



## FACT SHEET

### INTENT TO ISSUE A HAZARDOUS WASTE FACILITY PERMIT UNDER THE NEW MEXICO HAZARDOUS WASTE ACT TO NATIONAL AERONAUTICS AND SPACE ADMINISTRATION WHITE SANDS TEST FACILITY EPA ID NUMBER: NM8800019434

May 2022

#### GENERAL BACKGROUND

The New Mexico Environment Department (NMED) intends to issue a hazardous waste permit to National Aeronautics and Space Administration (NASA) White Sands Test Facility (WSTF) (Facility), to conduct post closure care and corrective action in accordance with the New Mexico Hazardous Waste Act (74-4 New Mexico Statutory Authority [NMSA] 1978) and its associated Hazardous Waste Management Regulations (HWMR) listed at 20.4.1 New Mexico Administrative Code (NMAC), which incorporates the Resource Conservation and Recovery Act (RCRA) and its implementing federal regulations listed in 40 Code of Federal Regulations (CFR) 260 through 280. NASA WSTF is the "Applicant." The action to be taken by NMED would renew an existing permit. NMED is charged with issuing a permit that will ensure that post closure care of closed hazardous waste management units and corrective actions taken at the Facility to investigate and remediate sites where contaminants have been released to the environment are properly completed in order to protect human health and the environment. If an applicant meets all of the conditions required for a RCRA-regulated facility, the NMED will issue a permit.

The draft permit is a renewal of the permit that was issued in November 2009. The permit renewal will authorize the Facility to conduct corrective action for releases identified at various solid waste management units (SWMUs), areas of concern (AOCs), and closed hazardous waste management units (HWMUs) under post-closure care at the Facility.

Prior to issuing a permit, NMED is required by regulation to release a draft of the permit for public comment in accordance with 20.4.1.900 and 20.4.1.901 NMAC. NMED is also required to issue a fact sheet which serves two functions: 1) to facilitate public review of the draft permit; and 2) to provide the basis for any specific requirements in the permit.

This Fact Sheet describes the general background for the draft permit, including a physical description of the Facility, its hazardous waste activities, and how the public may participate in the permitting process.

#### NASA WSTF

The White Sands Test Facility (WSTF) occupies over 60,000 acres and is located along the western flank of the San Andres Mountains, one of the most prominent north-south ranges in southwestern New Mexico. The main entrance to the installation is six miles north of Organ, New Mexico. The geographic coordinates for WSTF are 32°30'30" north latitude and 106°36'30" west longitude. The Facility is located in Doña Ana County, 18 miles northeast of

Las Cruces, New Mexico and 65 miles north of El Paso, Texas. Access to the site is provided by a paved road, which intersects U.S. Highway 70 one mile west of Organ, New Mexico. The Applicant's primary contact and address for this action is: Timothy Davis, National Aeronautics and Space Administration White Sands Test Facility, P.O. Box 20, Las Cruces, New Mexico 88004-0020.

### **Permit Contents**

The Permit addresses and authorizes corrective action at the Facility. The Applicant does not seek a permit to treat, store, or dispose of hazardous waste. The permit requires the Applicant to conduct detection and compliance monitoring and corrective action activities at the Facility. This Permit establishes the general and specific standards for these activities, pursuant to the New Mexico Hazardous Waste Act (HWA) and the New Mexico Hazardous Waste Management Regulations (HWMR).

The draft permit includes seven Parts (1 through 7) and five Attachments (1 through 5). The permit Parts address how the facility is to conduct cleanup of contaminated soil, soil vapor, surface water, and groundwater (referred to as "corrective action"). The permit Parts also include general requirements common to all hazardous waste permits throughout New Mexico (*e.g.*, duration of a permit); and general requirements that apply to the Facility (*e.g.*, characterization of waste, security, preparedness, and prevention).

The permit also requires the Applicant to maintain a program that minimizes the amount of wastes generated at the Facility and reduces the toxicity of those wastes.

### **Public Participation**

The HWMR and 40 CFR 270.42 require an opportunity for public involvement any time there is a modification to change a permit or when the NMED issues a new permit or permit renewal. That process involves public notice and includes an opportunity for public comment on major permit modifications or permit issuance. Public notices are provided in local newspapers and are included with written correspondence to individuals on the Facility mailing list. The Facility mailing list is maintained by NMED and any interested person may request to be placed on the list to be informed of such actions.

