Nuclear Watch of New Mexico

October 1, 2004

Mr. James P. Bearzi, Chief
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New Mexico Environment Department
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Santa Fe, New Mexico 87505-6303
Ref: Comments on draft Order on Consent between NMED, DOE and UC

Via e-mail to hazardous_waste_comment@nmenv.state.nm.usa

Dear Mr. Bearzi:

Nuclear Watch of New Mexico (NWNM) respectfully submits these comments on the draft Order on Consent between the New Mexico Environment Department (NMED), Department of Energy (DOE) and University of California (UC) of September 1, 2004. Thank you for the opportunity to comment. We also salute the NMED Secretary, you, your staff and NMED as whole for achieving this Order. We believe that it has tremendous potential, so long as NMED remains resolute behind the Order's apparent intent to compel genuine comprehensive cleanup at LANL.

General Comments

The Surface Water Quality FFCA and Public Participation

Having sincerely praised the Order on Consent (hereinafter the CO) our first observation is somewhat obvious: There are very serious flaws inherent in it. The first is the deletion of surface water quality monitoring requirements, something in which we do not criticize NMED. It is an unfortunate reality that New Mexico has not yet been delegated authority by EPA. All parties to this CO (i.e., NMED, DOE and UC) seemingly deserve some praise in that NMED has prompted DOE and UC to suggest and work on a Federal Facilities Compliance Agreement (FFCA) with EPA that would partially fill the regulatory void. Further, EPA, DOE and UC seem to be willing to enter into it. The seriousness of this issue is clearly demonstrated by the fact that the NMED Secretary has declared that the CO will not be finalized unless the FFCA is finalized in advance. Our practical point is that the FFCA should be finalized as soon as possible.

Related, the FFCA should be subject to a reasonable period of public comment. NMED is already on record as supporting this. Apparently DOE is as well (any declared UC position is unknown to us) and the Northern New Mexico Citizens Advisory Board has come out in support of it. We fail to understand why EPA is apparently not supporting it, and through these comments urge NMED to apply what pressure it can upon EPA to get it to agree to public comment. We maintain that public comment is not only democratically correct in principle, but on a purely practical basis often results in better decision-making by government officials in both state and federal levels, a claim we can substantiate and document.

Concerning encouraging EPA into accepting public comment, perhaps NMED need not be that passive in the matter, and urge NMED counsel to consider this. Just some preliminary reading into the Clean Water Act brings forth under "Congressional declaration of policy and goals"

> Public participation in the development, revision and enforcement of any regulation, standard, effluent limitation, plan or program established by the [EPA] Administrator or any State under this chapter shall be provided for, encouraged, and assisted by the Administrator and the States. 33 U.S.C.A §1251(e).

Clearly, the above would seem to include any FFCA. Further, the Code of Federal Regulations expressly provides for public participation under the Clean Water Act, and seemingly any FFCA under the Act. 40CFR25 describes as a policy and objective:

> To foster a spirit of openness and mutual trust among EPA, States, substate agencies and the public; and to use all feasible means to create opportunities for public participation, and to stimulate and support participation.

In short, the NMED Secretary has demonstrated that a FFCA is integral to the CO by virtue of his statement that he will not finalize the CO without it. Therefore, we assert that any comments on the hoped for FFCA are appropriate here. To get to a practical point, we recommend that NMED counsel carefully consider whether public participation in the FFCA is required under the above statutes (or any others), and if it is in his/her opinion to so inform the EPA. Any EPA argument over a lack of precedence would be wrong, as this writer twice submitted comments on proposed FFCA's concerning LANL between DOE and EPA in the mid-1990's (once under the Clean Air Act and once under RCRA for Land Disposal Restrictions). Finally, we note that were there to be public comment it would then be a possibly critical opportunity for NMED to offer its own.

To repeat, we do not criticize NMED for the CO's lack of surface water quality monitoring requirements, as this is the unfortunate result of a gap in regulatory jurisdiction. We can merely hope that the FFCA is reached as soon as possible (with public comment), and do advise NMED to stay the course on its decision to not finalize the CO until the FFCA is finalized in advance.

Future Land Use Designations

There is another serious deficiency that pervades the CO in which we feel that NMED has preemptively surrendered. If we are correct, this would substantially nullify the CO's potentially beneficial effects. This has to do with designated future land uses at LANL.

