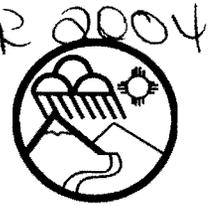




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RON CURRY
SECRETARY

DERRITH WATCHMAN-MOORE
DEPUTY SECRETARY

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

March 12, 2004

Thomas A. Ladd, Director
Environment and Safety Directorate
U.S. Army White Sands Missile Range
White Sands Missile Range, New Mexico 88002-5000

SUBJECT: NOTICE OF DEFICIENCY
RCRA PERMIT APPLICATION FOR THE HAZARDOUS WASTE
STORAGE FACILITY
WHITE SANDS MISSILE RANGE
EPA ID NO. NM2750211235
HWB-WSMR-99-006

Dear Mr. Ladd:

On March 22, 2001 the New Mexico Environment Department (NMED) determined that the White Sands Missile Range (WSMR) RCRA Permit Application for the Hazardous Waste Storage Facility (HWSF), submitted in June 1999, was administratively complete. On May 16, 2001, NMED confirmed receipt of the fees paid by WSMR on May 10, 2001.

In accordance with 20.4.2.201.3 and 20.1.4 NMAC, NMED completed its first technical review of WSMR's RCRA Permit Application for the HWSF and determined that it was not technically adequate and that changes were necessary before it could be approved. Therefore, on January 22, 2002, NMED issued WSMR a *Request for Supplemental Information (RSI)* that WSMR responded to on May 16, 2002. NMED determined, in a Notice of Deficiency (NOD) dated March 7, 2003, that WSMR must supply additional details in its Waste Analysis Plan.

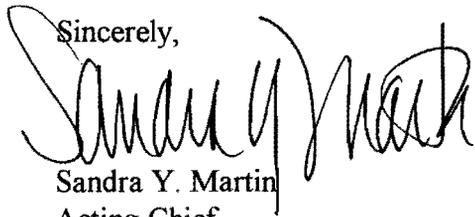
WSMR's July 25, 2003 NOD response was again deemed deficient and, as a result, NMED is issuing this second NOD. NMED's numbered comments are included as Attachment 1 and constitute our third technical review of WSMR's RCRA Permit Application. WSMR must submit replacement pages or replacement sections within thirty (30) days of receipt of this NOD. In

Thomas A. Ladd
January XX, 2004
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addition, WSMR must include a response letter that indicates exactly where revisions have been made, cross-referencing NMED's numbered comments. A red-line/strike-out version of the changes made is also requested by NMED. Please include a digital version of all response material. Following WSMR's submission of replacement pages or replacement sections, NMED will continue drafting WSMR's RCRA Permit.

If you have any questions regarding the Waste Analysis Plan (WAP) comments of this NOD call Steve Pullen at (505) 428-2544. If you have any questions concerning the rest of this NOD call Cheryl Frischkorn at (505) 428-2550.

Sincerely,



Sandra Y. Martin
Acting Chief
Hazardous Waste Bureau

SYM:caf

cc: C. Frischkorn, NMED HWB
J. Kieling, NMED HWB
D. Cobrain, NMED HWB
G. von Gonten, NMED HWB
S. Pullen, NMED HWB
Gene Forsythe, WSMR
WSMR 2004 File

ATTACHMENT 1

ATTACHMENT 1

The following comments comprise NMED's second technical review of White Sands Missile Range's (WSMR's) Permit Application. WSMR must provide a written response to each numbered comment that was deemed not adequate by the New Mexico Environment Department (NMED). WSMR must submit applicable and appropriate revisions to the application. If a section is revised, WSMR must submit an entire new section.

COMMENT 1

NOD COMMENT 1

NMED recommends that revised Part A of the permit application using the May 2002 revised forms and instructions (referenced above). When completing the Part A portion of the permit application, WSMR must include information pertaining to the entire facility. Please note that all Part A portions of any pending permit application should be the same.

WSMR's RESPONSE

The revised document uses the requested forms.

RESPONSE EVALUATION—NOT ADEQUATE

Although WSMR submitted the revised Part A forms, the forms are not filled out completely or correctly. Only two items were filled out on the revised forms. WSMR must fill out the revised May 2002 Part A forms completely and correctly.

COMMENT 2

NOD COMMENT 2

When completing the Part A portion of the permit application, WSMR must include information pertaining to the entire facility and not just the OB/OD. Please note that all Part A portions of any pending permit applications should be the same.

WSMR's RESPONSE

The requested items are included to address the entire facility.

RESPONSE EVALUATION---NOT ADEQUATE

WSMR did not fill out the revised Part A form. Only two items are filled out. WSMR must completely fill out the revised Part A. Please utilize the Part A instructions for guidance.

COMMENT 3

NOD COMMENT 3

In accordance with 20.4.1.900 NMAC, incorporating 40 CFR 270.11, all permit applications submitted by a municipality, State, Federal, or other public agency must be signed by a principal

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executive officer or ranking elected official. In other words, the acceptable signatory for WSMR's permit applications is the Installation Commander; therefore Brigadier General Engle must sign the permit application (see Attachment 3).

WSMR's RESPONSE

As subsequently discussed with you, the proper signatory is the Garrison (Installation) Commander or designated alternative. The revised submittal includes the proper signature.

RESPONSE EVALUATION---NOT ADEQUATE

Upon further review it has been determined that Brigadier General Engle must sign all permit applications, with no exceptions or alternatives. Ronnie J. Hickok is the Garrison Commander (individual responsible for all units assigned to a base or area for defense, development, operation, and maintenance of a facility), not an Installation Commander (the individual responsible for all operations performed by an installation), nor is he the owner/operator. The Army is the owner/operator. Revise the Part A form to include Brigadier General Engle's signature.

COMMENT 4

NOD COMMENT 4

Revised Part A of the permit application to list the Hazardous Waste numbers in numerical order.

WSMR's RESPONSE

The waste codes are listed in numerical order, as requested. In addition, U098 (UDMH) at 1,000 annual storage has been added.

RESPONSE EVALUATION---ADEQUATE

WSMR's response is adequate.

COMMENT 5

NOD COMMENT 5

In Part A of the permit application, the last entry is section XIV states "all other P-and U-listed wastes is 10,000." State whether the "10,000" is for both P- and U-listed wastes combined or if it should be "10,000" for each.

WSMR's RESPONSE

This has been clarified. The 10,000 is for both, combined, and is included to allow the possibility of laboratory standards and reagents, as well as possible materials to be used in future testing activities.

RESPONSE EVALUATION---ADEQUATE

WSMR's response is adequate.

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COMMENT 6

NOD COMMENT 6

Section 10.2 refers to Form 1348-1. Please submit a blank Form 1343-1 with the revised permit application. WSMR must add a section to the permit application that includes all forms (blank) referenced in the application (i.e. Form 1348-1, Disposal Turn-In Document, DA Form 2765-1, etc.).

WSMR's RESPONSE

Blank copies of all the appropriate forms are included with the submittal. Since this document has been revised, different forms are now called out.

RESPONSE EVALUATION---NOT ADEQUATE

WSMR's response is inadequate. WSMR did not supply DA Form 2765-1. WSMR should make sure that all forms (e.g., chain of custody forms) used and referenced in the permit application have been included and that revised forms (See Comment 11) are submitted when changed.

COMMENT 7

NOD COMMENT 7

Section 10.4, third bullet refers to 40 CFR 268.4(a) (Treatment Surface Impoundment Exemption). WSMR must explain the use of this citation and whether surface impoundments are going to be used for treatment.

WSMR's RESPONSE

There is no intention to use surface impoundments for treatment. This typo has been corrected.

RESPONSE EVALUATION---ADEQUATE

WSMR's response is adequate.

COMMENT 8

NOD COMMENT 8

WSMR must remove the citation 40 CFR 268.8 from Section 10.4, eighth bullet since this citation does not exist (RESERVED); perhaps the appropriate citation should be 40 CFR 268.9.

WSMR RESPONSE

The typo has been corrected.

RESPONSE EVALUATION---ADEQUATE

WSMR's response is adequate.