There are significant opportunities for the public to learn about and become involved in the regulation of hazardous waste at the Facility, including major permit-related actions and corrective action activities. Documents pertinent to permitting and corrective action activities submitted to or issued by NMED are available for public review in the Administrative Record maintained by the NMED at the address provided below.

## **PUBLIC REVIEW OF THE ADMINISTRATIVE RECORD**

A copy of the administrative record may be reviewed at the following location:

NMED - Hazardous Waste Bureau  
2905 Rodeo Park Drive East, Building 1  
Santa Fe, New Mexico 87505-6313  
Monday - Friday from 8:00 a.m. to 5:00 p.m.  
Contact: Dave Cobrain  
(505) 476-6000

A copy of the draft permit, the Public Notice, and this Fact Sheet are also available on NMED's website at <https://www.env.nm.gov/hazardous-waste/nasa/> To obtain a copy of the administrative record or a portion thereof, or for further information, contact Mr. Dave Cobrain at (505) 476-6000 or at the address given below.

The 60-day public comment period begins on **May 26, 2022 and ends on July 25, 2022**. Any person who wishes to comment on this action or request a Public Hearing should submit written or electronic mail (e-mail) comment(s) with the commenter's name and address to the respective address below. Only comments or requests received on or before **5:00 p.m. July 25, 2022**, will be considered. Written comments may be sent to:

Dave Cobrain, Program Manager  
Hazardous Waste Bureau - New Mexico Environment Department  
2905 Rodeo Park Drive East, Building 1  
Santa Fe, NM 87505-6313  
Email: [dave.cobrain@state.nm.us](mailto:dave.cobrain@state.nm.us)  
Ref: NASA WSTF Draft Permit Public Comments

Written comments must be based on the information available for review and include, to the extent practicable, all referenced factual materials. Documents in the administrative record need not be re-submitted if expressly referenced by the commenter. Requests for a Public Hearing shall provide: (1) a clear and concise factual statement of the nature and scope of the interest of the person requesting the hearing; (2) the name and address of all persons whom the requester represents; (3) a statement of any objections to the permit; and (4) a statement of the issues which the commenter proposes to raise for consideration at the hearing. NMED will provide a minimum 30-day notice of a Public Hearing, if scheduled.

All comments submitted will be considered in formulating a final decision and may cause the draft permit to be modified. NMED will respond in writing to the comments. This response will specify which provisions, if any, of the draft permit have been changed in the final decision and the reasons for the changes. All persons who have submitted written comments or who requested notification of the final decision will be notified of the decision by mail. These responses also will be posted on the NMED website.

After consideration of all written public comments received, NMED may issue a final permit. The NMED will make the final decision publicly available and will notify the Applicants by certified mail. All persons who submitted written comments, requested a hearing, or requested notification of the final decision will be notified of the decision by first class mail. NMED's

decision will constitute a final agency decision and may be appealed as provided by the HWA (Chapter 74, Article 4 NMSA 1978).

### **Arrangements for Persons with Disabilities**

Any person with a disability requiring assistance or auxiliary aid to participate in this process should contact Tina Montoya no less than 10-days prior to the end of the public comment period at the following address: New Mexico Environment Department, P.O. Box 5469, 1190 St. Francis Drive, Santa Fe, New Mexico, 87502-6110, (505) 827-9769. TDD or TDY users please access Ms. Montoya's number via the New Mexico Relay Network at 1 (800) 659-8331.

### **Non-Discrimination Statement**

NMED does not discriminate on the basis of race, color, national origin, disability, age or sex in the administration of its programs or activities, as required by applicable laws and regulations. NMED is responsible for coordination of compliance efforts and receipt of inquiries concerning non-discrimination requirements implemented by 40 C.F.R. Part 7, including Title VI of the Civil Rights Act of 1964, as amended; Section 504 of the Rehabilitation Act of 1973; the Age Discrimination Act of 1975, Title IX of the Education Amendments of 1972, and Section 13 of the Federal Water Pollution Control Act Amendments of 1972. If you have any questions about this notice or any of NMED's non-discrimination programs, policies or procedures, you may contact:

Kathryn Becker, Non-Discrimination Coordinator  
New Mexico Environment Department  
1190 St. Francis Dr., Suite N4050  
P.O. Box 5469  
Santa Fe, NM 87502  
(505) 827-2855  
nd.coordinator@state.nm.us

If you believe that you have been discriminated against with respect to a NMED program or activity, you may contact the Non-Discrimination Coordinator identified above or visit our website at <https://www.env.nm.gov/non-employee-discrimination-complaint-page/> to learn how and where to file a complaint of discrimination.

