

# Los Alamos

NATIONAL LABORATORY

*P.O. Box 1663/MS*

Los Alamos, New Mexico 87545

*John  
Please put  
a response for  
my signature  
Gardner*

Date: October 29, 1998

Symbol: EM:98-148

Benito Garcia, Bureau Chief  
Hazardous & Radioactive Materials Bureau  
New Mexico Environment Department  
525 Camino de los Marquez  
P.O. Box 26110  
Santa Fe, New Mexico 87502

**RE: HANDLING OF MATERIAL AT TECHNICAL AREA 54**

Dear Mr. Garcia:

In our meeting of March 25, 1998, we discussed construction work proposed for Technical Area 54 ("TA-54"). We described how as part of its normal operations, Los Alamos National Laboratory (LANL or the Laboratory) repairs and/or removes asphalt pads and roadways or portions of same from various locations within TA-54. A number of these efforts involve soils and/or asphalt material (hereafter referred to as "material") that may have come into contact with underlying vapor plumes emanating from subsurface solid waste management units so that the material may bear traces of organic constituents from such plumes.

As you know, the Laboratory continues to believe that such material does not constitute a hazardous waste, yet we recognize that the State may not share that view. At your suggestion, we describe our proposed handling practices and seek New Mexico Environment Department's (NMED) view of LANL's proposed activities involving repair and use of such soils and asphalt material to be removed in the future. Although in this letter we propose that NMED as an authorized state program determine that such material does not contain or no longer contains any hazardous waste, this letter is not an admission by LANL for any purpose, including in connection with Administrative Compliance Order 98-03, that soils or demolished asphalt from Area L is a hazardous waste, as alleged by NMED. Conversely, LANL will not assert against NMED its response regarding future asphalt handling in any of the current administrative or other legal proceedings concerning past asphalt handling practices within TA-54.

Because facility maintenance and construction activities at TA-54 often result in excess asphalt material combined with soil and other material and because these media may contain trace levels of hazardous substances, the Laboratory by this letter requests that it be granted an exclusion pursuant to 40 C.F.R. 261.3(f)(2) and the U.S. Environmental Protection Agency's (EPA or the Agency) related "contained-in" policy, based on a determination that the material is not contaminated with hazardous waste. A proposed procedure for this determination is described below. Importantly, the proposed procedure ensures that the asphalt material in question does not exhibit a hazardous characteristic and does not pose risk to human health or

RED LANL TA-54 '98

TL



11426

Benito Garcia, Bureau Chief

October 29, 1998

Page 3

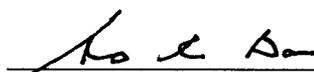
that are subject to this waiver. Materials subject to this waiver will include soil, asphalt, and other materials resulting from facility maintenance and construction activities at TA-54, which is LANL's primary hazardous waste storage area and lies wholly within Laboratory boundaries. There is little, if any, potential for constituents present in the soils, asphalt or other material to migrate and pose a hazard to human health or the environment.

If NMED grants this waiver, Laboratory personnel will measure the new material against the PRGs through characterization based either (i) on whether the material is being removed from a part of TA-54 about which the Laboratory has acceptable knowledge on which to make a decision, or (ii) on verification sampling. For materials subject to this waiver that cannot be used within TA-54, LANL will dispose of such material offsite in a Subpart D permitted landfill. We believe this proposed reuse of the material is consistent with NMED's prior consent to LANL's use of demolished asphalt from former Pad A (the former waste storage pad partially overlying Evaporation Pit A and the disposal shafts) as fill under the foundation of the new Area L mixed waste storage dome.<sup>3</sup> Further, the disposal of excess material in a Subpart D permitted landfill is protective of human health and the environment and is allowable consistent with the EPA's "contained-in" policy.

LANL appreciates NMED's consideration of this proposal, LANL would like to reach agreement with NMED regarding the future handling and final disposition of asphalt material within TA-54 that is (i) acceptable to NMED and LANL, (ii) technically reasonable and cost effective, and (iii) protective of human health and the environment. LANL believes that the proposed handling practices described in this letter meet these requirements.

Please call Tony Stanford at 665-6158 if you have any questions or would like any additional information.