COMMENT 9

NOD COMMENT 9

WAP Section 2.4 describes various solid and universal wastes that will be stored at the Hazardous Storage Facility (HWSF) in addition to hazardous wastes. Permit Application Section 2 (Closure Plan) addresses the investigation and cleanup of constituents in hazardous wastes, but fails to address the solid and universal wastes being stored at the HWSF. WSMR must revise the Closure Plan to address this deficiency. WSMR must clean close the HWSF in accordance with 20.4.1.500 NMAC, incorporating 40 CFR 264.111. To do this, WSMR must investigate for all materials ever stored at the HWSF or conduct a 40 CFR 261 appendix VIII scan on all appropriate media for closure.

WSMR's RESPONSE

The Closure Plan has been revised to indicate that a 40 CFR 261 Appendix VIII scan will be conducted on all appropriate media for closure.

RESPONSE EVALUATION---ADEQUATE

WSMR's response is adequate, although WSMR did not submit a revised Closure Plan with the July 25, 2003 submittal. WSMR must revise the Closure Plan as stated in their response and submit the revised Closure Plan.

COMMENT 10

NOD COMMENT 10

WSMR must submit all Standard Operating Procedures (SOPs) that are referenced in the permit application, including the off-range missile impact SOPs.

WSMR's RESPONSE

All the SOPs dealing with hazardous waste referenced in the application are submitted along with the application. There is no SOP for the potential of off-range missile impact (See response to COMMENT 54). WSMR has a standardized disaster plan. Actual events of an off-range missile impact are, and will be, addressed on a case-by-case basis. Hazardous waste management and disposal issues for off-range missile impacts have been dealt with on a case-by-case basis, and will continue to be for these unplanned events. Work plans and reports are submitted to NMED.

RESPONSE EVALUATION

This issue will be addressed as a separate issue at a later date.

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COMMENT 11

NOD COMMENT 11

WSMR's WAP fails to fully identify the waste characterization regulations applicable to the storage of hazardous wastes in accordance with 20.1.4.500 NMAC, incorporating 40 CFR 264.13 (a)(1). NMED considers the applicable regulations synonymous to data quality objectives (DQOs) of a WAP.

WSMR must revise WAP Section 2.1 to reference and thoroughly address the DQOs provided in Attachment 4. All waste characterization, whether performed using real-time sampling and analysis, acceptable knowledge (AK), or a combination of the two, must accomplish the objectives of the WAP. WAP Section 2.7 must be revised to address how HWSF personnel will perform a Quality Assurance/Quality Control (QA/QC) analysis to ensure that all waste characterization has met the DQOs.

WSMR's RESPONSE

WSMR is using a system of satellite accumulation points (SAPs) throughout the range. Additional information about the waste management flow is provided in the revised permit application. For most SAPs, the waste streams currently identified are identified and well described. If the wastes produced at the particular facility were to change, that change would be identified and a new waste analysis profile would be prepared for the new/changed waste stream. Forms are extensively checked at each movement of waste – from the SAP to a less-than-90 day yard and then to the HWSF. This checking is performed routinely and consistently.

RESPONSE EVALUATION---NOT ADEQUATE

WSMR's response is partially adequate. Waste Analysis Plan (WAP) Section 2.1 has been revised to include references to the waste characterization regulations that apply to the storage of hazardous wastes (DQOs). However, the reply in WSMR's table of responses appears irrelevant to NMED's comment and WAP Section 2.7 does not include procedures to ensure that waste characterization will meet all applicable DQOs. WSMR's response primarily discusses wastes associated with SAPs and waste characterization forms. NMED does not understand how this relates to ensuring full identification of the waste characteristics applicable to the storage of hazardous wastes.

WAP Section 2.7 (quality assurance and control) discusses numerous QA/QC procedures and generally references EPA guidance manuals on waste characterization and sampling, but does not specifically mention the data quality objectives in Section 2.1. Furthermore, the Waste Description Record form and the Request Waste Profile Assignment form fail to sufficiently query for the DQOs.

WAP Section 2.7 and the forms must be revised to, at a minimum, address procedures to ensure the following:

- The identification of all applicable EPA Hazardous Waste numbers,
- Determination of whether the waste must be treated before it can be land disposed,
- Determination of the presence and concentration of waste constituents that might cause unlawful air emissions; and,
- Determination of the presence of prohibited materials (e.g., waste numbers not listed on the Part A).

COMMENT 12

NOD COMMENT 12

WAP Section 2.4 (first sentence) states that personnel associated with the generating process will collect all samples. 20.4.1.500 NMAC, incorporating 40 CFR 264.16, requires sufficient personnel training to ensure compliance with waste characterization regulatory requirements.

WSMR must modify Section 11 to specify that generators and those involved in waste characterization will have appropriate and specialized training to perform waste characterization tasks properly. WSMR shall reference this specialized training in Section 2.

WSMR's RESPONSE

This information has been included in Sections 2 and 11, as requested. Training requirements for each job classification associated with hazardous waste management are detailed in WSMR Reg. 200-1, included as part of the submittal.

Samples are collected at the less-than-90-day storage facilities. Training for those personnel is specified in the Environmental Compliance Handbook, which accompanies WSMR Reg. 200-1.

RESPONSE EVALUATION---NOT ADEQUATE

WSMR's response is inadequate. In its response to comments WSMR has focused strictly on waste sampling, individuals who sample wastes, and their training responsibilities. NMED is requiring a discussion of the general waste characterization training required of individuals directly involved with the waste generation process. WAP Section 2.4 has been revised to state, "All hazardous waste samples are collected by either WSMR HAZMINCEN personnel or contractor personnel at the LiTe-90 storage area." The Section further states, "All personnel performing sampling are trained, as detailed in WSMR Reg. 200-1 and the accompanying Environmental Compliance Handbook."

NMED remains concerned that the individuals performing general waste characterization are insufficiently trained to properly perform the activity in compliance with the regulations. The bases of NMED's concerns are the inappropriate waste characterization

processes described in the WAP and WSMR's contradictory and overly general commitments to train waste generators. NMED is particularly concerned regarding generator training of the nuances associated with making a Land Disposal Restrictions (LDR) status determination and knowing when a waste or waste generating process has undergone a significant change.

New Mexico regulation 20.4.1.500 NMAC, incorporating 40 CFR 264.16(b)(1), specifies "Facility personnel must successfully complete a program of classroom instruction or on-the-job training that teaches them to perform their duties in a way that ensures the facility's compliance with the requirements of this part." *Facility*, as defined in 20.4.1.500 NMAC, incorporating 40 CFR 270.2, means any facility or activity subject to regulation under the RCRA program. 40 CFR 270.14(b)(12) requires that a permit application include an outline of the training program and a brief description of how the training program is designed to meet actual job tasks. New Mexico regulation 20.4.1.500 NMAC, incorporating 40 CFR 264.16(d)(1), requires the maintenance of records of job titles for each position at the facility related to hazardous waste management.

WSMR's revised application reference to HAZMINCEN personnel or contractor personnel does not match with positions specified to undergo training in Reg. 200-1 and the Environmental Compliance Handbook. HAZMINCEN is defined in WAP Section 2.2 as Hazardous Waste Minimization Center and as the organization responsible for waste management including the operation of the Hazardous Waste Storage Facility (HWSF). It is not clear whether this organization includes generators, SAP Managers, or others involved in initial waste characterization. WSMR Regulation 200-1 refers to Environmental Compliance Officers (EOCs) and the only references to training are at Section 4 where it states that the EOCs "will be properly trained to manage their environmental program" and "will train their subordinates" and Section 7 which requires that EOCs "attend a formal comprehensive classroom training course within four months after appointment as EOC."

A primary position title apparently responsible for performing waste characterization is a Satellite Accumulation Point (SAP) Manager. Section 2.2 states that SAP Managers are responsible for identifying when a waste generating process undergoes a significant change. The Section states that forms (Waste Description Forms) "are reviewed and approved by personnel knowledgeable of the waste producing process at the SAP..." Finally, WSMR's Environmental Compliance Handbook, which consists solely of a Waste Description Record form, identifies the SAP Manager as its primary signatory.

