CAFB 2003

DEPARTMENT OF THE AIR FORCE

HEADQUARTERS 27th FIGHTER WING (ACC)
CANNON AIR FORCE BASE NEW MEXICO

07 FEB 2003

Colonel Robert Yates
Commander
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Mr. James Bearzi
Chief, Hazardous Waste Bureau
New Mexico Environment Department
Hazardous Waste Bureau
2905 Rodeo Park Drive East, Building 1
Santa Fe NM 87505-6303

Dear Mr. Bearzi

This letter serves as Cannon Air Force Base's notice of intent to close our hazardous waste storage facility in accordance with Permit No. NM7572124454, and as our response to NMED's Notice of Deficiency dated 9 December 2002. Recent improvements in Cannon's hazardous waste management operations have negated our need to store hazardous waste beyond 90 days. We understand the Hazardous Waste Bureau views this action as a pollution prevention initiative since it reduces the risks of storing hazardous waste. As a Green Zia Achievement Level participant, Cannon Air Force Base is focused on continuous improvement in pollution prevention. As a willing partner, we look forward to working with you on an efficient and effective closure process.

Closure of our storage facility will necessarily alter the ongoing RCRA Part B permit renewal process. We understand a requirement will remain for a shell permit with a "HSWA" module. My staff will work diligently with you to provide the information required to process this permit.

We enclose as Attachment 1 a response to your December 9, 2002, NOD. However, inasmuch as we will no longer seek permission to treat, store or dispose of hazardous waste on our facility, we offer this response only as technical compliance with the NOD in good faith.

Due to the lateness of this closure action in the permit renewal process, Cannon will make no claim to recover any of the $54,900 fee paid to NMED in September 2000 for the permit renewal.

Environmental stewardship and pollution prevention are central to Cannon's core principles. We take these matters very seriously, and intend to work tirelessly with you to complete successful closure of our hazardous waste storage facility and appropriate permit revisions. If questions arise, please contact Mr. Don White or Mrs. Vera Wood of 27th Civil Engineer Environmental Flight at (505) 784-2739 and 784-1097 respectively.

Sincerely

ROBERT YATES, Colonel, USAF

Attachment
Cannon AFB Response to NOD letter

ATTACHMENT 1

CANNON AFB RESPONSE
TO NMED NOD LETTER DATED 9 DEC 02

No.	NMED COMMENT	CAFB RESPONSE
1.	General Comments: 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.	Additional clarification on NMEDs expectation for use of DQOs. The DQO process is a team effort between regulator and regulated to strike a balance between technical adequacy and cost. These issues must be resolved mutually. Concur on identification of regulations. Require clarification regarding placement.
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*	See responses to specific comments.

	section below.	
3. (a)	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:	No response.
3. (b)	(a) 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 AP.	Suggest WAP and Part B include language deferring to latest guidance from EPA regarding sample collection methods.
3. (b)	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.	Concur. Clarification required on specific language to resolve inconsistency.
3. (c)	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	Concur. Require clarification on specific section of WAP to make changes.

	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.	
4. (a)	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:	Clarification required on specific activities referenced and specific section of WAP to revise.
4. (b)	Air emission waste characterization (or the rationale for why it is not necessary) as addressed at Part B §§ 8.6 and 15.1;	The rationale for why it is not necessary to incorporate air emission waste characterization follows: Subpart AA is not applicable because Cannon does not have any process vents associated with specific hazardous waste treatment processes; Subpart BB is not applicable as we do not have any equipment associated with air emission leaks, and Subpart CC is in compliance with Air emission, as the installation does not store waste in tanks or surface impoundments. Personnel as well as identifying container storage requirements.
4. (c)	Free liquids in wastes as addressed at Part B § 15.3;	Clarification required citing specific language necessary to address NMED concern.
4. (d)	Permitted and prohibited waste addressed at Part B § 1.2.1; and,	Clarification required citing specific language necessary to address NMED concern.
4. (e)	Waste compatibility characterization as addressed at Part B § 9.1.	Clarification required citing specific language necessary to address NMED concern.
5.	CAFB does not adequately address the characterization of remediation wastes in	Recommend adopting NMED Style Guide requirements for characterizing remediation

	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.	waste.
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.	Concur on use of AK or process knowledge.
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.	CAFB is not a disposal facility.
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	CAFB disagrees with positions outlined in Appendix 2. Sampling and analysis for waste characterization is not required by federal or state regulations.

