

Kieling, John, NMENV

From: Jack Ellvinger [jack_ellvinger@yahoo.com]
Sent: Sunday, March 28, 2010 4:56 PM
To: Kieling, John, NMENV
Subject: Comments on the LANL Draft RCRA Permit

Attachments: Permit Comments.doc



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Mr. Kieling:

I have attached my personal comments on the LANL draft RCRA permit. I submit these as a private citizen and they should in no way be construed to represent the established position of LANL, LANs or the DOE. I appreciate this opportunity to participate in the public comment portion of the permitting process and look forward to the outcome that process.

Thanks,

Jack Ellvinger



Mr. John E. Kieling, Program Manager
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2905 Rodeo Park Drive East, Building 1
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March 28, 2010

Mr. Kieling:

My name is Jack Ellvinger. I am currently an employee of the Los Alamos National Laboratory (LANL). My comments presented here are my own and should not be construed to represent LANL's position. I have worked in the environmental compliance and permitting field for RCRA/Hazardous Waste since 1979. I served as a Program Manager for the State's Hazardous Waste Program and then as the Bureau Chief of that program, the underground storage tank program and superfund program at the then Environmental Improvement Division. I worked for two years as a hazardous waste consultant for LATA working on a contract that provided services to the Department of Energy Complex. I have been employed at LANL since 1993 working on compliance and permitting for waste management projects.

I wish to take this opportunity to say that in general the proposed permit for LANL is a positive step. It is important that each waste storage, treatment and disposal (TSD) site in New Mexico receive a permit. Permitting requirements need to be consistently applied to all TSD facilities across the state. The requirements need to be based on the regulations and provide clear and consistent guidance for facilities to operate under and for the regulator to enforce. The draft permit as proposed goes a long way to meet that standard. There are a number of issues that I see and would like to address. They follow as general and then specific comments.

GENERAL COMMENTS

- The permit as drafted is too prescriptive. A permit should provide the compliance envelope for a facility and not how it must operate. There is little to no flexibility in the permit thereby making it extremely complex, long, very time consumptive in its development and difficult to implement and enforce. It leads to a lot of "grey" areas that require interpretation and clarification. Also with great detail comes the need for a very active permit modification process that poses undue hardships for the facility and the regulator both having limited resources.
- The permit contains many sections that are redundant of other documents and agreements or are just not permitting issues. This permit as applied for by LANL was to permit storage locations at TAs-3, 50, 54 and 55 as well as treatment by cementation at TA-55 and by Open Burning at TA-16. There are a myriad of sections within the permit that go well beyond that scope. Many

of these have no basis in the regulations. I will attempt to address these more precisely in my specific comments.

- The applicability of various elements of the revised final draft is questionable. The RCRA permitting process is met to address any treatment, storage or disposal operations for defined hazardous waste at a facility. The regulations offer a number of exemptions, some because certain operations are addressed by other environmental regulations. Specific issues will be addressed in greater detail in my specific comments.
- Removal of the Open Burning Part 6 and its associated information/data throughout the draft permit and its attachment is not justified. It creates a huge impact on the facility operations, laboratory mission, safety and protection of the public health and environment. I will address this more thoroughly in the specific comment section.
- Over half of the draft permit text is devoted to Corrective Action which is already covered by the “Consent Order” which was negotiated with NMED/DOE/LANS. That is a binding document with hard deadlines and stipulated penalties. Any changes made by mistake or as a result of the permitting process places these two documents in conflict and the Laboratory in an untenable position of trying to maintain compliance. Part of the permitting process is offering the public the opportunity to comment on the draft document. If the “Consent Order” is unchangeable then the public can not offer changes as part of this permitting process or if changes are made then the two documents will be in conflict. The public, as can be seen by comments and proposed testimony, feels that since this issue has been placed in the permit that it is appropriate for them to submit comments on it and the associated groundwater monitoring. That is understandable. If the order and other agreements are immutable then they have no place in the permit.