WAP Section 2.2 states, in a discussion of the LDR status determination process that, "waste streams vary only within limited parameters, such as the relative concentrations of individual constituents. Should the waste produced at the particular activity change, that change would be

identified by the SAP Manager and a new waste description and plan for characterization prepared.” This statement demonstrates a lack of understanding of the highly sensitive nature that a waste’s LDR status has to slight changes in the concentrations of individual waste constituents.

The Training Program emphasizes emergency response training and provides few commitments related to proper hazardous waste characterization. NMED reiterates its requirement that WSMR modify Section 11 to specify that generators and others involved in initial waste characterization must have appropriate and specialized training to perform waste characterization tasks properly. The revised language must include a commitment to train WSMR’s Permit Renewal Application Section 11 (Training Program), refer to Regulation 200-1 and commit to training “all personnel directly involved in the hazardous waste program”, including generators in the considerations necessary to making an appropriate LDR status determination and in identifying when a waste or waste generating process has undergone a significant change. WSMR must also revise its application language to ensure that position titles associated with training are consistent. WAP Section 2.2 must be revised to reflect how critical slight changes in the concentrations of individual waste constituents may be to a waste’s LDR status.

COMMENT 13

NOD COMMENT 13

WAP Section 2.2 refers to standard operating procedures used by WSMR to characterize hazardous wastes.

WSMR must provide copies of all Standard Operating Procedures (SOPs) related to hazardous waste characterization (e.g., WSMR Regulation 200-1 and DA Form 2765-1 referenced in WAP Section 2.2).

WSMR’s RESPONSE

All SOPs referred to are, or will be, provided, as requested. WSMR Reg. 200-1 is provided in draft. Its supporting handbook is in process and will be provided when available.

RESPONSE EVALUATION---NOT ADEQUATE

WSMR’s response is partially adequate. Although WSMR Regulation 200-1 was provided, DA Form 2765-1 was not provided. WSMR Reg. 200-1 and the Environmental Compliance Handbook are not finalized and apparently contain contradictory WAP language.

NMED requires WSMR to submit a SOP with its permit application when the application refers to the SOP as either explaining or requiring particular hazardous waste management practices. NMED will review those SOPs to ensure that its hazardous waste management practices are consistent with the application. NMED generally expects all relevant SOP process language to be

included in a permit application. NMED does not incorporate the SOP itself into a permit because it often contains unrelated language that might require periodic alteration and because incorporating it might cause the entire SOP to be an enforceable document subject to 20.4.1.900 NMAC, incorporating 40 CFR 270.42 permit modification requirements. A SOP might be attached to a permit as a reference.

DA Form 2765-1 was neither provided nor addressed in WSMR's response. Section 2.2 of the 1999 version of the WAP states, "The generator is required to fill out and certify a Disposal Turn-in Document (DA Form 2765-1) which is submitted with the waste. Is NMED to assume the form is no longer used and that the Waste Description Form has replaced it?"

Regarding the draft SOPs: WSMR must both finalize the SOPs and commit to abiding by them, or revise the WAP to include any applicable procedure described in the draft SOP. WAP Section 2.2, paragraph 3 states, "Current standard operating procedures WSMR Regulation 200-1 and the accompanying Environmental Compliance Handbook (provided at Appendix H) call for waste to be analyzed prior to coming into the HWSF or to be completely characterized according to acceptable knowledge(AK) based on the Material Safety Data Sheets (MSDSs) associated with the material." WSMR must revise its WAP to specify that, waste will be analyzed prior to coming into the HWSF or will be completely characterized according to acceptable knowledge based on the Material Safety Data Sheets (MSDSs) associated with the material. This commitment is included in WSMR's current standard operating procedures, Regulation 200-1 and the accompanying Environmental Compliance Handbook (provided at Appendix H).

WAP Section 2.2, paragraph 4 states, "If the waste stream will be recurring, a SAP will be set up, and managed in accordance with the procedures detailed in WSMR Reg. 200-1 and the accompanying Environmental Compliance Handbook." Because the procedures detailed in the SOPs do not directly affect waste characterization or other aspects of the waste management procedures at the HWSF, NMED has determined that how the wastes are managed at the SAPs is not relevant to the permit and the sentence should be deleted. Proper completion of the Waste Description Record is relevant and the reference to the Record at WAP Section 2.3, final paragraph is appropriate.

WAP Section 2.4, paragraph 1 states, "All personnel performing sampling are trained, as detailed in WSMR Reg. 200-1 and the accompanying Environmental Compliance Handbook." A more appropriate reference would be Application Section 11, *Training Program*. That section must be revised to be consistent with the above referenced SOPs.

WAP Section 2.7.3 states, "The current operating procedure for the HWSF is provided in Appendix H and provides further information." The Section outlines a number of procedures but

if Appendix H contains other pertinent waste characterization procedures, the WSMR must revise the WAP to include those procedures.

Regarding contradictory language, WAP Section 2.2, Paragraph 3, references WSMR Reg. 200-1 and the Waste Description Form with regard to wastes either being analyzed or characterized by AK prior to arrival at the HWSF. However, subsequent WAP paragraphs, specifically paragraphs 6 and 7, contradict the SOPs with regard to the appropriate use of AK. The WAP suggests a strong preference for characterizing wastes via AK while the Waste Description Record, Section III, suggests that the only rationale for not characterizing a waste by laboratory analysis is that the waste is a "sole ingredient, single product." The Waste Description Record (Page 4) states "a lab analysis is not required to be filed at the SAP for a particular container if you can prove that only a single item from a single manufacturer is collected in the container. Otherwise an analysis is required. For example, waste paint from two or more manufacturers or waste paint from a single manufacturer when one is latex and the second is oil-based are both situations that require lab analysis." NMED believes that the SOP's preference for laboratory analysis is the more appropriate procedure and suggests that WSMR resolve this contradictory language by incorporating the Waste Description Record's preference for laboratory analysis into the WAP.

WAP Section 2.4 relies on WSMR Reg. 200-1 and the Environmental Compliance Handbook to detail sampling procedure training. WSMR Reg. 200-1, Section 4 does require Environmental Compliance Officers (ECOs) to be properly trained and to train their subordinates, but has no reference to sampling procedures. It is not clear what waste characterization responsibilities these individuals have because they are not referred to in the WAP. The Environmental Compliance Handbook also has no reference to sampling procedures. Other consistency issues associated with these SOPs and training commitments are discussed in the response evaluation to Comment 12.

The Environmental Compliance Handbook appears to consist only of an example Waste Description Record form. NMED is concerned that the Waste Description Record form, Section IV, *Hazardous Waste Determination*, does not conform to 20.4.1.300 NMAC, incorporating 40 CFR 262.11, nor does it conform to the hazardous waste identification process described in EPA's waste characterization guidance document (EPA 1994) Appendix A. NMED is also concerned that the Waste Description Record form inappropriately implies, in a statement at the bottom of Page 3, that significant waste changes are only the result of the introduction of different substances and are not the result of changes in the concentrations of substances. Because hazardous waste characteristics and the LDR status of a hazardous waste are highly concentration dependent, and because of the Waste Description Record language referenced above, NMED is concerned that these two very important waste criteria are not being appropriately identified and responded to. WSMR must revise both its WAP and the Waste Description Record form accordingly.

COMMENT 14

NOD COMMENT 14

20.1.4.500 NMAC, incorporating 40 CFR 264.13(b)(1), requires that a WAP describe the parameters for *each* (emphasis added) hazardous waste to be characterized, and describe the rationale for the selection of those parameters (explanation provided in the regulation). NMED interprets this as a requirement that WAPs actually discuss these characterization criteria for each and every waste. Although WSMR's WAP does refer to "parameters" at Section 2.5, the reference is too general and the associated rationale is not addressed.

For facilities like WSMR that are predominantly research and development facilities with many non-routine wastes, NMED chooses to allow the facility to specify parameters for routinely generated hazardous waste "types" instead of for each and every waste. NMED has identified the following waste types from WSMR's Part A application and Appendix C (Drum Tracking Logs) for which characterization parameters and associated rationale must be discussed in the WAP; spent solvents, waste oil, contaminated fuels, contaminated rags, lab packs, paint and paint related wastes, photographic wastes, and Temperature Test Facility (TTF) Evaporation Tank sludge.