It is remarkably how devoid the CO itself is of discussion of this crucial issue. This is all the more remarkable in that essentially the CO's *modus operandi* is primarily risk-based, that is NMED proposes to mandate "cleanup" at LANL down to a level in which there would be a 10^{-5} risk of a latent cancer fatality (LCF) from residual contamination (meaning one LCF in a population of 100,000 over an individual's lifetime). But that risk level has everything to do with the hours of human occupancy in a day at the affected site. Basing the LCF risk on "residential" occupancy assumes 24-hour human occupation daily, whereas LCF risk on "industrial" occupancy assumes only 8-hour human occupation daily. This does not result in a merely linear 3-fold (24/8) reduction of the calculated risk, but instead results in an exponential reduction of calculated risk, which in turn will severely lower the risk threshold that is suppose to trigger cleanup.

Again, the CO is remarkably devoid of discussion on this subject, which we find to be an incredibly significant failure. We have to turn to the NMED's "Fact Sheet' accompanying the release of the CO for clarity on this subject. That fact sheet states:

> The proposed Order on Consent contains language that allows the DOE and UC to establish industrial cleanup levels for specific sites based on the anticipated future land use. However, the Order on Consent contains elaborate provisions to ensure that future land use conforms to actual cleanup levels (Section III.Y). If the land use should change, the DOE and UC will be required to meet the appropriate land use cleanup level criteria…

Our concern here cannot be overstated, as again we fear that NMED has preemptively surrendered too much. It is clear that DOE and UC have angled for this all along, witness their so-called Risk-Based End States Vision (RBES), Performance Management Plan (PMP), and the "Letter of Intent" signed under former NMED Secretary Pete Maggiore. The CO's Section III.Y is far from proscriptive on the matter, and is in fact misleading, as it merely pertains to possible future land transfers, which constitute a minor fraction of present Lab property. There is nothing in the remainder of the CO that mandates "specificity" in the designation of future land use for the remainder of Lab property, which is an egregious (if not fatal) flaw in the CO.

It is clear what DOE and UC want, which is a wholesale determination of the Lab's remaining property to be designated as "industrial use" in perpetuity. We even suspect that, in addition to the lack of surface water quality monitoring requirements, this is why DOE and UC are willing to enter into this Order on Consent, since it is such a determinative basis for how future cleanup will proceed. We urge that NMED proceed most cautiously in this area and bear in mind the long-range implications. Despite its power, the Lab will not be here forever. The Parajito Plateau has been inhabited for at least a thousand years. That long-term human habitation was based on subsistence agriculture and hunting-gathering. Now our Nation is operating on deficit spending, resulting in an increasingly immense national debt. It is only prudent that comprehensive cleanup, defined as cleanup that makes human subsistence occupation possible without undue risk, should occur in the relative short-term, otherwise there is a distinct chance that it will not occur at all.

To make this yet more imperative, we note the DOE's explicit plans to turn over LANL's environmental management, including cleanup, to the National Nuclear Security Administration by 2015. In other words, by that time Lab cleanup will be delegated to the very nuclear weaponeers that caused the extensive contamination to begin with, and who explicitly plan to produce more radioactive and hazardous waste that inevitably causes more contamination. Further, they appear prepared to write cleanup off in a yet to be determined percentage of the Lab's territory, as evidenced by the following: "At LANL, EM sites that cannot be remediated to contaminant levels allowing unrestricted use (either now or in the foreseeable future) will transition to the National Nuclear Security Administration (NNSA)." Proposed Risk-Based End States Vision (RBES), LANL, November 2003.

We repeat that the Lab will not last forever, but add that it is the clear, present and compelling responsibility of NMED to help ensure long-term environment protection so that northern New Mexico and the Rio Grande can sustain and nurture posterity through many generations. Speaking as a father and grandfather this is no mere abstract or empty platitude; it is instead flesh and blood. I want future generations to praise my generation for its generosity and foresight,

rather than cursing us for the fiscal and environmental bankruptcy that we may perversely endow them with.

Again, it is clear what DOE, UC and LANL want, which is wholesale designation of the entire Lab property as industrial use. The RBES document claims that:

> The risk-based end states vision describes cleanup goals that would be protective under the planned future uses described in two planning documents. The first is LANL's *Ten Year Comprehensive Site Plan*, which describes NNSA's facility and operations over a ten-year planning window; the second is *Land Transfer Report to Congress under Public Law 105-119…*

The CO has provisions for only that related to future land transfers (CO §III.Y). Because future land use is the key factor determinative of future cleanup levels, NMED should demand that DOE continually release the annual versions of the LANL TYCSP to it and the public (thus far DOE has refused our repeated requests for it). However, the Proposed RBES Vision does offer substantial insight into what DOE and LANL's Plans are. If one carefully compares the graphic maps in the RBES document one finds that the Lab plans to dramatically expand its "Manufacturing and Industrial" land use into areas now declared "Open Space," resulting in an estimated overall 33% increase. To add to this, this expansion is primarily into the southeastern portion of the Lab, the so-called "Rio Grande Corridor," when long-term protection of the Rio Grande is obviously one of the primary aims of the CO. This strikes us as a rather obvious tactic by DOE and LANL to avoid future cleanup (among other purposes).

