



Kieling, John, NMENV

From: andrew green [aaggrreeenn@hotmail.com]

Sent: Thursday, May 06, 2010 8:09 AM

To: Kieling, John, NMENV

Subject: LANL burn permit

Dear Mr Kieling

Denying Los Alamos National Laboratory (LANL) an open burn permit is inequitable, based on less-than-scientific evidence, inappropriate, and even dangerous.

The New Mexico Environmental Department fact sheet on the permit states in conclusion that the basis for denial is:

-[if !supportLists]-->1. <!--[endif]--> insufficient proof from LANL that the continued operation of the burning units would not result in an adverse risk to the environment,
 -[if !supportLists]-->2. <!--[endif]--> Extensive public opposition to open burning, and
 -[if !supportLists]-->3. <!--[endif]--> NMED's belief that there may be preferable and viable alternatives.

Let me address these points, then close with a few costs of a denial.

<!--[if !supportLists]-->1. <!--[endif]--> **NMED needs to apply its standards equitably.**

It is ironic that the NMED allows the public to burn hundreds of tons of wood each winter without permit. Burning wood in a home fireplace has the same effect on the air as open burning since there is no filtration to the exhaust. Burning wood, driving a car, and running a diesel generator all produce dioxins and furans. Combustion temperature is important; at 1400 degrees the dioxins are destroyed. The burning of explosives at LANL is done at much higher temperatures than wood burning occurs. This already indicates LANL is doing better on grams of dioxin released per ton of material burned than the home fireplace. If one argues that LANL's volume of burned material is large, one quickly sees the frivolity of the argument: the permit allows LANL to burn about 6 tons per year; the public in the upper Rio Grande valley probably burn that quantity every day in winter. There is no doubt wood burning and car emissions in the area far exceed LANL's possible dioxin emission.

In the fact sheet there is **no evidence connecting current emission rates to soil concentrations**. Denying the permit will not reduce the soil dioxin concentrations. I think LANL is prepared to admit operations were not as environmentally sensitive in decades past as they are now. Cleaning up from past operations is a different issue from stopping current operations.

NMED plume modeling with the code OBODM suggests preferred depositions to the north and south/south-east. Day-time winds in Los Alamos are predominantly out of the south so how can one get a deposition to the south? My impression is that there are very restrictive wind conditions under which burning may occur. Would this not drive modeling plumes? One must seriously **question the input data used for the modeling**.

The entire risk assessment discussion in the fact sheet uses soil data (an integral of past emissions), but not current emission rates. Surely, if the NMED wants to make scientific judgment on current operations it needs to base decisions on what is happening now. But even going with soil data, the risk for humans was considered acceptable even under conservative assumptions. This is not what one would expect from reading the opposition letters to the NMED. A commonly used form-letter used in protest says



LANL's open burn activities "releases poisons into the air we breathe" (interestingly of the apparently 1400 letters of protest only about 10 – 20 (i.e. 1%) came from Los Alamos County residents, the people most likely to breathe this air). Canned protests claim a "direct threat to ... public health" without providing any substantiating evidence or cogent reasoning. This claim seems inflammatory and contradictory to the NMED-endorsed human risk calculation. Who is correct? I'm going with the NMED here.

The NMED supports the claim of a "slightly elevated" risk to deer mice and acceptable or low risks to all other wildlife. The risk to deer mice is so slightly elevated that even assuming a substantial bio-availability of 50% instead of the conservative 100% would drop the risk to acceptable for deer mice. The NMED also says it wants LANL to do an evaluation based on "lowest observed" rather than "no observed" adverse effects levels. Is this not a simple inverse-linearity where NMED could recalculate the risk with the other numbers? Two minutes of work, folks! To save the two minutes, using the most conservative "lowest observed" level the risk is acceptable. (Aren't we daily trying to kill this hantavirus-carrying pest anyhow?).

<!--[if !supportLists]-->2. <!--[endif]-->NMED cites extensive public opposition to the open burning. If one takes the time to look at the fourteen hundred expressions of opposition posted on the NMED website, we see that about 73% simply signed a petition and 24% submitted a form-letter which uses language and makes references which almost certainly are unfamiliar to most signatories. Ironically, the number of opponents that actually wrote their own opinion (the remaining 3%) is fewer than the number of people writing in support of the permit.

A further point to note is that the biggest risk of LANL's open burning is posed to the nearest residents. Only 1% of the opponents live in Los Alamos County (mostly a downwind population); a paucity in Espanola, the nearest large downwind town outside the county. The lion's share (about 80%) of those against the permit lives in Santa Fe, not downwind and over 20 miles away. I am curious as to why the NMED would be swayed by the opinion of more than 150 opponents who live outside New Mexico (70 from Kentucky alone!). The handful from Canada, Austria, Northern Ireland and Sweden add an irrelevant touch.

I seriously contest the significance of the opposition to this permit. The population within a 50 mile radius of LANL is about 300,000 so 1,400 objections is under 0.5%. I am counting on the NMED not being influenced by anything else but defensible evidence and sound science.

<!--[if !supportLists]-->3. <!--[endif]-->The NMED is hoping for "preferable and viable alternatives". This sounds like a reasonable goal - but not a reason for denying the permit. Unfortunately, under this umbrella comes a number of outstandingly irresponsible candidates, the most popular being transporting the high explosives elsewhere. I urge the proponents of this alternative to think hard about how much they want high explosives (possibly more unstable than new purchased material) going through their town. Does the NMED want to take on the **liability for forcing the transport of unstable high explosives through urban areas**? LANL has previously considered the cost and risk of doing so and opted for the more socially responsible burning in place. Another plan considered by LANL was use of an incinerator, but that was blocked by NMED a few years ago. For all alternatives one must always ask what is the cost incurred for the benefit gained.

Speaking of costs and benefits, I hope the NMED realizes the costs of denying this permit. They are numerous. Much of the open burn and open detonation work at LANL **supports defensive strategies relating to homeland security and protection of military personnel** who are often from disadvantaged socio-economic backgrounds. This work is intended to save lives; this is not weapons manufacture. Does the NMED want to be known nationally years down the line for thwarting these efforts? If this work can't continue here, pressure to get it done will move it elsewhere, along with the federal dollars and the people who can do the work. Think trickle-down economics; think children losing a parent to an improvised explosive device.

Another cost is the **damage to NMED's reputation** as a reliable and sensible enforcer of the law. The tardiness

with which this permit has been handled over more than a decade is already a poor showing. The Department's making decisions based on unfounded public fears and preferences can only tarnish.

Finally, are these opponents to the permit really interested in air quality or is there a broader agenda. The form letter addresses six other issues not related to burning. The petition is also a mixed bag, including a generic claim that LANL threatens "our cultural, spiritual and ecological survival". I postulate one could get millions of nationalists in other countries to sign such a petition if they understood the ultimate goal to be to stymie US arsenal maintenance. The anti-nuclear weapons agenda belongs elsewhere.

I conclude in pressing you to grant an open-burn and open-detonation permit to the Los Alamos National Laboratory and work with their staff in addressing scientifically- based concerns.

Andrew Green, Los Alamos County, NM (not Sweden).

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