For the remainder of WSMR's wastes, the WAP must establish a "characterization plan" unique to each waste that, at a minimum, identifies the characterization parameters and the associated rationale. NMED considers this characterization plan to be equivalent to the sampling plan discussed in U.S. EPA's *Test Methods for Evaluating Solid Wastes – Physical/Chemical Methods* (SW-846). The characterization plans do not necessarily have to be incorporated into the WAP, but they must be in-place prior to characterization of their respective waste, they must conform to the WAP or other portions of the Permit, and they must become part of WSMR's permanent operating record.

WSMR's characterization plans should include a description of the waste, the objectives of the characterization, identification of the individuals involved in the data collection and their responsibilities, reference to, or inclusion of, the specific sample collection and analysis procedures that will be followed, enumeration of QC procedures to be followed, and descriptions of all project documentation.

WSMR's RESPONSE

Each established SAP will prepare and retain as part of the logbook a waste description record for each separate waste stream (individual collection container) at the SAP. These will be reviewed annually. New SAPs, as they are being set up, will complete a waste description record for the waste stream to be collected. This sheet will document the acceptable knowledge that is included in the waste characterization and identify if analytical tests necessary.

A generalized discussion of the characterization parameters and the rationale for the selection is provided in Section 2 for the major waste types generated at WSMR. Note - WSMR does not generate waste oil; rather, used oil is recycled. There is no longer an evaporation tank associated with TTF, so no sludges are generated.

For the non-routine or unique/one-time waste streams, the WAP addresses the requirement to prepare a waste characterization plan prior to the characterization of the waste stream, and to prepare a hazardous waste determination which incorporates the characterization plan, all analytical data used to support the determination, and the waste codes assigned to the waste. In addition, Section 2 addresses the requirement to maintain all the documentation as part of the permanent operating record.

RESPONSE EVALUATION---NOT ADEQUATE

WSMR's response is partially adequate. WAP Section 2.3, final paragraph, specifies that WSMR will commit to create a characterization plan for wastes undergoing laboratory analysis, but not for all wastes as required. The WAP fails to include a commitment to incorporate all of the requirements mentioned in the last paragraph of NOD COMMENT 14.

The regulatory basis for NMED's requirement of a "characterization plan", plus what NMED considers to be a reasonable approach to fulfilling these regulatory requirements, is provided in the first three paragraphs of NOD COMMENT 14. WSMR's response appears to indicate that WSMR believes the regulatory requirement to identify parameters only applies to laboratory-analyzed wastes. WSMR must note that the 20.4.1.500 NMAC, incorporating 40 CFR 264.13(b)(1) reference to the term "analyzed" in the phrase "parameters for which each hazardous waste will ... be *analyzed*" (emphasis added) does not limit the regulatory requirement only to wastes that will undergo laboratory analysis, but is meant to include all wastes including wastes, that will be characterized by AK. In drafting this particular regulation and other hazardous waste regulations, EPA used the term "waste analysis" synonymously with "waste characterization." EPA uses the term "waste analysis" similarly in its waste *analysis* guidance. (see EPA 1994, Section 2.2)

The first paragraph of WSMR's response discusses a form titled *Waste Description Record* that WSMR uses to document waste characterization. Although NMED believes that this form may be an appropriate method to document waste characterization results, NMED does not understand how a generic form can be used to fully and appropriately characterize a waste.

The parameters and associated rationale discussed in WAP Section 2.5 and listed on Table 2-3 are deficient. The objectives listed in WAP Section 2.1 identify additional parameters that wastes must be characterized for, including: free liquids, LDR considerations such as the identification of

underlying hazardous constituents, attainment of treatment standards, identification of a significant waste change, determination of the presence of prohibited materials, and the determination of the applicability of RCRA air emission requirements included in 20.4.1.500 NMAC, incorporating 40 CFR part 264, subpart CC. AK must be removed from Table 2-3 because it is not a parameter for which wastes are characterized.

The WAP Section 2.5 listing of parameters and rationale regarding spent solvent is deficient and requires revision. Table 2-3 implies that by not checking the boxes for TCLP organics and metals, that spent solvent cannot also be characteristically hazardous for organic or metal constituents. This is incorrect. EPA noted that “solvents are likely to contain other toxic contaminants. In fact, solvents become spent when they have been contaminated with other materials (e.g., toxic heavy metals or toxic organic compounds)...” [50 FR 53317]. WSMR must explain why SVOCs are not a parameter for which spent solvents are characterized. The WAP must also identify that paint and paint related waste, must be evaluated for TCLP metal and organic parameters.

The WAP Section 2.5 listing of parameters and rationale regarding Laboratory Packs is deficient and requires revision. Lab packs is a category of wastes that can be almost any type of waste and must therefore be considered for almost all parameters and for almost all rationales. NMED recognizes that AK may be an appropriate method to characterize wastes that consist largely of non-defiled chemical products, but as discussed in the second paragraph of this evaluation, parameters must be identified for *all* wastes regardless of how they are characterized.

WSMR must revise its WAP to commit to include a characterization plan for all wastes not already addressed in the WAP as required. As discussed above, WSMR’s WAP commits to creating a plan for waste destined to undergo laboratory analysis and NMED believes that the WAP may adequately address waste characterization for those seven wastes specifically mentioned (once revised in accordance with this NOD). However, the WAP must include a characterization plan for wastes other than the seven specifically mentioned and those wastes that will not be characterized by laboratory analysis. The WAP must also be revised to include a commitment to incorporate all of the requirements mentioned in the last paragraph of NOD COMMENT 14.

COMMENT 15
NOD COMMENT 15

The used batteries and pesticides referenced in the list of wastes stored at the HWSF in Section 2.3 may be “universal wastes.” WSMR has the option of managing universal wastes under the less stringent regulations at 40 CFR 273 or through a permit. Universal wastes are exempt from the permitting requirements of 20.4.1.500 NMAC, incorporating 40 CFR part 264 and 270 by 20.4.1.500 NMAC, incorporating 261.9 and 40 CFR 264.1(g)(11). If WSMR does choose to

manage these or any other appropriate wastes as universal wastes, and to store the wastes at the HWSF, then the wastes must be clearly labeled as universal wastes to distinguish their regulatory status.

WSMR's RESPONSE

Lamps, including fluorescent tubes, and used batteries are managed as universal wastes. These wastes are not stored at the HWSF; rather they are managed at the HAZMINCEN. However, from time to time it is possible that it might be necessary to manage these waste streams at the HWSF. Should that be the case, they would be managed in full compliance with the permit.

Information to this effect has been added to the text of the permit application.

RESPONSE EVALUATION---ADEQUATE

WSMR's response is adequate.

COMMENT 16

NOD COMMENT 16

WAP Section 2.2 states, "There are few constant waste streams that can be characterized and verified from year to year. Thus, most waste streams would be considered new or non-routine waste streams." WSMR's WAP must specify the frequency that *routinely* (emphasis added) generated wastes' characterization will be re-evaluated as required by 20.4.1.500NMAC, incorporating 40 CFR 264.13(b)(4).

WSMR must identify all waste streams that it considers "routine." Furthermore, WSMR must address the requirements to propose a re-evaluation frequency as specified in Attachment 6, or propose an acceptable alternative.

WSMR's RESPONSE

This section has been revised to reflect the current approach using SAPs as the primary collection point for almost all wastes generated at WSMR. The waste streams collected in each container at the various SAPs are routine, in the sense of being readily identified and only varying within limited parameters. For each SAP, the SAP Manager, in consulting with the worksite supervisor (if these are different individuals) will prepare and maintain a waste description record form, providing the information available about the waste stream collected in each container, and identifying if analytical testing is required to complete the waste characterization. For each SAP, a reevaluation will be performed annually, or when the process generating the waste changes. Completed forms for existing SAPs will be provided as Appendix I, when available. (See also Comment #22)

RESPONSE EVALUATION---NOT ADEQUATE

WSMR's response is partially adequate. WSMR has revised WAP Section 2.2 by describing how satellite accumulation points serve as the primary collection point for almost all wastes generated at WSMR and that the waste streams collected in each container at the various SAPs are considered routine. However, NMED does not agree with WSMR's definition of routine as, "being readily identified and only varying within limited parameters," and believes that the definition may cause WSMR to be out of compliance with the regulations. WSMR specifies that it will reevaluate wastes annually at Section 2.4, paragraph 11, but this commitment is indirect and located in an inappropriate portion of the WAP. NMED requires that the WAP be revised accordingly.