I repeat the CO's fact sheet quote "The proposed Order on Consent contains language that allows the DOE and UC to establish industrial cleanup levels for *specific* sites based on the anticipated future land use" (emphasis added). However, there is no language, provision or mechanism in the CO for the determination of site specificity, nor is there language on who makes that determination. Even were the Lab's plans for the dramatic expansion of its declared "Manufacturing and Industrial" zone to not go forward, it has already declared more than 60% of its property to be within that zone. This is convenient for the Lab, in that the actual footprint of "Manufacturing and Industrial" activities is really a very low percentage of that land. Further, that zone captures the majority of the land surface of LANL's watersheds, whose protection is one of the primary aims of the CO.

We find the lack of provisions in the CO for determining industrial-use site specificity to be an egregious flaw. We recommend that the final CO contain extensive language toward that end. We further recommend that one practical effect of this CO has to be to seriously limit the industrial-use designation to just the footprint of where industrial activities actually occur. We recognize that this can be tricky, even contentious to the other parties, given their desires for large buffer zones (particularly with respect to the firing sites), etc. But it should be done in order to protect the environment.

Specific Comments

Specific comments are formatted in sequential alignment with the draft Order on Consent, with any quotes from the Order or its accompanying Fact Sheet in italics.

First, please explain what role, if any, will UC and DOE have in responding to public comment and/or modifying the draft Order into the final Order?

Fact Sheet: *The proposed Order on Consent contains provisions for stipulated penalties should the DOE and UC fail to comply with certain requirements of the proposed Order on Consent.* We applaud the institution of stipulated penalties. We assume that all parties have agreed to this and that they will be preserved in the final Order on Consent.

Fact Sheet: *Some findings of fact, information on toxicity of various substances, and most reference present in the original Order are not included in the proposed Order on Consent.* We recommend putting them back in the final CO, as they are the comprehensive compendium of the possible contamination at LANL that we are aware of (particularly with respect to the MDAs). We suggest that it is in the public's interest to do so, and surely is not that onerous a task given that it can be copied and pasted from the original Order.

Fact Sheet: *Corrective action requirements in the proposed Order on Consent apply to releases and potential releases of "Contaminants," which is defined to include hazardous waste. hazardous constituents, nitrate, explosive compounds and perchlorate.*
We particularly applaud the inclusion of perchlorate and explosive compounds. We expect to see them included in the final Order as well.

Fact Sheet: *...DOE and UC have agreed to voluntarily provide to NMED sampling and monitoring data for radioactive contamination and potential contamination. NMED reserves all rights to acquire such information through appropriate legal measures.*
We applaud NMED for obtaining that "voluntary" commitment. Having said that, there are, of course, no provisions in the draft Order which mandate that the resulting data be of sufficient quantity and quality. Perhaps in response comments NMED could clarify exactly how the integrity of that data is to be assured. Needless to say, we are glad that NMED has reserved it legal rights.

III. G.3 Stipulated Penalties Amounts
We question whether the proposed amounts of $1,000 per day up to 30 days and $3,000 per day thereafter are sufficient. We are not being merely punitive here. We can well envision the Lab paying up to $10,000 in a year of that "bought" it allowance to avoid a major milestone. We encourage NMED to consider harsher penalties for infractions that it considers as major.

III. G.6 Interest
The rate of interest should be specified even if it is variable.

III.J.1 Procedures for Modifying Provisions of the Consent Order. ... modifications of this Consent Order are subject to the same procedural rights that would apply to these modifications if made under the Facility's Hazardous Waste Permit…
This would seem to mandate public participation in major modifications. Please clarify. If so, what then are the provisions for public notification, comment, any hearings, etc.?

III.P Availability of Information
What access will the public have to pertinent information?

III.Y Land Transfer
We find this section to be troubling. A pertinent case in point is the seriously contaminated Technical Area (TA)-21, which Los Alamos County has long had designs on. For the sake of discussion here, let's suppose that the County wanted to create an industrial park there, even perhaps with DOE encouragement. That then could be a very convenient way for DOE to avoid cleanup at TA-21, while passing on the liability to a level of government that could never be capable of comprehensive cleanup. This raises a number of questions. What is to assure that cleanup of transferred land would be conducted to even an industrial-use standard? What are the provisions for public participation in any transfers that might be undertaken under this section? What occurs if it is later found that the extent of contamination is more severe than previously believed? In short, we feel that too large a loophole has been created by this section, one that could perhaps be more constricted in the final Order.

