WAP - we are pointing out that CAFB must have and maintain these additional sampling plans in your operating record.

**Comment 34.** WAP § 4.2.3.2 must be revised to establish guidelines on how CAFB will choose either grab or composite sample collection methodologies.

**Comment 35.** WAP § 5 must be revised to specify that CAFB will report *all* hazardous constituents that the particular analytical test method is capable of measuring as part of a LDR status determination when performing waste analysis. For example, when performing a metals analysis to determine a waste's toxicity characteristic, it is a simple matter to measure and report the other 6 hazardous constituent metals listed at 20.4.1.800 NMAC, incorporating 40 CFR 268.48. Volatile and semi-volatile organic hazardous constituents must be measured and reported in the same manner.

**Comment 36.** WAP § 5 must be revised to specify that CAFB will ensure that the analytical method detection limit (MDL) is capable of measuring concentrations less than the applicable LDR treatment standard when performing analyses to determine a waste's LDR status.

**Comment 37.** WAP § 5 must be revised to specify that CAFB will place a copy of all laboratory analysis quality assurance reports in their operating record.

**Comment 38.** WAP § 6.3.3, which addresses laboratory quality assurance procedures, is inappropriately located within a discussion of field sampling procedures. CAFB must revise their WAP by creating a separate section dealing with laboratory QA/QC.

**Comment 39.** WAP § 7, Paragraph 1, last sentence inappropriately refers to the "Universal Waste Standards." The correct reference is the "Universal Treatment Standards."

#### **Typographical Errors**

Comment 40. Sentence 1.	Please add a comma between the words <i>spill</i> and <i>they</i> in WAP § 2.2.1, $-$	
<b>Comment 41.</b> Sentence 6.	Please add a comma between the words <i>process</i> and <i>such</i> in WAP § 2.2.1,	
Comment 42.	The phrase "than one" is used twice in WAP § 2.2.1, Sentence 11.	
Comment 43.	Analysis is spelled incorrectly in the heading of WAP § 2.3.	
<b>Comment 44.</b> in WAP § 3.1.1, Parag	Please revise Sentence 1 by removing either "described at" or "depicted in" agraph 1.	
<b>Comment 45.</b> <i>laboratory</i> and <i>the</i> .	WAP § 3.2.1, Sentence 1 should have a comma between the words	
<b>Comment 46.</b> properly.	WAP § 4.2.3.3, Sentence 2 should have the verb to use conjugated	

#### **APPENDIX 1**

#### **DATA QUALITY OBJECTIVES**

The data quality objectives (DQOs) for the waste characterization process are, in part, the specific data or information that the process is designed to identify. Waste characterization data must ensure that CAFB abides by all associated and applicable regulatory requirements. Therefore, the following New Mexico hazardous waste management regulations must be considered when establishing the DQOs applicable to permitted storage of hazardous wastes.

Waste characterization data at the point of generation.

- 20.4.1.300 NMAC, incorporating 40 CFR 262.11: Requirement to identify *all* EPA Hazardous Waste Numbers (i.e., waste codes) that apply to the waste;
- 20.4.1.500 NMAC, incorporating 40 CFR 264.13 (b)(6), 20.4.1.800 NMAC, incorporating 40 CFR 268.7 and 268.9: Requirement to determine the land disposal restrictions (LDRs) status of each hazardous waste. Requirement to determine a waste's LDR status requires, in part, the identification of *all* regulated constituents associated with each of a waste's EPA Hazardous Waste Numbers, including, but not limited to, the constituents of concern for F001-F005 wastes and the underlying hazardous constituents (UHCs) in characteristically hazardous wastes;
- 20.4.1.800 NMAC, incorporating 40 CFR 264.13 (a)(3)(i) and 20.4.1.800 NMAC, incorporating 40 CFR 268.7 (a)(3)(iii): Requirement to determine whether any routine waste generating process has changed sufficiently to create a new waste stream and alternative regulatory requirements.
- 20.4.1.900 NMAC, incorporating 40 CFR 270.25 (a)(4) and (5), 20.4.1.500 NMAC, incorporating 40 CFR 264.13 (b)(6), 264.179, 264.200, 264.1050 (b), and 264.1082 (c)(1): Requirement to determine the presence and concentration of waste constituents that might cause unlawful air emissions.

Prior to placement in a permitted hazardous waste storage unit.

- 20.4.1.500 NMAC, incorporating 40 CFR 264.13 (a)(1): Requirement to determine all information which must be known to treat, store and dispose of the wastes in accordance with New Mexico's Hazardous Waste Regulations.
- Part A: Requirement to determine whether the waste was listed on the Permit Application or is otherwise prohibited from storage in accordance with Permit Conditions.