The issue of waste characterization reevaluation is associated with the issue of "routine" wastes because non-routine or one-time wastes would obviously not require reevaluation. One of NMED's concerns with WSMR definition of routine wastes is that it inappropriately implies that wastes can undergo constituent concentration changes and still be considered the same waste. NMED considers a routine waste to be a waste that is generated in multiple batches (i.e., multiple containers at different times) and has identical pertinent hazardous characteristics, including the LDR status of the waste. Because a waste may or may not be LDR prohibited (i.e., exceed its applicable LDR treatment standard(s)) due to extremely minor changes in constituent concentration, WSMR's consideration that a waste "varying within limited parameters" would not be significantly changed and would be considered a routine waste is inappropriate.

The concept of waste varying within limited parameters and still being the same waste is also an issue in WAP Section 2.2, first paragraph, and on the Waste Description Record form, page 3, bottom box, where it states "This form must be reviewed (and revised) each time the waste generating process changes (producing a container that would have different substances – not different amounts of previously listed substances)." This problem results, in part, from the WAP's inadequate explanation of the characterization necessary to perform a proper LDR status determination.

WSMR's commitment to reevaluate wastes annually at Section 2.4, paragraphs 10 and 11 is indirect and located in an inappropriate Section of the WAP (i.e., *Sampling Procedures*). NMED requires that WSMR incorporate the reevaluation criteria specified in Attachment 6 of the March 7, 2003 NOD into WAP Section 2.7, *QA/QC Procedures*.

COMMENT 17

NOD COMMENT 17

Generators are required to identify both underlying hazardous constituents (UHCs) in characteristic wastes and constituents of concern in listed wastes as part of a waste's LDR status

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determination as specified at 20.4.1.800 NMAC, incorporating 40 CFR 268.9(a) and 268.7. WSMR's WAP fails to address how these hazardous constituents will be identified and fails to address how this characterization will be documented in the facility operating record.

WSMR must revise their WAP to address the requirement to provide the hazardous constituent information.

WSMR's RESPONSE

The WAP has been revised as requested.

UHCs in characteristic wastes and constituents of concern in listed wastes are identified based on acceptable knowledge of the process generating the wastes in many cases. In addition, most waste streams are analyzed and the analytical results are evaluated. This information is used in preparation of the LDR paperwork, and documentation of the analytical results is maintained.

RESPONSE EVALUATION---NOT ADEQUATE

WSMR's response is partially adequate. NMED is concerned that the procedures to characterize wastes for their LDR status are located throughout the WAP instead of being co-located as is suggested by EPA 1994 and that this unorganized LDR information will cause wastes to be mischaracterized. WSMR should address this issue and revise Table 2-3 to include the determination of a waste's LDR status (including the identification of UHCs) as one of the rationales for using the characterization parameters.

COMMENT 18

NOD COMMENT 18

WAP Table 2.3 lists F001-F005 inappropriately. These solvent wastes must be characterized for the presence of all constituents of concern as specified in 20.4.1.800 NMAC, incorporating 40 CFR 268.7(a)(2) and (3) and at *Generator Paperwork Requirements Table, Required Information, Item 3*. In addition, WAP Table 2-3 should be revised to correspond to the table in 20.4.1.800 NMAC, incorporating 40 CFR 268.40 (Treatment Standards for Hazardous Wastes), with columns for wastewaters and non-wastewaters and a flag for those constituents required to undergo the Toxicity Characteristic Leaching Procedure (TCLP) sample preparation process.

WSMR must revise WAP Table 2.3 accordingly.

WSMR's RESPONSE

This particular table has been deleted. References are supplied to the appropriate tables in the regulations.

RESPONSE EVALUATION---ADEQUATE

WSMR's response is adequate.

COMMENT 19

NOD COMMENT 19

WAP Section 2.2 refers to waste characterization via "process knowledge." NMED prefers the term "acceptable knowledge" (AK) which is defined the U.S. EPA guidance; "Waste Analysis at Facilities that Generate, Treat, Store, and Dispose of Hazardous Waste" dated April 1994 (EPA 1994). That definition and a portion of NMED's policy on the use of AK are summarized in Attachment 5.

For consistency purposes, WSMR must incorporate into the WAP both the AK terminology and methodology specified at Attachment 5.

WSMR's RESPONSE

The requested revision has been made.

RESPONSE EVALUATION---NOT ADEQUATE

WSMR's response is partially adequate.

WSMR has replaced the term "process knowledge" with "acceptable knowledge" where appropriate. However, WSMR's discussion of AK is inconsistent and incomplete. The WAP implies that AK consists primarily of MSDSs. However, the use of MSDSs to characterize wastes overlooks UHCs in characteristic wastes. Specifically, if MSDSs are the sole reference used to characterize spent solvents, then NMED believes that although the appropriate solvents will be identified, hazardous constituents in the material that the solvent came in contact with might be overlooked.

The WAP is inconsistent on the issue of whether AK is sufficient to characterize wastes. Section 2.2, paragraph 6 states, "Acceptable Knowledge is the knowledge that a generator has about the waste, such as the chemical composition and content of the waste, as well as the process that produced the waste. This knowledge supports the waste characterization and *is sufficient* (emphasis added) to determine the hazards associated with managing and storing the waste and to identify any restrictions for disposal." The next paragraph discusses waste sampling and analytical procedures used when AK is insufficient. WSMR must revise WAP Section 2.2, paragraph 6 to state the following; "This knowledge supports the waste characterization and *may be* sufficient to determine the hazards associated with managing and storing the waste."

WSMR did not incorporate Attachment 5 as required. At a minimum, WSMR must incorporate the operative portion of Attachment 5, which states "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.”

COMMENT 20

NOD COMMENT 20

Paragraph 2 in WAP Section 2.4 implies that a representative sample of waste is collected to ensure proper characterization in all situations. However, in several other locations, the WAP implies that AK (or process knowledge) is the sole characterization method.

WSMR must address this inconsistency throughout the WAP.

WSMR's RESPONSE

The text has been revised to clarify whether sampling is required, or AK will be the sole basis for the characterization.

RESPONSE EVALUATION---ADEQUATE

WSMR's response is adequate.

COMMENT 21

NOD COMMENT 21

The Container management requirements specified in 20.4.1 NMAC, incorporating 40 CFR 264.173(b) and 270.15(b)(1) differ for wastes with and without free liquids. The term “free liquids” is defined at 40 CFR 260.10. The WAP does not describe how the free liquid content of wastes will be determined.

The WAP must be revised to provide procedures for determining the free liquid content of wastes.

WSMR's RESPONSE

Use of the paint filter method for determining the presence or absence of free liquids has been included.

RESPONSE EVALUATION---ADEQUATE

WSMR's response is adequate. Language regarding the procedure for determining the presence of free liquids is provided at WAP Section 2.4, paragraph 5.

COMMENT 22

NOD COMMENT 22

When the process that generates a waste changes, additional waste characterization is required by 20.4.1 NMAC, incorporating 40 CFR §§ 264.13 (a)(3)(i) and 268.7 (a)(3)(iii). WSMR's WAP does not address these regulations.

WSMR's WAP must be revised to provide procedures used to determine whether a routine waste generating process has changed sufficiently to warrant the creation of a new waste stream requiring characterization.

WSMR's RESPONSE

For each established SAP, each waste stream will be reevaluated and verified annually. A formal determination will be made, and recorded in the logbook, by the SAP Manager that the waste stream remains unchanged. In addition, whenever the process generating the waste changes, the SAP manager will be notified. A process change will be identified any time new or different chemicals are brought into the shop. Part of the process of identifying changes will include the manager of the less-than-90 day yard periodically checking with the SAP operator and/or manager to ensure that the process generating the waste remains unchanged. Should a change be identified, a new Waste Description Record will be prepared and a notation will be entered into the weekly inspection and maintained in the logbook for the SAP.