IV.A.3.d Background [Groundwater] Investigation. …The background investigation report shall state the background concentration for each metal and the general chemistry parameters….
Will the same be done for radioactive constituents under DOE's voluntary reporting? It should.

IV.A.4 Sediment Investigation
Again, will his include radioactive constituents under DOE's voluntary reporting? It should.

IV.A.5 Firing Sites. …The Respondents have prepared a map entitled "Los Alamos National Laboratory Firing Sites" dated October 2003, depicting active Facility firing sites and surrounding areas; this map is part of the Administrative Record of this Consent Order.
We applaud NMED for assuming greater regulatory control over LANL's firing sites. With reference to our earlier discussion of specificity in determining designated industrial land-use areas we suggest using those maps which are already part of the Administrative Record, specifically the "Testing Hazard Zones." Areas outside of those zones should be remediated to residential or agricultural standard, unless distinctly within the footprint of "Manufacturing and Industrial" activities.

IV.B Canyon Watershed Investigations
The extensive provisions for investigations are fine in and of themselves. However, what are the practical goals of all of these investigations. How do they translate into corrective actions? What role, if any, would a future surface water FFCA play in filling this apparent regulatory void? How well does the focus on entire watersheds comport with the Clean Water Act, which seems to require focus on individual potential release sites within a watershed rather than the collective watershed. What is NMED's counsel's opinion on this?

IV.C Technical Area Investigations
We applaud the breadth and thoroughness of all the requirements for these investigations that NMED has imposed. Having said that, in all cases where LANL is required to supply data on hazardous contamination, will DOE also supply analogous data on radioactive constituents and contamination under its "voluntary" reporting? It should.

V. Investigation for other SWMUs and AOCs
Same comment as above.

VI. On-Going Investigations
Same comment as above.

VII.C Risk Assessment ...The respondents shall attain the cleanup goals outlined in Section VIII of this Consent Order including, as necessary, performance of risk analysis to establish alternate cleanup goals, at each site for which the Department determine , under Section VII.D.I, that corrective measures are necessary.
Our earlier comments on future land-use designations are repeated here by incorporation. It is critical that NMED restrict the industrial-use to just the distinct footprint of actual "Manufacturing and Industrial" activities.

VII.D Corrective Measures Evaluation ... The Department will require corrective measure a SWMU or AOC if the Department determines, based in the Investigation Report and other relevant information available to the Department, that there has been a release of contaminants to the environment at the SWMU or AOC and that corrective action is necessary to protect human health or the environment from such a release.
We believe that this is the heart of the Order, and that because of this section we are prepared to accept the NMED claim that this is actually a cleanup order. However, we have many concerns, the primary having already been repeatedly stated over future designated land-use. We are appreciative of the provision for public comment under the "Statement of Basis."

VII.E Corrective Measures Implementation
There should be a provision for incorporating all steps under Corrective Measures Implementation into the schedule of milestones.

VII.F Accelerated Cleanup Process
There should be a provision here for public comment. It's not beyond possibility that this process could be abused, bearing in mind the nature of DOE's past "accelerated cleanup" programs.

VIII. Cleanup and Screening Levels
We support NMED's selection of a human health target risk level of 10^{-5} for residential or agricultural land-use. We do not support it within the context of industrial land-use, and again urge NMED to sparingly and stringently apply industrial-use designation. Above all, do not let DOE and LANL apply that designation wholesale and without public scrutiny.

NMED should adopt EPA's screening level of 10^{-6} risk from single pollutants in addition to a total target risk to individuals of 10^{-5}.

The cleanup levels for Polychlorinated Biphenyls (PCBs) of 1 mg/kg is not strict enough and should be lowered to 0.22 mg/kg. A preliminary screening criterion for perchlorates should be set to 1 part per billion.

In allowing for variances this section's use of “technical or physical feasibility” of cleanup projects and consideration of costs is far too vague, and creates large potential loopholes. What is to ensure that NMED will stringently, if not skeptically, review any requests for variance? Additionally, there should be a provision for public comment on requests for variances.

IX. Investigation and Sampling Methods and Procedures
DOE should "voluntarily" provide any data on radioactive constituents from these investigations.

XI. Reporting Requirements
Same comment.

- End of Comments -

Respectfully submitted,
Jay Coghlan