### **REGULATORY BACKGROUND**

In 1976, the Resource Conservation and Recovery Act (RCRA) was passed by the U.S. Congress to regulate "cradle to grave" management of hazardous waste. RCRA was enacted as an amendment to the Solid Waste Disposal Act of 1965, and mandated the development of regulations governing the actions of owners or operators of facilities that generate, transport, treat, store, or dispose of solid and hazardous wastes.

On November 19, 1980, the RCRA regulations became effective, and it became unlawful under certain conditions to treat, store, or dispose of hazardous waste without having, or having applied for, a permit. For then-existing treatment, storage, or disposal facilities (TSDFs), the requirement to submit a permit application was satisfied by submitting the "Part A" portion of the application; the "Part B" portion could be submitted at a later time. The roles of these application parts are clarified in 40 CFR 270.1(b) and 270.10.

The United States Environmental Protection Agency (EPA) has authorized the State of New Mexico to implement and enforce hazardous waste management requirements, including corrective action requirements, under its own hazardous waste management program. The State's authority for the program is the HWA, which: (1) authorizes the State's Environmental Improvement Board (EIB) to adopt hazardous waste management regulations, and (2) authorizes the NMED to implement and enforce regulations issued under the HWA. These regulations are known as the HWMR.

The EIB has adopted regulations concerning hazardous waste management and the issuance of hazardous waste permits. These regulations incorporate by reference pertinent sections of the CFR – 40 CFR Parts 260 through 270, 273, and 280 – and are codified in the HWMR at 20.4.1 NMAC.

Whenever the permit cites a provision of 20.4.1 NMAC or Title 40 CFR, the permit is meant to incorporate the citation by reference, including all subordinate provisions of the cited provision, and make binding the full text of the cited provision. The federal hazardous waste management regulations, 40 CFR Parts 260 through 273, are generally cited rather than the HWMR. The federal regulations are cited because only the federal regulations set forth the detailed regulatory requirements; the State regulations incorporate by reference, with certain exceptions, the federal regulations in their entirety. Citing only the federal regulations also serves to avoid encumbering each citation with references to two sets of regulations. However, it is the State regulations that are legally applicable and enforceable. Therefore, for the purpose of the draft permit, and enforcement of its terms and conditions when finalized, all references to provisions of federal regulations that have been incorporated into the State regulations are deemed to include the State incorporation of those provisions. The same method of citation of the regulations apply to this Fact Sheet - the federal hazardous waste management regulations, 40 CFR Parts 260 through 273, are generally cited rather than the HWMR.

The HWA and HWMR require corrective action for all releases of hazardous waste or hazardous constituents, regardless of when waste was placed in such a unit, from any SMWU at a facility seeking a permit. [42 United States Code 6924(u); NMSA 1978 74-4-4.2(B); 20.4.1.500 NMAC, incorporating 40 CFR 264.101(a)]. RCRA facilities also must conduct corrective action at AOCs. An AOC is an area to be investigated for potential releases. Depending on the type and extent of contamination, an AOC may subsequently be designated as a SWMU. Corrective action is required to be conducted beyond the facility boundary (42 U.S.C. 6924(v); 20.4.1.500 NMAC, incorporating 40 CFR 264.101(c)) where necessary to protect human health and the environment. There are currently thirty-six SWMUs, one AOC, and also five HWMUs under post-closure care at the Facility. Of these sites, corrective action is still required at all SWMUs, AOCs, and Post-Closure Care Units.

On January 26, 1983, "units" managing and disposing of hazardous waste became subject to the closure and post-closure standards of 40 CFR Part 264, Subpart G and Part 265, Subpart G, requiring a post-closure care permit in some circumstances.