RESPONSE EVALUATION---ADEQUATE

WSMR's response is adequate. Language regarding procedures used to identify waste stream changes is in the following WAP locations: Section 2.2, paragraph 1, final two sentences; Section 2.2, paragraph 4; Section 2.3, final paragraph; and Section 2.4, paragraphs 11 and 12. However, NMED is concerned that WSMR does not recognize the significance of changes in the concentrations of waste constituents. For a discussion on this issue see COMMENT 16.

COMMENT 23

NOD COMMENT 23

WAP Section 2.2 (third paragraph) inappropriately refers to the *testing* of a waste to determine whether it is listed. Performing a hazardous waste (listing) determination of a solid waste requires determining whether the process that generated the waste is listed in one of the tables in 20.4.1.200, incorporating 40 CFR 261 subpart D. Generally there is no testing involved; perhaps WSMR meant to refer to subpart C.

WSMR must revise their WAP by specifying that WSMR will be performing a hazardous waste determination, listed or characteristic, on all solid wastes.

WSMR's RESPONSE

The WAP has been revised as requested. Characteristic wastes require testing. Listed wastes are determined through an evaluation of the process that generated the waste.

RESPONSE EVALUATION---ADEQUATE

WSMR's response is adequate.

COMMENT 24

NOD COMMENT 24

WAP Section 2.2 (third paragraph) inappropriately refers to "restricted" wastes. U.S. EPA guidance, *Land Disposal Restrictions: Summary of Requirements*, revised August 2001, distinguishes between restricted and prohibited wastes. The guidance states, "prohibited wastes have an EPA-established treatment standard in effect" and "virtually all current wastes have treatment standards that are in effect", therefore, WSMR's wastes are more appropriately referred to as prohibited wastes.

WSMR must distinguish between "restricted" and "prohibited" wastes in the WAP.

WSMR's RESPONSE

The WAP has been revised to state in the referenced paragraph that "wastes subject to LDR restrictions," to eliminate confusion.

RESPONSE EVALUATION---ADEQUATE

WSMR's response is adequate. However, it appears that WSMR continues to inappropriately maintain that a portion of their hazardous wastes may not be subject to the LDRs. This is evidenced at WAP Section 2.2, paragraph 8 which was revised to state: "If it is determined that the waste in question is subject to land disposal restrictions (LDRs) ..." WAP Section 2.5, paragraph 4 states, "40 CFR 268 is then consulted to determine if the land disposal restriction applies."

As is stated in the above comment, "virtually all current wastes have treatment standards that are in effect." WSMR must respond to NMED (not necessarily in the WAP but under separate cover) by identifying any waste(s) that it manages that is not subject to LDR standards.

COMMENT 25

NOD COMMENT 25

WAP Section 2.2 (fourth paragraph) contains contradictory language regarding how wastes will be tested to determine whether they exhibit a hazardous characteristic. This paragraph refers to both a field hazardous characterization method *and* the methods specified in 20.4.1.200 NMAC, incorporating 40 CFR 261.21-23. NMED believes that these are not identical methodologies.

The WAP must be clarified to address the resolution procedures that will be used if the two methodologies provide contradictory results.

WSMR's RESPONSE

The field hazardous characterization method is no longer used. All characterization is based on the results of laboratory analysis. Thus, there is no requirement to resolve a contradiction between the results of two methods.

RESPONSE EVALUATION---ADEQUATE

WSMR's response is adequate.

COMMENT 26

NOD COMMENT 26

WAP Section 2.2 refers to "applicable prohibition levels." NMED is unfamiliar with this phrase.

WSMR must revise the WAP to clarify what those levels are, particularly if they differ from the LDR treatment standards specified in 20.4.1.800 NMAC, incorporating 40 CFR 268.40.

WSMR's RESPONSE

The WAP has been revised to discuss the LDR treatment standards, as required. The phrase "applicable prohibition levels" has been deleted from the text.

RESPONSE EVALUATION---ADEQUATE

WSMR's response is adequate.

COMMENT 27

NOD COMMENT 27

WAP Section 2.2 fails to appropriately specify when a waste's LDR status will be determined. 20.4.1.500 NMAC, incorporating 40 CFR 264.13 (a)(1) requires that all applicable information be obtained before wastes are stored. Furthermore, EPA's 2001 guidance specifies in Section 8.2 that LDR determinations must be made at the point where the waste is first generated (i.e. the "point of generation").

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WSMR's WAP must be revised to specify that the LDR status of a waste will be established prior to that waste being stored at the HWSF.

WSMR's RESPONSE

The WAP has been revised to specify that the LDR status of a waste will be established prior to the waste being stored at the HWSF.

RESPONSE EVALUATION---ADEQUATE

WSMR's response is adequate.

COMMENT 28

NOD COMMENT 28

The final bulleted list in WAP Section 2.3 states that a number of wastes will be stored because they are characteristic for extraction procedure (EP) toxicity. The EP extraction procedure was replaced in 1990 by the TCLP (see 55 FR 11798) and thus, is an out-dated method.

WSMR must revise the WAP for accuracy and consistency purposes by replacing all references to EP TOX with "toxicity characteristic."

WSMR's RESPONSE

The requested change has been made.

RESPONSE EVALUATION---ADEQUATE

WSMR's response is adequate.

COMMENT 29

NOD COMMENT 29

WAP Section 2.4 describes drum-sampling procedures but neglects to address possible liquid stratification or sediment settling. The same section also describes heterogeneous wastes but does not mention drums specifically.

WSMR must revise their WAP to specify how stratification in drums will be determined and sampled for representativeness. NMED recommends that WSMR reference and attach American Society of Testing Materials (ASTM) Method D5743-97 (Standard Practice for Sampling Single or Multilayered Liquids, With or Without Solids, in Drums or Similar Containers) or Method D5956-96 (Standard Guide for Sampling Strategies for Heterogeneous Wastes).

WSMR's RESPONSE

Information has been added to address the issue of stratification in drums.

RESPONSE EVALUATION---ADEQUATE

WSMR's response is adequate. WAP Section 2.4, paragraph 3 has the appropriate language.

COMMENT 30

NOD COMMENT 30

Paragraph 3 in WAP Section 2.4 provides a sampling methodology for liquid wastes in pits, ponds, lagoons, and similar reservoirs.

WSMR must identify where these waste containment structures are located and what wastes they hold or are anticipated to hold.

WSMR's RESPONSE

These waste containment structures are not used, and references to sampling these structures has been deleted in the revised WAP.

RESPONSE EVALUATION---ADEQUATE

WSMR's response is adequate.

COMMENT 31

NOD COMMENT 31

Paragraph 4 of WAP Section 2.4 refers to the use of appropriate sampling "devices" pursuant to 40 CFR part 261, appendix I. However, as is clarified in the paragraph, appendix I is a list of sampling methods and procedures.

WSMR must clarify whether it is referring only to the devices but not the remainder of the methods.

WSMR's RESPONSE

The text has been revised to clarify that the intent is the entire method.

RESPONSE EVALUATION---ADEQUATE

WSMR's response is adequate. WAP Section 2.4, paragraph 4 contains the appropriate language.

COMMENT 32

NOD COMMENT 32

Paragraph 6 of WAP Section 2.4 describes the use of "composite" samples.

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WSMR must revise the WAP to address composite sample limitations for wastes containing any volatile organic constituents.

WSMR's RESPONSE

A discussion of the limitations of composite samples for wastes containing any VOCs has been included.

RESPONSE EVALUATION---ADEQUATE

WSMR's response is adequate. WAP Section 2.4, paragraph 7 contains the appropriate language.

COMMENT 33

NOD COMMENT 33

Paragraph 6 of WAP Section 2.4 refers to particular sampling methods for "non-wastewaters". Non-wastewaters are defined in 40 CFR 268.2(d) and it appears that WSMR may be using this term incorrectly.

The WAP must also be revised to specify how WSMR will determine the status of all wastewaters/non-wastewaters as specified in 20.4.1.800 NMAC, incorporating 40 CFR 268.7(a)(2).

WSMR's RESPONSE

The phrase "non-wastewater" has been deleted in the cited paragraph.

The status of all wastes with respect to meeting applicable treatment standards for land disposal will be determined using acceptable knowledge of the waste generating process and results of laboratory analysis.