	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).	
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.	CAFB meets these requirements by using DRMS Form 1930 "Hazardous Waste Profile Sheet."
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	CAFB disagrees that IAP managers must be trained to identify LDR status. CAFB believes the generator is CAFB as defined in 40 CFR 260.10.
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.	No comment.
12.	SECTION SPECIFIC COMMENTS FOLLOWS: 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."	Concur.
13.	WAP § 2.1, Sentence 2 states that each	The current WAP was written during mid-

	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.	life of the current 1989 Part B Operating Permit. Cannon follows current operating permit at C.2.f. (1) Continuous processes will be sampled annually. C.2.f. (2) Intermittent processes will be sampled upon request for turn-in to DRMO. Intermittent waste is a low generation of waste. Personnel delivered multiple boxes of waste sample and analysis records to NMED to review those waste generations during a 3-year period. Some wastes are inactive because we no longer have F-111 aircraft and others may no longer exist (inactive) due to process changes during waste minimization (pollution prevention) efforts. Quality assurance process ensuring waste characterization will be re-evaluated in accordance with RCRA regulations.
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.	Concur.
15.	CAFB is required to specify a waste characterization re-evaluation frequency that is independent of, and in addition to,	40 CFR 264.13(b)(4) states, "that the frequency with which the initial analysis of the waste will be reviewed or repeated 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.	ensure that analysis is accurate and up to date;..." Attachment 4 seems to require annual repetition of analysis, which is beyond the regulatory requirement. CAFB agrees that re-characterization is required, however; re-analysis is not.
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.	Concur.
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.	Concur. CAFB does include this training for IAP managers.
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).	Clarification requested regarding regulatory requirement for review schedule.
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.	Concur.
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-	Please see response to comment 15.

	evaluation criteria (see Appendix 4 to this Attachment) or must propose an acceptable alternative.	
21. (a)	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.	Clarification required on the term "substantially elaborate." Specific language would be helpful. CAFB does not and will not certify that wastes meet the LDR treatment standards
21 (b)	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.	No response elicited. Suggestion taken.
22.	WAP § 3.1.1, Paragraph 3, Sentence 5 states that testing will not normally be required for listed wastes produced from	CAFB does not certify that wastes meet LDR treatment standards.

	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.	For CAFB to classify a waste as a listed waste, the listed constituents are known by process knowledge supported by analytical testing
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.	Concur.
24. (a)	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.	Concur.
24. (b)	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	Concur.

	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.	
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.	Concur that section needs revision. However, CAFB does not certify that wastes meet LDR treatment standards. CAFB believes that measuring constituent concentrations is not required, only that constituents be identified that can reasonably be expected to be present.
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.	Concur.
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	Concur on expanding discussion.

	because CAFB must determine the total concentration of all organics (see 20.4.1.800 NMAC, incorporating 40 CFR 268.40 and 268.48).	
28.	CAFB must explain why "LDR status" is not a hazardous waste characterization parameter addressed in WAP § 3.3.	WAP § 3.3 and WAP § 7 should be combined.
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.	Concur.
30.	CAFB must revise WAP § 3.3.2 to include a description of the relationship of the TCLP sample preparation method to liquid wastes.	Concur.
31.	CAFB must revise WAP § 3.3.3 by defining the acronym "NACE."	Concur. National Association of Corrosion Engineers (NACE).
	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.	Treatment is performed in less than 90 days in containers. Neutralized (treated) hydrazine is manifested off-site along with a Hazardous Waste Profile Sheet expressing Land Disposal Restriction notification requirements for treatment. CAFB implemented guidance from New Mexico's Secretary of State's letter for lamps until EPA addressed fluorescent lamp management. Cannon does not crush lamps on-site.
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,	The purpose of Table 4-3 is to provide instruction of physical sampling of types of waste, i.e., rags & absorbents, wastewater.

	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.	
34.	WAP § 4.2.3.2 must be revised to establish guidelines on how CAFB will choose either grab or composite sample collection methodologies.	Concur.
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.	CAFB does not certify that wastes meet LDR treatment standards. CAFB believes that measuring constituent concentrations is not necessarily required, only that constituents that can reasonably be expected to present are identified
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.	CAFB does not certify that wastes meet LDR treatment standards. CAFB believes that measuring constituent concentrations is not necessarily required, only that constituents that can reasonably be expected to present are identified
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.	Concur.
38.	WAP § 6.3.3, which addresses laboratory quality assurance procedures, is inappropriately located within a discussion	Concur.

	of field sampling procedures. CAFB must revise their WAP by creating a separate section dealing with laboratory QA/QC.	
39.	WAP § 7, Paragraph 1, last sentence inappropriately refers to the "Universal Waste Standards." The correct reference is the "Universal Treatment Standards."	Concur.
40.	Typographical Errors: Please add a comma between the words *spill* and *they* in WAP § 2.2.1, Sentence 1.	Concur.
41.	Please add a comma between the words *process* and *such* in WAP § 2.2.1, Sentence 6.	Concur.
42.	The phrase "than one" is used twice in WAP § 2.2.1, Sentence 11.	Concur.
43.	Analysis is spelled incorrectly in the heading of WAP § 2.3.	Concur.
44.	Please revise Sentence 1 by removing either "described at" or "depicted in" in WAP § 3.1.1, Paragraph 1.	Concur.
45.	WAP § 3.2.1, Sentence 1 should have a comma between the words *laboratory* and *the*.	Concur.
46.	WAP § 4.2.3.3, Sentence 2 should have the verb *to use* conjugated properly.	Concur.