SPECIFIC COMMENTS

- **Part 1.10 Information Repository** - Public notification and information and the information repository are issues that are very important to the public. I, as member of public, wish to support the concept of a virtual repository. It is that type of progressive thinking proposed by NMED in the draft permit that will give a broader range of the public access to the repository. Libraries and general access to the internet has become so pervasive that this is the best possible approach. It also makes it easier for the Laboratory to maintain an up-to-date repository. A single facility with hard copies would be difficult for the public to access and difficult for the Laboratory to keep current. Access to a virtual repository is 24/7, not just during business hours making it difficult for people working to partake in the public participation aspects of the program.
- **Part 1.17 Notice of Demolition Activities** – This requirement is currently covered in a binding agreement. There is no regulation that requires a facility to report its demolition activities. This agreement was entered into by LANS, DOE and NMED. It is limited and flexible due to the nature of demolition operations at the laboratory. The requirements in the permit are more

prescriptive and will cause issues with the demolition process thereby limiting the laboratory's ability to reduce its footprint, potentially jeopardize money allocated for demolition and, should there be issues of whether the laboratory met the requirement, it places the permit in jeopardy through enforcement. Since this is not a permitting issue it should be removed from the permit.

- **2.2.1 Hazardous Waste from Off-site Sources** - The inclusion of the "off-site" wastes section is unnecessary, poses a hardship for various programs, makes problems for national security, and is not a good use of tax payer's monies. This comment addresses both the sited Part of the permit and Attachment L. These sections limit the Laboratory from receiving wastes from off-site. The Laboratory is a National Laboratory. As such its missions are national in nature. This prohibition limits the Laboratory's ability to address national problems such as the Off-site Sealed Source Recovery Program. This program works at both a national and international level to recover sealed radioactive sources and securely dispose of them. This program is aimed at keeping these sources out of the hands of terrorists and preventing them from making "dirty bombs". The prohibition as written restricts the Laboratory to one drum of these sources per year if it is deemed mixed waste (governed by RCRA). At this time the program is not receiving any mixed waste but the potential exists that some of the sources will be mixed waste. If the amount should exceed one drum per year then the Laboratory would be required to seek permit modifications to increase that amount. Additionally, the Laboratory routinely sends wastes off-site for treatment. It then is required to take back the treated residues (still regulated under RCRA) sometimes. The list of facilities in Attachment L is those facilities that the Laboratory is currently using to treat its wastes off-site. If the Laboratory can no longer use one or more of those facilities or a more efficient or cost effective option becomes available to the Laboratory, it would be required to seek a permit modification. I understand that NMED and the public do not want to see hazardous chemical and radiological/chemical mixed waste disposed at LANL. LANL has not asked for and is not trying to permit a disposal site for those wastes. LANL, however, is a unique member of the NNSA National Laboratory system. It has unique capabilities. It is understandable that with costs and requirements what they are for security and compliance with state/federal/DOE laws, regulations and orders that many capabilities are not duplicated throughout the DOE complex. Therefore, if LANL has the capabilities that no other facility has it makes sense to have LANL provide the service necessary to characterize and package certain wastes (i.e. sealed sources, limited wastes from Sandia) for shipment to WIPP. The regulations contain no prohibition against this. The purpose of the permit is to protect the public health and the environment. This provision does just the opposite, it places restrictions upon the facility that make it difficult if not impossible to provide those services it missions demand to protect the nation. In order to carry on the mission of this program unhampered this provision should be deleted from the permit.