RESPONSE EVALUATION---NOT ADEQUATE

WSMR's response is partially adequate. The inappropriate use of the term "non-wastewater" has been removed from the WAP, however the WAP continues to fail to appropriately describe how the wastewater/non-wastewater waste characteristic will be determined in relation to making a LDR status determination. NMED is prepared to prescribe the wastewater/non-wastewater determination process as a permit condition if WSMR does not do so in its permit application.

COMMENT 34

NOD COMMENT 34

WAP Section 2.4 addresses waste verification frequencies.

WSMR must revise this section to explain what constitutes a situation when "the process or operation generating a waste has changed." This section must also be revised to comply with 20.4.1.500 NMAC, incorporating 40 CFR 264.1082, which requires that wastes subject to subpart CC be reviewed and updated annually (see EPA 1994, Section 2.5 for additional discussion and guidance).

WSMR's RESPONSE

Additional information has been provided to address the issue of process changes leading to the requirement to reevaluate waste streams (See also comments 16, 22 and 54). In addition, information has been added to address wastes subject to subpart CC.

RESPONSE EVALUATION--NOT ADEQUATE

WSMR's response is partially adequate. Section 2.4, final paragraph of the WAP was revised to include language regarding subpart CC air emissions. However NMED remains concerned that the WAP is not clear as to whether wastes will be characterized for their Volatile Organic Compound (VOC) concentration and that it inappropriately defines a change in a waste stream.

Regarding the WAP not being clear as to whether wastes will be characterized for their VOC concentration with regard to subpart CC, Section 2.4, final paragraph implies that instead of characterizing wastes for their VOC concentration, WSMR will comply with 40 CFR 264.1086(b)(1)(i) Container Level 1 standards for all wastes. This approach to managing air emissions is appropriate, but to make it clear, WSMR must specifically state in the WAP whether it will characterize wastes to determine if all hazardous wastes entering containers has an average VO concentration at the point of origination of less than 500 parts per million by weight. If WSMR has no waste characterization obligations regarding 20.4.1.500 NMAC, incorporating part 264 subparts BB and CC, WSMR must explain why the Permit Renewal Application Section 10.4, bullet 6, commits to maintaining related information in the HWSF written operating record.

NMED has concerns about the WAP inappropriately defining what constitutes a change in a waste stream: See NMED's response evaluation to NOD COMMENT 16 for additional information.

COMMENT 35

NOD COMMENT 35

WAP Table 2-3 does not specify the maximum allowable concentrations for land disposal. WAP Table 2-3 inappropriately lists the concentrations used to determine whether a solid waste exhibits a characteristic of toxicity.

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WSMR must revise WAP Table 2-3 to list the constituent concentrations specified in 20.4.1.800 NMAC, incorporating 40 CFR 268.40, rather than those provided in 20.4.1.200 NMAC, incorporating 40 CFR 261.24.

WSMR's RESPONSE

The table has been deleted from the text. A reference to the regulations is provided.

RESPONSE EVALUATION---ADEQUATE

WSMR's response is adequate.

COMMENT 36

NOD COMMENT 36

WAP Section 2.5 states that the facility is prepared to accept all F-listed wastes. However, WSMR's Part A only lists F001-F005. Please note that the Permit will be based on the information submitted in Part A.

WSMR must revise the WAP to resolve this discrepancy.

WSMR's RESPONSE

All information provided in the Part A has been reviewed for accuracy and revised as necessary to reflect current waste management activities and projected future needs. The WAP has been revised to be consistent with the Part A when the permit renewal application is submitted.

RESPONSE EVALUATION---ADEQUATE

WSMR's response is adequate.

COMMENT 37

NOD COMMENT 37

WAP Section 2.5 states that when a waste is determined to be restricted based solely on process knowledge, all supporting data used to make that determination will be kept on file.

WSMR's WAP must be revised to specify that the relevant records of a waste's LDR status determination will be kept in the operating record regardless of how that determination was made.

WSMR's RESPONSE

The requested revision has been made. All data relevant to hazardous waste characterization and LDR status will be retained as part of the operating record.

RESPONSE EVALUATION---ADEQUATE

WSMR's response is adequate.

COMMENT 38

NOD COMMENT 38

WAP Section 2.5 contains the recordkeeping requirements that would more appropriately be located in WAP Section 2.8. Application Section 10 (Manifest System, Recordkeeping and Reporting) contains the following items that must be either relocated or reiterated in WAP Section 2:

- Section 10.2, second bulleted item---move or add to WAP Section 2.7;
- Section 10.3---move or add to WAP Section 2.7;
- Section 10.4, third bulleted item---move or add to the WAP; and
- Section 10.4, sixth bulleted item---move or add to the WAP.

WSMR's RESPONSE

The section has been revised as requested.

RESPONSE EVALUATION---ADEQUATE

WSMR's response is adequate.

COMMENT 39

NOD COMMENT 39

WAP Section 2.6 discusses how incompatible wastes will be managed but fails to identify how wastes will be characterized for incompatibility.

WSMR must revise the WAP to identify how wastes will be characterized for incompatibility considerations to comply with 40 CFR 264.13 (b)(6). In addition, WAP Section 2.6 must address, in the text, the waste groupings presented in WAP Table 2-6 and must detail how they will be characterized for incompatibility, including procedures to determine if a waste may be included in a compatibility group.

WSMR's RESPONSE

An additional discussion has been provided, indicating that AK and analytical results will be used to assign wastes into the appropriate compatibility group/s.

RESPONSE EVALUATION---ADEQUATE

WSMR's response is adequate.

COMMENT 40

NOD COMMENT 40

WAP Section 2.7 only addresses QA/QC for sampling procedures and laboratory analytical procedures.

WSMR must revise the WAP to specify a quality assurance program that will ensure that all requirements in the WAP are adhered to (e.g. HWSF personnel must use checklists to ensure that generators completely and accurately fill out the waste profile form).

WSMR's RESPONSE

Section 2.7.3 has been added to the WAP to address this issue.

RESPONSE EVALUATION---ADEQUATE

WSMR's response is adequate.

COMMENT 41

NOD COMMENT 41

WAP Section 2.7 suggests that statistics will be used to ensure waste characterization validity. However, the WAP provides no specifics.

WSMR must revise the WAP to discuss the statistical procedures that WSMR will use for waste characterization.

WSMR's RESPONSE

WSMR does not use a statistical approach to waste characterization. The section cited has been revised to delete the suggestion that statistics are used.

RESPONSE EVALUATION---NOT ADEQUATE

WSMR's response is inconsistent and inadequate. Although its response states that WSMR does not use a statistical approach to waste characterization, WAP Section 2.7.1 states, "Sampling for waste characterization will be conducted in accordance with the guidance provided in the EPA document SW-846 ..." That guidance, at Chapter nine (Sampling Plan) bases the sampling portion of waste characterization predominantly on statistics. SW-846 Section 9.1.1 states, "An appropriate sampling plan for a solid waste must be responsive to both regulatory and scientific objectives. Once those objectives have been clearly identified, a suitable sampling strategy, predicated upon fundamental statistical concepts, can be developed." EPA's waste characterization guidance (EPA

1994), also referenced at WAP Section 2.7.1, references a statistical approach to waste sampling at Section 2.3.1 (Sampling Strategies). WSMR must explain why it is not necessary to use a statistical approach to waste characterization in light of this guidance.

COMMENT 42

NOD COMMENT 42

WAP Section 2.7.1 lists training requirements for sampling personnel as part of the WAP QA program. Section 11 (Training Program) of the permit application identifies three job titles that will receive hazardous waste management training at WSMR. The application refers to many other individuals involved in waste characterization and the primary responsibility belongs to the individuals that generate the waste. These people must also receive training pursuant to 20.4.1.500 NMAC, incorporating 40 CFR 264.16.

WSMR must revise the WAP and Section 11 of the Part B appropriately to address the training requirements discussed above.

WSMR's RESPONSE

The WAP and Section 11 have been revised to address training requirements for any individuals involved in waste management. These are also detailed in WSMR Reg 200-1, which is included as part of the submittal.

In addition, the logbook for each individual SAP will specify by name the personnel and his/her appropriate training requirements.

