



Allen, Pam, NMENV

From: Kliphuis, Trais, NMENV
Sent: Wednesday, February 08, 2012 3:46 PM
To: Allen, Pam, NMENV
Subject: FW: per your request

For the record (thanks)

From: Kliphuis, Trais, NMENV
Sent: Tuesday, February 07, 2012 5:10 PM
To: Most, Wille - RES
Subject: per your request

DRAFT

The report establishes DAC for the 30 gallon container as well as the lead shielded drum that contains a 30 gallon drum that contains RH waste. The DAC for the 30 gallon drum before it is placed in the shielded drum is 10 days and the DAC for the shielded container with a 30 gallon drum is 16 days. In each instance, the DAC was established by determining the time needed for a series of common volatile organic compounds to reach equilibrium through a four-inner bag, two layers of confinement, no rigid liner, and filters on the 30-gallon drum and shielded container. The VDRUM program, which was used to calculate previous DAC for use in the permit, was also used to calculate the VOC equilibrium times in support of the proposed DAC time scenarios for the shielded containers. The calculations on their face appear to be appropriate given the assumptions made in the report. However, the following questions and requests for additional clarification are submitted that could reflect future questions posed by the public:

1. The evaluation of this Class 2 Modification was performed assuming that the version of VDRUM used to calculate equilibrium times was the same version utilized to determine the other DAC times in the permit. VDRUM has previously been reviewed thoroughly to establish that the software properly calculates VOC equilibrium times in drum headspace. The Permittees should provide the version of VDRUM used and specify if the software version has remained unchanged since the last time VDRUM was used to establish a new DAC for a waste packaging configuration. If the version has changed, the Permittees should have software lifecycle plans and reports that show the new version was subject to appropriate software quality assurance and testing (validation and verification), to ensure that the VDRUM calculations were appropriate. Please clarify.
2. The report indicated that a drum handling bag may or may not be used to hold the 30-gallon drum when it is placed in the shielded drum. The report did not indicate the thickness and surface area of the bag. Based on the description of the drum handling bag as a mesh bag with enough strength to contain the 30 gallon drum, it seems like it would have much greater thickness than a typical polyethylene bag. If the thickness of the bag is too large it may behave more like a rigid liner than another layer of confinement in terms of the equilibrium calculations. Please clarify the composition, thickness, and surface area of the drum handling bag and address the behavior of the drum handling bag with regard to obtaining VOC equilibrium in the void space of the shielded container.



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