

## National Aeronautics and Space Administration Goddard Space Flight Center

### Wallops Flight Facility

#### Subpart X Operating Permit for Open Burning

A **Subpart X Operating Permit for Open Burning and Open Detonation** is required for owners and operators who perform open burning and open detonation of waste explosive and propellant. Subpart X of the RCRA regulations under 40 CFR Part 264 covers miscellaneous units not regulated under the standards for specific types of treatment, storage, and disposal units in Part 264. The National Aeronautics and Space Administration Goddard Space Flight Center Wallops Flight Facility (NASA Wallops) currently operates a permitted Open Burning (OB) operation, OB Subunits 1-4, at the facility. The Subpart X permit for NASA Wallops, which was issued in 2005, is active. A renewal permit application is currently under review.



#### NASA Wallops, OB Subunits 1-4

Open burning of rocket motor propellants and igniters is performed at the southwestern corner of Wallops Island. Three subunits and one open burning pad assembly, Subunit 4, are used for open burning of the rocket motor propellants and igniters.

Rocket motor propellants and igniters are thermally treated at the OB area within the rocket motor or igniter casing, which serves as a containment device. The existing area consists of three OB sub-units and a burn pad used to thermally treat various rocket motor propellants and igniters in order to render them non-reactive. The rocket motor with igniter is placed inside a steel subunit. The subunit acts as a secondary containment device and is made from a larger rocket motor casing.

Motors with diameters larger than the steel subunits are burned on the open burning pad assembly. Motors are inverted and attached to the motor head assembly fixture in the center of the pad. Four cable tie downs are attached to the motor for lateral stability. The propellants and igniters are reactive, but are not likely to detonate during treatment due to their inherent design.

Occasionally, propellant is burned which is not in a rocket motor casing. When this material is ready for burning, the propellant is placed in the burn pan on the burn pad and ignited with a fabricated squib (igniter). The material usually burns completely leaving no residue. Ejected material and residue are also burned in this manner. If weather conditions prevent the treatment of residues and ejected material at the burn pan they are characterized and then stored in non-conductive containers at the less-than 90 day storage area. The residue and ejected material is then treated at the next open burn event.

NASA Wallops is limited to treating 33.5 tons of propellant per year by a Virginia State Operating Permit issued by the DEQ Tidewater Regional Air Permitting Office.

Groundwater monitoring is performed semi-annually under the detection monitoring program in Module V of the current permit to ensure that hazardous waste does not impact groundwater at the units. The permit specifies the monitoring well network to be constructed and maintained at the unit and specifies the constituents to be monitored for. The permit also requires the NASA Wallops facility to establish a compliance monitoring program should and hazardous constituents be identified in groundwater at statistically significant concentrations above the established background level.

## Steps in the Hazardous Waste Permit Reissuance Process

### Step 1: Starting the Process

About one year before a permit expires, DEQ sends a letter to the facility (“call-in” letter) as a reminder that the permit will expire and that the renewal application is due six months before the permit expiration date. As long as the facility submits the application and fee by the due date, the current permit remains in effect. The call-in letter also suggests a pre-application meeting to provide the necessary information to help ensure that a complete and thorough application is submitted.

### Step 2: Receipt and Review of the Application

Depending on the type of application, once DEQ receives the permit application, notice of the receipt is provided to the facility mailing list. The application is then reviewed to make sure it contains all the information required by the regulations. This phase is termed the completeness review. The goal is to conduct the initial completeness review within 30 days of receipt of the application. Once the application is determined to be administratively complete, DEQ will conduct a technical review of the application. During the technical review, the design and operation of the facility are evaluated to determine if the facility meets the technical requirements of the regulations and can be operated in a manner that protects human health and the environment. Sometimes the completeness and technical reviews may be combined.

### Step 3: Revisions, Revisions, Revisions

After each review of the application, DEQ may issue a “notice of deficiency” (NOD) to the applicant. NODs request that the applicant provide any missing information. During the application review and revision process, DEQ may issue several NODs. Each time DEQ receives a response from the applicant, it reviews the information and, if necessary, issues another NOD until the application is complete. Usually the applicant is given 30 to 45 days to respond to an NOD, depending on the comments. Given the complex and technical nature of the information, the review and revision process may take one to two years or more.