RESPONSE EVALUATION---NOT ADEQUATE

WSMR's response is inadequate. See the response evaluation in COMMENT 12.

COMMENT 43

NOD COMMENT 43

The fourth paragraph in WAP Section 2.5 refers to the D001-D017 listed waste codes as being subject to LDR standards. The treatment standards for *all* D-listed waste codes are specified at 20.4.1.800 NMAC, incorporating 40 CFR 268.40.

WSMR must revise their WAP by adding discussion stating that all "D" waste codes have applicable LDR standards. In addition, WSMR must justify their comments in the second sentence of the fourth paragraph in WAP Section 2.5.

WSMR's RESPONSE

A discussion stating that all D waste codes have applicable LDR standards has been added. Section 2.5 has been revised for clarity.

RESPONSE EVALUATION---ADEQUATE

WSMR's response is adequate.

COMMENT 44

NOD COMMENT 44

Permit Application Section 10.9 (Generator Responsibilities) lists the generator waste characterization responsibilities associated with 40 CFR Part 262, but fails to mention the 20.4.1.800 NMAC, incorporating 40 CFR 268.7 and 268.9 requirements.

WSMR must revise Section 10.9 accordingly.

WSMR's RESPONSE

The requested revision has been made.

RESPONSE EVALUATION---ADEQUATE

WSMR's response is adequate.

COMMENT 45

NOD COMMENT 45

Pursuant to 20.4.1.800 NMAC, incorporating 40 CFR 268.50, prohibited wastes can only be stored at the HWSF for less than one year. However, the permit application does not address this storage limitation.

WSMR must revise its permit application by specifying that, in accordance with 20.4.1.800 NMAC, incorporating 40 CFR 268.50, prohibited wastes will be stored for less than one year.

WSMR's RESPONSE

The requested revision has been made.

RESPONSE EVALUATION---ADEQUATE

WSMR's response is adequate. WAP Section 2.5, paragraph 5 contains an appropriate commitment.

COMMENT 46

NOD COMMENT 46

Waste characterization documentation requirements are insufficiently addressed in the WAP.

WSMR must address in detail their documentation requirements for waste characterization. At a minimum, WSMR must include in their application copies of all forms (blank) that are used in this process.

WSMR's RESPONSE

A separate letter will be submitted to NMED to address this comment.

RESPONSE EVALUATION

Evaluation of this response will be made after NMED receives WSMR's response in a separate letter.

COMMENT 47

NOD COMMENT 47

WSMR's WAP states that polychlorinated biphenyls (PCBs) wastes will be stored at the HWSF in accordance with Toxic Substance Control Act (TSCA) regulations. Particular requirements for the storage of PCB wastes are specified at 20.4.1.800 NMAC, incorporating 40 CFR 268.50 (f).

WSMR must provide, under separate letter, documentation that demonstrates compliance with the above regulation.

WSMR's RESPONSE

A separate letter will be submitted to NMED to address this comment.

RESPONSE EVALUATION

Evaluation of this response will be made after NMED receives WSMR's response in a separate letter.

COMMENT 48

NOD COMMENT 48

WAP Section 2.3 lists, by rank and quantity, the miscellaneous category from WAP Table 2-1. Some of these categories do not seem to have a direct connection to hazardous waste (i.e. underground storage tanks, sewage treatment operation, municipal solid wastes, septic tank operations, storm water management).

WSMR must explain in WAP Section 2.3 why each category has been included. If some of these operations do not generate hazardous waste, then WSMR should remove them from the list. Revise WAP Section 2 accordingly.

WSMR's RESPONSE

Section 2.3 presents the results of 3 separate historical studies. These studies were conducted for various purposes, including the identification of P2 opportunities. It is noted in the text that not all the activities listed generate hazardous waste. The last list in this section presents waste currently stored or which might be stored at the HWSF.

RESPONSE EVALUATION---ADEQUATE

WSMR's response is adequate.

COMMENT 49

NOD COMMENT 49

WAP Section 2.7.2 states that the WSMR's laboratory does not have formal QA protocol.

Lab results will only be acceptable to NMED if the laboratory performing the work follows EPA SW-846 methods and protocol, including QA requirements, and the analysis is accompanied with an auditable QA report. Furthermore, the WAP must be revised to specify, when performing waste characterization to determine a waste's LDR status and to demonstrate that the waste meets its applicable treatment standard concentrations specified at 20.4.1.800 NMAC, incorporating 40 CFR 268.40 (Treatment Standards for Hazardous Wastes) [in compliance with 20.4.1.800 NMAC, incorporating 40 CFR 268.7(a)] and that analytical method detection limits (MDL's) are not higher than the treatment standards. When performing laboratory analysis, WSMR must analyze method blanks, laboratory duplicates, and laboratory control samples to assess the quality of the data resulting from laboratory analytical programs. If WSMR uses a contract laboratory to perform analyses, WSMR must inform the laboratory in writing that it must operate under the waste analysis conditions set forth in the Permit.

WSMR's RESPONSE

The WAP has been revised to state that only lab results from a certified laboratory that follows EPA SW-846 methods and protocols will be used for hazardous waste determinations. In addition the WAP has been revised to state that all labs performing analysis will be informed of the applicable permit conditions.

RESPONSE EVALUATION---ADEQUATE

WSMR's response is adequate.

COMMENT 50

NOD COMMENT 50

Waste characterization records must be maintained at the HWSF and the generator sites pursuant to 20.4.1 NMAC, incorporating 40 CFR 262.40 and 264.73(b).

WSMR must revise the WAP to specify that all waste characterization records will be kept at the HWSF and the generator sites as part of the operating record.

WSMR's RESPONSE

The WAP has been revised to state where all waste characterization records will be maintained. Because WSMR is a single generator which includes a huge area, and a system of less-than-90-day sites and satellite accumulation points is utilized for waste management, records are maintained at more centralized locations. Waste characterization records are readily available through the central offices for waste management activities.

RESPONSE EVALUATION---ADEQUATE

WSMR's response is adequate.

COMMENT 51

NOD COMMENT 51

Given the scope of operations at the High Energy Laser Systems Test Facility (HELSTF), NMED is concerned that hazardous waste may be handled in containers, piping, pressure release systems, and/or pumps that do not meet the standards specified 40 CFR part 264, subpart BB.

WSMR must confirm whether these standards do or do not apply at HELSTF or at any other operation sites that generate hazardous waste at WSMR.

WSMR's RESPONSE

Final resolution of this issue is pending. However, WSMR does not believe that any activities subject to Subpart BB are conducted at HELSTF or elsewhere on the Range.

RESPONSE EVALUATION---ADEQUATE

WSMR's response may be adequate. Evaluation is pending arrival of separate letter.

COMMENT 52

NOD COMMENT 52

The last paragraph in WAP Section 2.4 mentions that confirmation analysis and reviews of process knowledge will be performed annually or when the HWSF is notified that the process or operation generating the waste has changed.

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WSMR must propose a frequency for, and describe how and why routine wastes will be re-evaluated to confirm waste composition.

WSMR's RESPONSE

A discussion has been added. A review and confirmation analysis will be conducted at least annually.

RESPONSE EVALUATION---ADEQUATE

WSMR's response is adequate.

COMMENT 53

NOD COMMENT 53

NMED's table provided in Attachment 7 lists all waste characterization documentation referenced in the WAP. NMED will attach this table to WSMR's WAP for inspection purposes. WSMR may comment on NMED's proposal.

WSMR's RESPONSE

Any comments will be submitted with the permit application. NMED should revise the table in light of the current documentation submitted.

RESPONSE EVALUATION---ADEQUATE

WSMR's response is adequate.

COMMENT 54 (ADDITIONAL COMMENT)

WSMR's procedures used to comply with the RCRA air emission requirements are addressed at WAP Section 2.4, final paragraph. Considering the importance of this issue, NMED requires that the paragraph be removed from the section on sampling procedures and moved to its own section. WSMR's WAP organizational structure should conform to EPA's waste characterization guidance (EPA 1994).

COMMENT 55 (ADDITIONAL COMMENT)

WAP Section 2.1, paragraph 2, 9th bullet actually has two separate items.