On January 25, 1985, the State of New Mexico received authorization from the EPA to implement its hazardous waste program under the HWA. *See* 50 Fed. Reg. 1515 (Jan. 11, 1985). Subsequent program revisions were approved effective on April 10, 1990; July 25, 1990; December 4, 1992; August 23, 1994; December 21, 1994; July 10, 1995; January 2, 1996; March

10, 1997; July 13, 1998; October 9, 2001; October 16, 2007, May 26, 2009, and December 27, 2010.

On July 25, 1990, the State received from EPA authorization to expand its hazardous waste program under the HWA, including the authority to regulate the hazardous component of mixed waste. *See* 55 Fed. Reg. 28397 (July 11, 1990).

On January 2, 1996, the State received authorization from the EPA to implement a corrective action program under the HWA. *See* 60 Fed. Reg. 53708 (Oct. 17, 1995); 61 Fed. Reg. 2450 (Jan. 26, 1996).

## **NASA WSTF PERMIT HISTORY**

WSTF is a former treatment, storage, and disposal (TSD) facility. A RCRA Operating Permit was issued in February 1993 and a Post-closure care Permit for five hazardous waste management units was issued in September 1994. The prior 2009 RCRA Permit renewal allowed for the treatment of hazardous waste generated during Facility operations at the Evaporation Treatment Unit (ETU) and Fuel Treatment Unit (FTU). The ETU and the FTU were “clean-closed” in 2014 and 2019, respectively, and do not require post-closure care. Corrective action at SWMUs, AOCs, and HWMUs under post-closure care are required under the renewed permit.

WSTF currently manages hazardous waste generated at the Facility as a large quantity generator at various less than 90-day storage areas. These units do not require a permit and are subject to regulation under 40 CFR 262. All hazardous waste is shipped off-site to an appropriate permitted Facility for treatment or disposal.

Historic releases of contaminants generated at WSTF in association with testing and evaluation operations is believed to have primarily occurred at surface impoundments and storage tanks located in the 200, 300, 400, and 600 Areas. Available historical information indicates that the release of hazardous waste to the environment likely occurred during the early 1960’s through the mid-1980’s. These hazardous waste releases at WSTF by NASA resulted in soil and groundwater contamination at the Facility and surrounding areas. Primary contaminants of concern released to the environment at WSTF include N-nitrosodimethylamine (NDMA), which is believed to have originated from test evaluation operations and treatment of generated hazardous waste in the 300 and 400 Areas surface impoundment structures. The release of the halogenated volatile contaminants trichloroethene (TCE), tetrachloroethene (PCE), trichlorofluoromethane (Freon 11), 1,1,2-trichloro-1,2,2-trifluoroethene (Freon 113), and chloroform are believed to have primarily originated from the 200 Area, and potentially, to a lesser extent from the 100, 300, 400, 600 and 700 Areas as a result of the use and release of solvents and other chemicals at these operational areas.

Based on prior RCRA permitting as a TSD, corrective action at WSTF is still required at identified SWMUs, AOCs, and former HWMUs managed under post-closure care (Closures) in accordance with the RCRA regulations. This Permit serves to require continued corrective action at the Facility’s SWMUs and AOCs and post-closure care and corrective action at its five former HWMUs.

Following issuance of the draft permit and completion of the required public comment period, a final permit for the Facility may be issued by NMED. The final permit will be effective for a term of ten years but remains in effect if a timely renewal application is submitted by the Permittee to the NMED as specified in 40 CFR 270.51(a)(2).

## **TYPES OF HAZARDOUS WASTES MANAGED AT THE FACILITY**

The Facility is a large quantity generator of hazardous waste and does not currently manage hazardous waste beyond 90 days. Storage of hazardous waste for less than 90 days does not require a permit.

## **PERMIT ORGANIZATION**

The draft permit comprises permit Parts 1 through 7 and permit Attachments 1 through 5. The Parts contain requirements that the Applicant must adhere to during management of hazardous waste, post closure care, and conducting corrective action at the Facility.

