

City of Santa Fe



New Mexico



BUCKMAN DIRECT DIVERSION BOARD

September 24, 2008

New Mexico Environment Department
Surface Water Quality Bureau
Attn: Pamela Homer

SUBJECT: Buckman Direct Diversion Board comments regarding NMED's
August 11, 2008, triennial review discussion draft

Dear Ms. Homer:

Subject to the concerns expressed below, the Buckman Direct Diversion Board (BDD Board) supports the proposed NMED amendments to:

- Add "public water supply" as a designated surface water use in New Mexico,
- Add the "public water supply" designated use to the main stem of the Rio Grande from the headwaters of Cochiti Reservoir upstream to the Rio Pueblo de Taos.
- Add segment specific numeric criteria for plutonium at 1.5 pCi/l, for americium at 1.9 pCi/l, and tritium at 4,000 pCi/l.

The proposed amended standard for plutonium is 10 times more stringent than the existing standard for total gross alpha activity. The proposed amended standard for americium is about eight times more stringent than the existing standard for total gross alpha activity. The proposed amended standard for tritium is about five times more stringent than the existing standard for gross beta activity.

Dr. Kerry Howe's work for the BDD Board leads us to believe the Rio Grande at Buckman would be in attainment of such a standard today, if the compliance regime were similar to the regime promulgated by the State of Colorado.

The discussion draft regulations are vague and ambiguous with respect to averaging and the definition of a violation of the standard. The contaminants have chronic, not acute, health effects. Therefore, the measure of compliance should be an annual average. However, if inadequately regulated stormwater runoff exceeds the standards, a violation should exist, especially if the responsible party has not implemented a thorough set of best management practices.

The BDD Board requests that NMED provide additional consideration to setting standards for radionuclides and toxins of LANL origin in intermittent stream flows discharged to the Rio Grande from tributary canyons with LANL contamination problems.

It would be a poor result if the proposed amendments as discussed above had the result of restricting the BDD Project sediment return due to any non-attainment caused the BDD Project's diversion and return to the river of LANL-origin legacy contaminants, including PCBs. Such a result would not be acceptable to the BDD Board. The BDD Board requests additional discussions with NMED regarding its assessment of the likelihood and causes of any potential non-attainment that might be caused or aggravated by LANL-origin contaminants. Additionally, the BDD Board seeks cooperation from LANL and from NMED to implement best management practices designed to reduce the amount of LANL-origin legacy contaminants reaching the Rio Grande in stormwater.

The BDD Board hereby indicates its intention to further evaluate whether or not it will advocate for more stringent standards at the time the New Mexico Water Quality Control Commission considers the triennial review changes. Because the Board believes the Rio Grande almost always has water quality that will comply with even more stringent standards for these radiochemicals, the Board requests that NMED should consider how to apply the antidegradation requirement of the standards, as stated in NMAC 20.4.6.8 A (2), to the Rio Grande in White Rock Canyon.

The BDD Board requests that NMED provide additional consideration to the general requirements set forth in NMAC 20.6.4.13 and the specific requirements of NMAC 20.6.4.13 G, which states in part "The radioactivity of surface waters of the state shall be maintained at the lowest practical level." The BDD Board feels it is prudent and practical to implement additional activities that control stormwater that erodes and conveys sediment containing LANL-origin legacy contaminants from the Pajarito Plateau canyons that drain LANL property to the Rio Grande.

Finally, the BDD Board requests that NMED provide additional consideration to regulation of cesium-137 and strontium-90, both of which are LANL-origin legacy contaminants. The NMED DOE Oversight Bureau report by Englert (April, 2007) shows that cesium-137 and strontium-90 are responsible for essentially all of the risk that is above background, and that the risk from plutonium was negligible.

NMED's position stated as commentary in the proposed amended regulations is a matter of concern to the BDD Board. NMED states:

In proposing these new criteria, the Department is aware that under the Atomic Energy Act of 1954, as amended, the authority to regulate discharges of these materials from LANL may lie with DOE rather than with the Commission or EPA. However, even if there are limits on the

ability of the State or EPA to implement the criteria, the Department recommends the Commission act on its authority under the federal Clean Water Act and the NM Water Quality Act to adopt water quality criteria to protect designated uses. The criteria will provide information to the public and an accountability tool for measuring progress towards reducing the health risks from legacy contamination and ongoing activities at LANL.

The BDD Board is less concerned with the regulation of current LANL discharges, which are now stringently regulated.

The BDD Board has a much greater concern regarding LANL-origin legacy contaminants in the Rio Grande and its tributary canyons that are upstream of the BDD diversion location. The BDD Board asks that NMED make it aware of any and all data that indicates that LANL-origin legacy contaminants may pose unacceptable health risks.

The BDD Board also is more concerned with the lack of proactive application of best management practices for stormwater. The BDD appreciates NMED focus on this area. However, the continuing lack of best management practices implemented by LANL causes LANL-origin legacy contaminants adsorbed to alluvial sediments downstream from historical LANL discharges to be eroded by stormwater and conveyed to the Rio Grande. From the Board's perspective, that does not seem consistent with the requirements that radioactive contaminants shall be maintained at the lowest practical level." Additionally, NMED should consider how the antidegradation requirements should apply to the periodic discharge of contaminated stormwater to the Rio Grande at Los Alamos Canyon.

The BDD Board's stated goals include that LANL should stop the discharge of LANL-origin legacy contaminants to the Rio Grande and that it should properly monitor the transport of those contaminants to the Rio Grande. Best management practices would help stop this transport. Specific attention should be given to practical mechanisms, such as bed and banks stabilization, sediment retention structures, and urban stormwater diversion or retention and release to discharge locations or at rates that will reduce erosion and transport of sediments with adsorbed legacy contaminants.

The BDD Board appreciates and thanks NMED for its substantial efforts to properly monitor LANL-origin legacy contaminant transport in stormwater, and it is clear that LANL's current monitoring efforts are inadequate.

In closing, we request the opportunity to review comments by others and to respond to those for your consideration in preparing your final proposal for the New Mexico Water Quality Control Commission.

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Please contact Rick Carpenter at 505 955-4204 or rrcarpenter@santafenm.gov if you have any questions or concerns regarding this letter.

Sincerely yours

/s/

/s/

Rebecca Wurzburger
Chair
Buckman Direct Diversion Board

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Buckman Direct Diversion Board