- **Part 2.2.2 Hazardous Wastes from Foreign Sources** – This provision is closely tied to the one above. Many of the sources that the Off-site Sealed Source Recovery Program deals with are sources manufactured in the United States but sold or sent out of the country for use. Those sources are then recovered, characterized and packaged for shipment and disposal. It is not impossible that some of these sources will be mixed waste once characterized. Again, it is in the interest of protecting the public from potential threats that these sources should be secured. Therefore, this section should be deleted from the permit as well.
- **Part 2.12.2 through 2.16 and Attachment M Financial Assurance** – LANL is a federally owned and operated facility with a contractor as a co-operator. The Federal Government owns all of the structures, property and equipment. The facility is run by federal tax payer dollars controlled by the Department of Energy. All operations at the Laboratory are overseen by the Department of Energy. Being so, the Laboratory is not subject to financial assurance. Section 264.140(c) under Applicability states “States and the federal government are exempt from the requirements of this subpart.” Placing the burden of financial assurance on the Laboratory would take tax payer dollars away from important work and place them in a trust that will never be needed. The clean up of the past operations and current permitted operations is guaranteed by the federal government. Placing multi millions of dollars in a useless trust will cause clean up activities to slow for that money in all likelihood will have to come from that budget. This would also place the laboratory in jeopardy of not making its commitments under the “Consent Order”. Since this requirement clearly does not apply to LANL it should be deleted from this permit.
- **Part 4.6 TA-50 Radioactive Liquid Waste Treatment Facility** – This facility is regulated by the Clean Water Act. It holds an NPDES permit for its operation and discharges. As such it is exempt from the hazardous waste regulations and their permitting requirements as per subpart 261.4(a)(2). If the facility should fail to meet any of its requirements under it’s NPDES Permit then it would be in violation of that permit and not subject to losing an exemption under the Hazardous Waste Regulations. There is no provision in the hazardous waste regulations providing for loss of such an exemption. Including it or referencing it in this permit is, therefore, outside the scope of the permitting regulations and therefore it should be deleted from the permit.
- **Part 6** – The purpose of LANL requesting a permit for these units was to provide the flexibility to destroy reactive HE wastes that could not be sent safely off-site for treatment. LANL is currently sending more and more waste off site for treatment as can be seen by its records. The issue at hand is that LANL knows that there are waste streams that are being or will be generated that it will not have the ability to send off site for treatment. Another issue is that the only off site treatment site may cease its operations. This would leave LANL without a path forward for HE waste treatment. LANL is a R&D facility. As such it has the potential to work with new and unique HE materials and energetics. It must have the ability to treat the waste residues if

there is no commercial capacity available. The removal by NMED of the Open Burning portion of the permit (Chapter 6 and its related attachment) was based on sampling data, and the modeling conducted by both NMED and LANL. The modeling was done first and utilized a waste dictated by NMED that is not burned by LANL (ammonia perchlorate). This substance is a known generator of furans when burned. LANL does not have a perchlorate waste stream that goes to the burn ground. The site is currently a "brown field". It is an old industrial site where a myriad of activities have been carried out over its life span (~50-60 years). There is little doubt that activities prior to being regulated by RCRA generated furans. Those activities are reflected in the soil samples that were taken as a result of the modeling done on the perchlorate waste stream. If this operation had been proposed as a new operation on a "virgin" mesa top at the laboratory the permit would have likely been granted and more of the environment would have been utilized for industrial purposes. Industrial activities over its life span have, without doubt, contributed to any contamination that is present at this site currently. Additionally, operating temperatures at the burn tray reach ~1,800 to 2,000 degrees F within 10 seconds of commencement of a waste burn. Dioxins and furans are formed in the 400 to 800 degree F range as products of incomplete combustion. Therefore, it is not logical to assume that the presence of furans in the nearby soil was generated by this operation. This site is part of the facility's corrective action plan for the future. Once activities are completed at this location, RCRA closure will be implemented then the entire site will undergo corrective action. As it stands today, this site would pass the test of being clean to residential standards. This would allow LANL to clean close it as is. No impact to human health or the environment is present. The concern over the potential impact to small mammals is exaggerated. LANL is planning on doing population studies on the deer mouse and other small mammals to show that they are not impacted. No Threatened and Endangered Species are present on the mesa and the current residents enjoy a full and productive life across the laboratory. LANL was surprised when it was announced that these units would be denied their permit. The site has taken many positive steps to improve the operations at TA-16. There has been a huge reduction in the volume and type of wastes that are sent there for burning. Safety is the biggest concern. Each waste stream is reviewed and considered for treatment there or shipment elsewhere for treatment. If the material is safe and meets DOT requirements for transportation, that waste will go off site. If not it must be treated at LANL or stored until some other option becomes available. The treatment units are designed so that they burn hot and clean. A recent video clip provided by LANL clearly shows that during a waste burn there are no visible emissions other than heat waves. Open Burning is clearly recognized as a viable option for the treatment of reactive wastes. NMED has adopted the EPA regulations dealing with open burning and should therefore utilize them to permit this unit. The previous drafts of the permit contained a provision for soil sampling so that any added contamination by the burn units could be trended and the permit withdrawn if the trend was upward. I believe

that the permit should be issued for the Open Burn activities at LANL with this provision included to ensure that the unit functions without posing a threat to the environment or the public.