### Step 4: Drafting the Permit for Public Review

When the revisions are complete, DEQ makes a preliminary decision about whether to issue or deny the permit. If DEQ decides that the application is complete and meets appropriate standards, the agency prepares a draft permit containing the conditions under which the facility can operate. DEQ announces its decision by sending a letter to everyone on the public notice mailing list, placing a notice in a local paper, and broadcasting it over the radio. It also issues a fact sheet to explain the decision. Once the notice is issued, the public has 45 days to comment on the proposed permit. Citizens also may request a public hearing by contacting DEQ, which may also hold a hearing at its own discretion. The agency must give a 30-day public notice before the hearing.

## Step 5: The Result – A Final Permit Decision

After carefully considering all public comments, DEQ determines if any changes to the draft permit are warranted. DEQ must issue a "response to public comments," specifying any changes made to the draft permit. DEQ then issues a final decision. Each person who commented on the draft permit receives a copy of the response to public comments and notice of the final decision.

### How Can the Public Participate?

Members of the public have valid concerns about hazardous waste management. They and other interested parties can contribute valuable information and ideas that improve the quality of DEQ decisions and permit applications. DEQ believes that public participation is a vital component of the permitting process. The public comment and response period and public hearings are instances where citizens can engage applicants and regulators in a dialogue. DEQ also encourages additional public participation activities where they will be helpful.

DEQ recognizes that some of the most important public participation activities happen outside the formal permitting process. Citizens can contact environmental, public interest, civic and community groups and become involved in their activities. The permit holder or applicant may also create informal opportunities for public input and dialogue.

The permitting process gives citizens a number of opportunities to express their ideas and concerns. For the NASA Wallops facility in particular, here are several steps you can take to ensure that your voice is heard:

- Know whom to call at DEQ. This person's name is on the website, fact sheets and other printed materials.
- Ask to have your name put on the facility mailing list for notices, fact sheets and other documents distributed by the agency.
- Do your own research by talking to local officials, contacting research or industry organizations, reading permitting agency materials, and interacting with interested groups in the community.
- Understand the applicable legal and regulatory authority and what issues can be addressed as part of the permitting action.
- Submit written comments that are clear, concise and well-documented. Target specific issues and cite specific provisions. DEQ must consider all significant written comments submitted during a formal comment period and respond appropriately. To be most effective, comments should be relevant to specific information in the proposed permit.

June 2016

- Participate in public hearings and other meetings. Provide testimony that supports your position. All comments should be based on factual information and supported by applicable regulations, guidance documents, and technical references.
- If any material needs further explanation, or if you need to clear up some details about the facility or the permitting process, contact the permit writer. You also may want to call the facility to meet with the staff or to request a tour or other information.

### Renewal Requirements for Application for Reissuance of Hazardous Waste Open Burning Permit

Application Deadline: September 2015

Task	Month	Review period (# of days)
DEQ Initial Completeness Review (1st CR)	June 2015	30
NASA Wallops response to 1 <sup>st</sup> CR received	July 2015	30
Application deemed administratively complete	August 2015	1
DEQ receives full risk assessment for application	September 2015	60
1 <sup>st</sup> Technical Review (TR), NOD	November 2015	30
30 day (for Sections 1,2 and 3) and 60 day (for Sections 4 and 5) extension request received for NOD response	December 2015	1
DEQ approves 30 and 60 day extension for NOD response	December 2015	1
19 day extension request received for NOD Sections 1, 2 and 3 response	January 2016	1
DEQ approves 19 day extension for NOD Sections 1, 2 and 3 response	January 2016	1
NASA Wallops response to 1 <sup>st</sup> TR, Sections 1, 2 and 3	February 2016	60
14 day extension request received for NOD Section 4 response	February 2016	1
DEQ approves 14 day extension for NOD Sections 4 response	February 2016	1
NASA Wallops response to 1 <sup>st</sup> TR, Section 5	February 2016	60
NASA Wallops response to 1 <sup>st</sup> TR, Section 4	March 2016	60
2 <sup>nd</sup> TR Notice of Deficiency for Sections 1, 2 and 3	March 2016	30



June 2016


Questions regarding the RCRA permit for the NASA Wallops facility OB units should be directed to the current permit writer whose contact information is as follows:

Mr. Ashby Scott  
RCRA Permit Writer  
Phone: 804-698-4467  
Email: [Ashby.Scott@deq.virginia.gov](mailto:Ashby.Scott@deq.virginia.gov)