- 20.4.1.900 NMAC, incorporating 40 CFR 270.15 (b)(1): Requirement to determine the presence of free liquids in wastes;
- 20.4.1.500 NMAC, incorporating 40 CFR 264.13 (b)(6): Requirement to determine waste ignitability and reactivity characteristics;
- 20.4.1.500 NMAC, incorporating 40 CFR 264.13 (b)(6): Requirement to determine the compatibility between separate wastes and between a waste and its container.
- 20.4.1.300 NMAC, incorporating 40 CFR 262.10 (h): Requirement to facilitate appropriate waste packaging for transportation.

#### **APPENDIX 2**

March

#### ACCEPTABLE KNOWLEDGE

CAFB must characterize their waste by analysis of the waste or by use of Acceptable Knowledge (AK). AK is defined in EPA guidance, "Waste Analysis at Facilities that Generate, Treat, Store, and Dispose of Hazardous Waste" dated April 1994 as process knowledge and prior sampling data performed before the effective date of RCRA regulations. Current sampling and analysis is the preferred method. CAFB must characterize their waste by sampling and analysis whenever feasible. AK may be used as the sole method to characterize waste only when the waste is from processes that are well documented with supporting information that address all characterization requirements of the permit, including the requirement to determine the LDR status of the waste. If the existing data do not meet this criteria, and sampling and analysis is used to characterize a waste, then CAFB must develop a sampling and analysis plan for that waste that will specify the sampling and laboratory analytical methods appropriate to identify and quantify potential contaminants in the waste stream.

CAFB may use AK to comply with the waste characterization requirements if any of the following, or equivalent, criteria are met:

- The waste is an unused, commercial, chemical product, reagent, or chemical of known physical and chemical constituents (e.g., P or U-listed EPA Hazardous Waste Number under 20.4.1.200 NMAC, incorporating 40 CFR 261.33) and the characterization is based on a Material Safety Data Sheet or equivalent information supplied by the manufacturer and identifying the chemical content of the waste;
- Health and safety risks to personnel would result from sampling and analysis (e.g., mixed or explosive waste) and this risk is documented by reports or other written documentation signed by appropriate site personnel responsible for assessing health and safety risk; or
- The physical nature of the waste precludes collection of a representative sample (e.g., heterogeneous debris waste) and the physical nature of the waste is documented by a detailed written description of the waste identifying the specific characteristics of the waste that make sampling or analysis unachievable.

CAFB must enter written documentation supporting the use of AK for each waste stream into their Operating Record. CAFB must include all specific AK documentation assembled and used in the AK process in their Operating Record, regardless of whether it supports the decision to use AK.

# **APPENDIX 3**

# HAZARDOUS WASTE CHARACTERIZATION DOCUMENTS (FORMS, SHEETS, ETC.)

NAME	LOCATION IN	CONTENTS
	WAP	
Analysis and	§ 2.2.1	Generator documents the waste process
Characterization		description, lists applicable TOs, describes the
Request Form		waste constituents, and references or attaches
		information on chemicals used in the process
Hazardous Waste	§§ 2.2.1 and 3.1.3	Documents a hazardous waste determination.
Profile Sheet		Includes generator process information,
		analytical results, hazardous waste
		determination, and LDR status determination.
	-	These sheets must be updated annually.
Waste Stream Review	Appendix A, § 3.1.4	Date that the waste was last profiled, unique
Schedule		waste stream number and name, brief
		description of waste, building and point of
		contact (used to ensure wastes are re-
		evaluated annually)
Laboratory Analysis	To be determined	See Section Specific Comment 37.
Quality Assurance		
Report		
Waste Sampling Plan	§ 4.2.2	See Section Specific Comment 33.
Waste Sampling	§ 6.3	Documentation of any non-conformance with
Quality Assurance		the Sampling Plan, use of field blanks and field
Report		duplicates.

#### **RE-EVALUATION FREQUENCY**

CAFB must re-evaluate the initial analysis of routinely generated wastes to ensure that the analysis remains accurate and up to date for subsequent batches of waste pursuant to 20.4.1.500 NMAC, incorporating 40 CFR 264.13 (b)(4). CAFB must reevaluate their waste under the following conditions:

- At least annually to verify the accuracy of initial characterization results. CAFB must use the same sampling and analysis methodologies used in the initial analysis, or equivalent methodologies as approved by NMED, for wastes characterized through sampling and analysis. For wastes characterized through AK, CAFB must review their AK information.
- When there is a change in waste-generating process(es). CAFB must reevaluate their waste whenever any information indicates that there has been a change in the process that generates the waste; and,
- When CAFB is notified by an off-site TSDF that the characterization of the waste received at the TSDF does not match a pre-approved waste analysis certification and/or accompanying waste manifest or shipping paper. If CAFB receives such a notice, then CAFB must notify NMED within 24 hours.

Unused commercial chemical products, reagents, or chemicals of known physical and chemical constituents (i.e., P or U-listed wastes) with Material Safety Data Sheet (MSDS) or similar information from the manufacturer identifying chemical content need not be included in this re-evaluation.