Sincerely yours,



Thomas E. Baca

Los Alamos National Laboratory

cc: Nick Persampieri, NMED  
Dennis Erickson, ESH-DO, K491  
Tony Stanford, EM-SWO, J595  
Sheila Brown, LC, A187

---

<sup>3</sup>In a meeting with LANL representatives in June 1994, NMED authorized use of asphalt from Pad A as fill material in the immediate area of the construction of the mixed waste storage dome. See Administrative Compliance Order 98-03, ¶ 53. NMED and LANL agreed that such movement and use would not constitute "placement" of the asphalt and no act of waste generation would occur.

Benito Garcia, Bureau Chief

October 29, 1998

Page 2

the environment. Accordingly, LANL requests that NMED, as having an authorized state program under RCRA, exclude such soils and asphalt from regulation under RCRA.

Because EPA's contained-in policy is a policy, not a rule, EPA has been flexible in its administration. The policy has been codified with respect to debris in 40 C.F.R. 261.3(f)(2), and has also been applied to soil and other environmental materials. See Letter from Michael Shapiro to Peter Wright dated September 15, 1995 (explaining that the contained-in policy applies to "environmental media"). In 1993, the Agency proposed to codify application of the contained-in policy to soil (58 Fed. Reg. 48092, 48123), but it has not finalized this proposed rule. Nevertheless, case-by-case application of the risk-based screening factors (such as the EPA Region IX Preliminary Remediation Goals [PRGs] discussed below) to soil and asphalt at TA-54 is consistent with the requirements of the contained-in policy, and addresses the key criteria outlined by EPA for proper "contained-in" determinations.<sup>1</sup>

The Laboratory has sampled and analyzed soils and asphalt, and reported its findings in its "Area G Asphalt Sampling and Analysis Project Results" dated March 18, 1998, which we provided in our March 25 meeting. Sampling was conducted in 1994 at three locations at Pad A, the former mixed waste storage pad in Area L of TA-54, and in 1997 at the Area G asphalt pile located east of the Compactor Building and in Pit 37 in Area G. Analysis of the 1997 samples showed that neither the asphalt/soils in the pile east of the Compactor Building, nor that found in Pit 37, contains hazardous constituents at levels exceeding either the Toxicity Characteristic regulatory limits or the PRGs. PRGs, which are chemical concentrations in environmental media that represent a risk of less than one in a million to an exposed individual based on residential exposure scenarios, are widely considered to present an insignificant risk of potential harm to human health or the environment.<sup>2</sup> Results of the 1997 sampling and analysis in general are consistent with data from the 1994 sampling and analysis of the Pad A asphalt/soil. Finally, a risk screening evaluation of the data from the 1997 sampling shows that there are no chemicals of potential concern in the asphalt or soil that exceed PRGs.

The requested waiver, if granted by NMED, would apply on a prospective basis to materials

---

<sup>1</sup>EPA has explained that a contained-in determination should "include information sufficient to demonstrate that specific constituent concentrations in hazardous debris, hazardous soil, or other environmental media to be excluded do not pose a hazard to human health and the environment at the site." 58 Fed. Reg. at 48155 (Sept. 14, 1993). Information relevant to this determination includes: (1) characteristics of the debris, soil, or other media; (2) waste constituent characteristics such as solubility, mobility, toxicity, and interactive effects of constituents present; (3) possible exposure pathways and potential adverse ecological impacts; (4) an acceptable risk range of  $10^{-4}$  to  $10^{-6}$ ; (5) surface or subsurface characteristics such as topography, hydraulic conductivity, permeability and porosity of soil, aquifer thickness, and other geologic and hydrogeologic characteristics that may influence constituent mobility; (6) climatic conditions; and (7) other site or waste-specific characteristics that may affect the potential for constituents to pose a hazard to human health or the environment. *Id.*

<sup>2</sup>Use of the very conservative  $10^{-6}$  PRG risk level combined with the limited exposure potential created by either use of the material within TA-54 or disposal at a Subtitle D landfill (as proposed by the case-specific procedures outlined in this letter) ensures compliance with the criteria specified by EPA with regard to a "contained-in" determination. See 58 Fed. Reg. at 48155 (Sept. 14, 1993)(media meeting an acceptable risk range of  $10^{-4}$  to  $10^{-6}$  does not "contain" hazardous waste).