- **Part 11 Corrective Action** - Interface with the Consent Order. In Part 11.1 the statement is made that “Nothing in this permit Part shall be construed to constitute a change to the Consent order”. Additionally, 11.2.1 states “If any additional SWMUs or AOCs are discovered while the Consent Order is in effect, corrective action for such units shall be conducted under the Consent Order.” Under alternative closure requirements in subpart 264.110(c), those RCRA regulated disposal units that were in operation after the date of regulation can be rolled into the CME/CMI process for corrective action. It is the intention of the NMED and LANL to combine all of the underground regulated units and SWMUs at TA-54 Area G for a comprehensive cleanup/closure of the site. A great deal of time and effort has been expended on this issue and since no permit is being applied for or issued for these units, the issue should be left to corrective action under the Consent Order. When the Consent Order expires then the future monitoring and any other activities tied to those units should be rolled into a post closure care permit that can be worked out at that time and amended to the current permit. With the corrective action yet undecided and the full investigation yet incomplete it is non productive to consider post closure care at this point. It would appear to be more productive for NMED to develop a technical guidance document that provides facilities an outline of how the regulator will apply corrective action to those sites where it is applicable. If the Consent Order is a good example then it could be used as boiler plate for such an endeavor. The document could be tailored to meet specific sites with unique circumstances but it would go a long ways to making this process consistent. It would also have the benefit of making it possible to refer to sections in that document rather than putting in long sections in a permit. Since the permit can not change the Consent Order, there are no units in the permit that require corrective action, and the public is unable to alter the language that comes from the Consent Order (prohibits public input as required for permitting activities), I submit that this section should be removed from the permit and maintained in the Consent Order.
- **Part 11.3.1 Groundwater Monitoring** - Ground water monitoring and installation of wells is another issue that is being driven by the Consent Order and in a separate agreement between NMED and LANL. If the alternative closure approach is used as discussed in the bullet above, then, other than mentioning that the monitoring system being developed and implemented under separate agreements at this point and will be rolled into the post closure care permit when the Consent Order expires is excessive and serves no point. I propose that this section should be deleted from the permit as well.
- **Attachment D Preparedness and Prevention** – This has been an issue that has received a great deal of attention due to audits done on the Los Alamos Fire Department and LANL’s response capability. It is apparent that there is a lack of understanding of what the regulations require. The Fire Department is

a separate entity from the Laboratory. The DOE/Laboratory has an agreement with them to provide assistance in a time of need. Training is provided to the Fire Department to better enable them to be safely responsive to any emergencies anywhere within the Laboratory. The waste management operations represent only a very small component of that responsibility. The regulations at 264.37 require the facility to “attempt” to make arrangements with fire, police and local medical facilities. It is incumbent upon the facility to familiarize those entities with “...layout, properties of hazardous waste handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to and roads inside the facility, and possible evacuation routes.” LANL has done all these things and maintains a constant training and familiarization program for the Fire Department to maintain a high level of facility awareness. That is facility wide. The waste management portions of the Laboratory represent only a small percentage of the buildings and areas occupied by the Laboratory. These waste storage and treatment areas are the focus of this permit and should not be confused with operations that are outside the scope of it.

- **Attachment G Closure Plans** – For each of the closure plans associated with TA-54 Areas G and L there is a requirement to conduct soil sampling. When corrective action is carried out at those locations a full site characterization will be completed and a remedy proposed/approved to/by NMED. Requiring LANL to sample and analyze soils that are scheduled to undergo corrective action within the next 3 to 5 years after a careful characterization (currently taking place) via a plan approved by NMED provides no benefit and is a waste of money that could be better spent on other important issues. These requirements should be deleted from each of the closure plans in the permit for units at TA-54 Areas G and L.

I appreciate the opportunity to present my personal comments on this very important document. This document is important to the public as well as the Laboratory for many of the same reasons. Protection of the public health (including employees) as well as the environment is an extremely high priority for both parties.

Sincerely,

Jack Ellvinger