Permit requirements are established to ensure compliance with New Mexico's HWA and HWMR and are derived from applicable regulatory requirements, the Applicant's commitments in their permit application, or additional facility or unit-specific requirements established by NMED to ensure adherence with the regulations or to protect human health or the environment as provided at 20.4.1.500 and 900 NMAC, incorporating 40 CFR Parts 264 and 40 CFR 270.32(b)(2), respectively.

**PERMIT PARTS:** Each draft Permit Part is briefly described below.

**Permit Part 1: General Permit Conditions**, provides the regulatory authority and basis for the permit including modification and compliance requirements, definitions and general permit conditions regarding duties and requirements that apply to corrective action at the Facility, most of which are based upon mandatory permit conditions set forth in 40 CFR Parts 264 and 270.

**Permit Part 2: General Facility Conditions**, contains permit conditions for operation, maintenance, and general facility standards as set forth in 40 CFR Part 264, Subparts B through E. The conditions include security, inspection requirements, personnel training, provisions for waste sources accumulation and off-site disposal of hazardous waste, recordkeeping, emergency preparedness and prevention, and reporting.

**Permit Part 3: Corrective Action for Solid Waste Management Units, Areas of Concern, and Post Closure Care Units** describes the process the Applicant must follow to implement corrective action as necessary to protect human health and the environment for all releases of hazardous waste and hazardous constituents pursuant to sections 3004(u) and 3013 of RCRA, Sections 74-4-4.A.5.h and 74-4-4.2 of the HWA, 40 CFR 264.101, and 42 U.S.C. 6924(u) and (v). Requirements also include corrective action beyond the Facility property boundary, where necessary to protect human health and the environment pursuant to Section 3004(v) of RCRA, Section 74-4-4.A.5.i of the HWA, and 40 CFR 264.101(c). This Part includes sections discussing cleanup levels applicable to both human and ecological receptors. Part 3 also discusses the process for conducting corrective action from initial assessment and interim measures through corrective action investigation and corrective measures selection and implementation.

**Permit Part 4: Investigation and Sampling Methods and Procedures**, contains the requirements for methods and procedures to conduct site investigation, remediation, and

monitoring activities sufficient to fulfill the requirements of the permit and provide valid data for the evaluation of site conditions, determining the nature and extent of contamination, and for remedy selection and implementation, where necessary. The methods presented in permit Part 4 are minimum requirements for environmental investigation and sampling and are not intended to include all methods that may be necessary to fulfill the requirements of the permit. The methods for conducting investigations, corrective action, and monitoring at the Facility must be determined based on the conditions and chemical compounds that exist at each location where a release of contaminants has occurred.

**Permit Part 5: Monitoring Well Construction Requirements**, contains the requirements for construction of groundwater monitoring wells at the Facility. General drilling procedures, monitoring well construction requirements, and monitoring well abandonment is addressed in Part 5.

**Permit Part 6: Reporting Requirements**, contains general reporting requirements and report formats for corrective action activities under the permit. The reporting requirements listed in Permit Part 6 do not include all types of work plans or reports that may be necessary to address activities conducted pursuant to the permit.

**Permit Part 7: Hazardous Waste Management Unit Post Closure Care**, contains general requirements for continued corrective action and post-closure care at five closed HWMUs and applicable federal regulations.

## PERMIT ATTACHMENTS

**Attachment 1: General Facility Description**, provides a brief description of Facility physiographic location information, general historic information, adjacent land use information, and any hazardous waste management permitting information for the Facility.

**Attachment 2: Facility Maps**, provides Facility site plans which depicts the layout of the Facility and the location of SWMUs, AOCs, and HWMUs subject to corrective action.

**Attachment 3: Compliance Schedule**, lists applicable permit parts the required submittals and submittal dates.

**Attachment 4: Corrective Action Status Tables**, provides Tables 4-1, 4-2, and 4-3, which list the Facility SWMUs and AOCs. Table 4-1 provides a list of SWMUs and AOCs that require corrective action; Table 4-2 provides a list of SWMUs and AOCs with corrective action complete with controls status; and Table 4-3 provides a list of SWMUs and AOCs with corrective action complete without controls status.

**Attachment 5: Hazardous Waste Management Unit Post Closure Care**, Table 5-1 lists the five closed HWMUs undergoing post-closure care, a description of each unit, and the minimum inspection requirements and schedules for each unit.