LANL TA-14 Carl

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Date: March 2, 2004
Refer to: RRES-MAQ:04-079

Mr. Ted Schooley, P.E.
Program Manager
New Source Review
New Mexico Air Quality Bureau
2048 Galisteo Street
Santa Fe, NM 87505

Subject: REVIEW OF PERMIT DETERMINATION FOR OPEN BURN ACTIVITIES LOS ALAMOS NATIONAL LABORATORY (LANL)

Dear Mr. Schooley:

As agreed to during the tour and meeting on February 11, 2004 regarding LANL's open burn activities, this letter requests your review of our determination regarding which open burn activities will be addressed in air permit applications under 20.2.72 New Mexico Administrative Code (NMAC) - Construction Permits.

With the exception of emergency open burning, all of the activities described below are covered by open burn permits issued by the New Mexico Environment Department (NMED) in December 2002 in accordance with 20.2.60 NMAC – Open Burning. However, LANL has agreed to voluntarily submit new permit applications under the requirements of 20.2.72 NMAC – Construction Permits for those open burn activities which are not allowed under the new permit-by-rule provisions of the recently revised 20.2.60 NMAC. Our determination described below focuses on whether an open burn activity is allowed or not under 20.2.60 NMAC. If it is allowed under the revised rule, NMED has agreed a construction permit application is not required or requested.

TA-14 Burn Cage

Open burns at this site dispose of high explosive (HE) contaminated combustible waste which may also have small amounts of solvents. The material consists of rags, paper, sample containers, and other processing and clean-up materials. This material meets the definition of hazardous waste and a permit application for it has been submitted to the NMED Hazardous Waste Bureau. Until a hazardous waste permit is issued, the Burn Cage is operated in compliance with interim status regulations. 20.2.60.113 NMAC – Open Burning of Hazardous Waste allows the open burning of hazardous waste for sites operating in compliance with interim status regulations. Therefore, a construction permit application under 20.2.72 NMAC is not required

TA-16-388 Flash Pad

The Flash Pad is used to burn both solids and liquids contaminated with HE and bulk HE. These materials are hazardous wastes and a permit application has been submitted to the NMED Hazardous Waste Bureau. The site is regulated under hazardous waste interim status regulations until NMED issues a hazardous waste permit. Therefore, these activities are allowed under 20.2.60.113 NMAC – Open Burning of Hazardous Waste, and a construction permit application is not required.

However, the Flash Pad is also used to flash parts and equipment (e.g. piping) which are not regulated under RCRA. These metals are contaminated with such low levels of HE that the metal is non-detonable. Propane burners are used to raise the temperature high enough to destroy any HE contamination. This treatment process was observed during the recent tour with NMED. The attached letter of October 22, 2003 from Anthony Grieggs, LANL Solid Waste Regulatory Compliance to Carl Will, NMED Hazardous Waste Bureau explains the regulatory status of these metals. Air emissions from this activity are minimal and as such the operation qualifies for a permit exemption at 20.2.72.202.B.(5) NMAC. We request your concurrence that LANL may file a permit exemption notice rather than an application for this operation.

TA-36 Open Burn Area

The Open Burn Area is used to dispose of combustible firing site debris that consists primarily of unpainted and untreated wood from test stands used at firing sites. As mentioned in the recent meeting and in the open burn application for this site, the wood can include depleted uranium (DU) from testing activities. Under the current open burn permit, material burned may also include other debris such as rags, paper, cardboard, plastics, and packing material. LANL has begun training operators to remove all material except wood from the firing site material to be burned. It is LANL's intention to only burn wood at this site. Since the wood to be burned is untreated and unpainted, it meets the definition of *vegetative material* in 20.2.60 NMAC which includes not just unprocessed plant material such as grass or trees, but also lumber and wood products. The wood or lumber which is burned at the Open Burn Area meets the criteria of the definition which state material burned cannot have been painted, pigment-stained, or treated with compounds containing chromium, copper, arsenic, pentachlorophenol, or creosote. Therefore, this activity is allowed under 20.2.60.111 NMAC – Open Burning of Vegetative Material, and a construction permit application is not required.

Emergency Burning

LANL conducts experiments which utilize explosives. There are times following experiments when explosives have not detonated and must be addressed for safety reasons. When it is safe to do so, these materials are collected and taken for treatment to a LANL hazardous waste treatment site. There are other times when material is too dangerous to transport and must be destroyed in place. For instance, it is not possible to collect powdered explosives or gun powders and take them to another location. Instead these are burned in place in order for the experiment to be "safed". The experiment is not finished until it is "safed", which is determined by an emergency response specialist. The open burning of this material is unplanned and the material could be dangerous to handle and dispose of in any other manner. Under the prior version of 20.2.60 NMAC, this activity was not subject to permitting pursuant to 20.2.60.109.C NMAC which stated open burning of explosive materials is permitted where the transportation of such materials to other facilities could be dangerous. Thus, this activity is not in a current open burn permit because it is not required. The revised 20.2.60.114 NMAC - Emergency Burning also provides for this

type of activity. The explosive material in the field does present an imminent danger with no other practical method of disposal, and an emergency response specialist determines the situation requires immediate action. LANL will provide to NMED the required notice within two weeks after each burn. This type of open burning only occurs approximately two times per year on average. Therefore, this activity is allowed under 20.2.60.114 NMAC, and a construction permit is not required.

TA-11 Fuel and Wood Fire Testing and TA-36 Sled Track Firing Mound

As explained on the recent tour, these two areas are used primarily for testing and evaluating potential accident scenarios involving fires. The open burning is for experimental purposes and not waste treatment or disposal. Under the restrictions of the current open burn permits for these sites, maximum air emissions of all pollutants are low, with carbon monoxide being emitted in the highest quantity at just over 1,000 lbs per year. These activities are not allowed under the 20.2.60 NMAC, and a 20.2.72 NMAC construction permit application will be submitted.

LANL requests NMED review as soon as possible of LANL's determination regarding which sites require 20.2.72 NMAC permit applications in order to meet our agreed to deadline of June 30, 2004 for submittal of applications. We also request the identification of which NMED permit engineer(s) who will be assigned to these applications in order to aid our staff in addressing additional questions regarding the application contents.

If you have any questions concerning this letter, please contact Bill Blankenship of the Risk Reduction and Environmental Stewardship Division's Meteorology and Air Quality Group at (505) 665-0823. Thank you in advance for your attention to this issue.

Sincerely,

Jean M Dewart

Jean Dewart
Group Leader

JMD:db

Att: a/s

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