

RESPONSE TO COMMENTS

April 15, 2008

Comments Received on EPA's Proposed Decision to Grant a RCRA Permit

On November 13, 2007, EPA issued public notice of its proposed decision to approve a Remedial Action Plan for the Commonwealth of the Northern Mariana Islands to treat and store hazardous remediation waste. A Remedial Action Plan is a form of Resource Conservation and Recovery Act ("RCRA") permit pursuant to 40 C.F.R. Sections 270.80 – 270.230, to treat, store, or dispose of hazardous remediation waste. EPA held an informal public meeting on December 11, 2007 at CNMI Division of Environmental Quality. As required by 40 C.F.R. § 270.145(b), public comments were accepted for 45-days, from December 11, 2007 through January 24, 2008.

EPA received one comment letter. In addition one individual commented during the public meeting on December 11, 2007. EPA has considered all of the comments in making its final decision. EPA's final decision is the same as the proposed decision, to approve the Remedial Action Plan ("RAP"). EPA has, however, modified the language of the RAP in response to public comment, as discussed below.

Federal regulations require that EPA briefly describe and respond to all significant comments on the permit application raised during the public comment period. Following is a summary of the comments received on EPA's proposed decision, and EPA's responses.

The Administrative Record contains a complete copy of the comment letter and is available for review at the CNMI DEQ offices Pangelinan Building, Chalan Pale Arnold Road, in Gualo Rai Village as well the EPA Regional Office, 75 Hawthorne Street, San Francisco, California.

Comments

Comment # 1: *The commenter offered two main points. First, that EPA consider alternative treatment technologies, other than open burning/open detonation ("OB/OD"). The commenter offered significant detail about potential hazards of OB/OD. Second, the commenter requested that EPA prohibit the OB/OD of chemical, biological, radiological, smoke-filled, incendiary, improved conventional munitions, and other similar munitions wastes.*

Response:

EPA appreciates the research and data offered in the comment letter. Regarding the commenter's first point, as the letter notes, there is an urgent need to immediately retrieve and safely treat munitions wastes found at Saipan. As discussed in more detail below, the situation at Saipan is unique because there is no military presence. The local government has volunteered to address an issue created during and after World War II. The Remedial Action Plan is written to minimize risks associated with open detonation, and to monitor the treatment unit's impact on the local environment.

Unlike many of the examples that the commenter cites, there is no military base on Saipan and no military presence. The government of CNMI has volunteered to take responsibility for this cleanup. The unexploded ordnance (UXO) in CNMI is "remediation waste." Remediation waste means all solid and hazardous wastes that are managed for implementing cleanup (*See* 40 C.F.R. § 260.10). This waste is spread all over the island, and the hazards of leaving it in place, where it can accidentally detonate when people find it, are far greater than the hazards of open detonation.

CNMI applied for the permit to operate an existing OB/OD unit, which has been used for emergency treatment events in the past. In a prevention-oriented system, if the community objected to building new on-site units, a facility could decide not to engage in business practices that would generate the waste that would need to be managed. The situation at CNMI, however, is response-oriented – the government must deal with existing contamination, and must find an acceptable response.

CNMI's resources for this cleanup are limited. Although alternative technologies exist, EPA has acknowledged that treatment by OB/OD may be the only practicable method of treatment or disposal for many types of reactive wastes. Examples of these types of reactive wastes include: waste that is capable of detonation or explosive reaction if it is subjected to a strong initiating source or if it is heated under confinement; and waste that is readily capable of detonation or explosive decomposition or reaction at standard temperature and pressure. These wastes are common in CNMI.

The commenter states that OB/OD has no pollution controls and causes uncontrolled release and dispersal of emissions to the surrounding environment. Many of the situations cited in the commenter's letter, however, describe incomplete combustion, which can result from open burning or from low-order detonations. The treatment method used in Saipan is high-order detonation, which consumes a large percentage of the waste.

In addition, research has demonstrated the effectiveness of using protective works to minimize the adverse effects of detonation. When appropriate protective works are used, adverse effects of the blast and fragments resulting from a high-order UXO detonation are minimized. Protective works are physical barriers designed to limit, control, or reduce adverse effects of blast and fragmentation generated during the high-order detonation of UXO. In CNMI, the Explosive Response Team uses trenches/pits,

directional detonations, tamping down of the soil over the UXO as a fragmentation blanket, and cliff face and berms as deflector shields. All of these are effective protective works.

Regarding other concerns about potential exposures, the treatment site is in a remote location on the island, and there are no residents nearby. The area is cleared of non-essential personnel and any tourists prior to treatment events. Although the groundwater is not used for any public water supplies due to its high salt content, four wells have been installed to monitor groundwater and determine if treatment at the OB/OD unit is impacting groundwater. Prevailing wind direction is out of the northeast towards the ocean. There are no occupied lands across that lower slope. Pursuant to Standard Operating Procedures used at the site, the OB/OD unit is not operated if the winds are blowing toward residential areas.

In response to the commenter's second main point, as the letter notes OB/OD is not acceptable for certain munitions wastes. The Remedial Action Plan has been amended to include the following paragraph, now Paragraph 14 of the document:

Under this Permit, the Permittee is prohibited from storing and treating any munitions containing chemical warfare agent, biological warfare material, radiological hazardous wastes or chemical agent contaminated media at the OB/OD unit. This provision is not intended to limit any other storage or treatment which may be authorized pursuant to AOC RCRA-7003-09-2008-0001.

The RAP is revised accordingly to include definitions for "Chemical Warfare Agent," "Chemical Agent Contaminated Media," and "Biological Warfare Materiel" in Paragraph 5.

In addition, the Remedial Action Plan requires substantial personnel training, specific to managing UXO and operating an OB/OD treatment unit. EPA will continue to monitor what wastes are stored at the OB/OD area through inventories of the waste storage area that the permittee is required to submit quarterly. The permittee must also prepare a treatment report after each treatment event.

Comment #2: *The commenter asked about the status of investigations of and locations of munitions which may have been disposed of offshore in Saipan.*

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Response: This comment focused on the status of current investigations in CNMI, so CNMI DPS provided the response. Representatives of the CNMI government acknowledged they are aware of this issue, and that the offshore munitions currently do pose a hazard to the public. There are several documented cases where divers or snorkelers have retrieved (unknowingly) white or red phosphorous, which burns upon exiting the water. The CNMI government is hoping to survey and inventory submerged munitions in the near. CNMI does not want to publicize the locations of submerged

munitions, out of concern that it might encourage divers to look for this waste, and so pose a serious hazard to the diving community.