



Fwd: Comments Re: Stakeholder Process - Radioactivity

1 message

cdphe_TENORMpolicyrevision - CDPHE, CDPHE

<cdphe_tenormpolicyrevision@state.co.us>

To: Jeannine Natterman - CDPHE <jeannine.natterman@state.co.us>

Fri, Apr 11, 2014 at 11:09

AM

----- Forwarded message -----

From: **project forsaken** <projectforsaken@earthlink.net>

Date: Tue, Feb 18, 2014 at 7:50 PM

Subject: RE: Comments Re: Stakeholder Process - Radioactivity

To: "TENORM Policy Revision, CDPHE" <cdphe_tenormpolicyrevision@state.co.us>

Thank you Steve, for your acknowledgement, which I had not expected. Glad to know commentary was received – very courteous.

Thanks again,

Lisa Bracken

From: steve.tarlton@state.co.us [mailto:steve.tarlton@state.co.us] **On Behalf Of** TENORM Policy Revision, CDPHE

Sent: Tuesday, February 18, 2014 12:45 PM

To: project forsaken

Cc: Warren Smith - CDPHE

Subject: Re: Comments Re: Stakeholder Process - Radioactivity

Thank you for your comment.

Steve Tarlton

CDPHE

On Fri, Feb 14, 2014 at 7:38 PM, project forsaken <projectforsaken@earthlink.net> wrote:

As the Colorado Department of Public Health and Environment undertakes an evaluation and

revision of radioactivity and its associated presence, background, environmental liberation, handling and disposal, please consider also individual citizens as stakeholders in your considerations. While they may not represent commercial interests in a powerfully organized and political way, they, along with wildlife and elemental carriers of soil, air and water, are the final recipients of cumulative exposures and should be fully considered in establishing any presumed thresholds of safety.

Radioactive background values differ across the state of Colorado, and a thorough inventory of genuine values should be cataloged in order to determine alterations to such values through technological enhancements. Careful definitions should be assigned to all reference terminology such as “hazardous”, “waste”, “technological enhancements”, “effective treatments”, “disposal”, “facilities”, and “beneficial use” so as not to mislead the public in their collective interest of maintaining presumed baseline public safety standards.

Oil and gas mining operations are notorious for releasing radioactivity into the ecological life-cycle through all phases of actual (if not so technically defined) development and transport. Given the risks of toxicity to ground water, surface water, surface soils and air, together with human and wildlife fates, I have requested that the Colorado Oil and Gas Conservation Commission (COGCC) test West Divide Creek for radioactivity. The region has long been associated with a massive 2004 natural gas seep which occurred during drilling and fracking operations. The COGCC has consistently refused such testing, though my own independent analysis has shown radioactivity present in those surface waters (and our source of drinking water).

The Western Slope has long been a target of uranium mining, and radium is enough of a concern to prompt statewide public awareness programs. Oil and gas mining activities increase the likelihood of radioactive contamination and should be so considered in their contributions to risks.

Appropriate recognition of background levels; recognition of industrial propensity to exacerbate those levels; the design of legal definitions and properly presumed health thresholds are essential first steps toward assuring public safety where radioactivity is concerned. And most certainly, disposal needs and methods must be considered together with Colorado’s public health priorities and energy development plans going forward.

Thank you for your considerations of these vitally important issues as Colorado’s environment and public continue to remain vulnerable to aggressive energy development and poor public health and environmental policy.

Lisa Bracken

January 13, 2014

Via E-Mail and U.S. Mail

cdphe_tenormpolicyrevision@state.co.us
and steve.tarlton@state.co.us

Mr. Steve Tarlton, Radiation Program Manager
Colorado Department of Public Health and Environment
4300 Cherry Creek Drive South
Denver, CO 80246

Re: Comments of Parker Water & Sanitation District on CDPHE
Proposed Guidance to Lower Generic Dose Limits for TENORM

Dear Mr. Tarlton:

This letter provides comments on behalf of Parker Water & Sanitation District (“PWSD”) on the proposed revisions to the February 2007 “Interim Policy and Guidance Pending Rulemaking for Control and Disposition of Technologically Enhanced Naturally Occurring Radioactive Material (“TENORM”), Rev. 2.1” (the “Guidance”), as summarized by the “TENORM Policy and Guidance, Revision 2013, draft overview of 10/1/2013” (“Draft Revision”).

PWSD provides water supplies and wastewater services for residents in Douglas County, including the Town of Parker and Town of Lonetree. Currently, the primary water source for PWSD is groundwater. Parker Water and Sanitation District water facilities include thirty-seven deep wells, eight alluvial wells, and five water storage tanks. PWSD has completed the construction of Rueter-Hess Reservoir, a reservoir with storage capacity of 72,000 acre feet which will allow PWSD and other water supply partners to shift toward renewable surface water supplies. Additionally, PWSD is completing construction of a new 1-MGD water treatment plant which will use state-of-the-art ceramic filters to produce high quality drinking water.

For wastewater, PWSD operates two tertiary (advanced) wastewater treatment plants which produce effluent that meets state requirements, including the ultra-low phosphorus effluent limit of 0.05 µg/l. The treated water, after mixing and storage in regional reservoir, is released to Cherry Creek. Because PWSD customers are primarily residential and related commercial, there are no industrial sources of anthropogenic radioactive materials to their water and wastewater systems. Any de minimis radioactive particles are from naturally occurring background sources.

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Biosolids from PWSD's treatment facilities meet the criteria for land application; the biosolids are transported and applied by Parker Ag. Services to agricultural lands in Eastern Colorado.

PWSD neither generates nor receives TENORM in concentrations of concern under the current Guidance. Moreover, to the extent that any technologies implemented by PWSD were to enhance TENORM, such technologies for water and wastewater treatments are specifically required, and approved, by Colorado Department of Public Health and Environment ("CDPHE"). CDPHE cannot, on one hand, require treatment, and by another agency complain that the required treatment has side effects which now must be regulated.

Summary of PWSD Comments

As has been expressed by numerous parties at the public meetings for the Draft Revision, there is no demonstrated need for a proposal to lower the generic dose limit (from 100 mrem/yr to 25 mrem/yr). CDPHE has not conducted a risk or exposure analysis, no public or private group requested the modification to the guidance, no study has been conducted to demonstrate the costs and benefits of the proposal, and there is no information from CDPHE on the quantifiable decreased risk of exposure. Environmental requirements are not driven by a "less must be better" approach, there must be a demonstrated regulatory need in order to require new compliance protocols. Instead of conducting the necessary research and studies to demonstrate the need for the Draft Revision, CDPHE has asked the stakeholders to submit information. In other words, CDPHE has proposed a solution and is asking the impacted regulatory community to demonstrate the problems to justify regulation.

The Draft Revision also shifts the Guidance from a material specific approach to a media specific approach. In so doing CDPHE would cast a much broader net over the currently regulated community, and potentially regulated community, to capture every source of TENORM. The potential costs are staggering, but again, CDPHE has done nothing to demonstrate the need for change in approach.

Finally, this is a clear attempt to regulate through guidance. CDPHE is well aware that it cannot issue regulations more stringent than federal standards. See C.R.S. §§ 25-11-104(b) and 24-4-103. There is no federal standard in this instance, merely a suggestion from EPA and the NRC that a lower generic dose standard is appropriate. CDPHE's attempt to side-step this prohibition fails, as the Draft Revision is a clear attempt to regulate through guidance. Federal guidelines are not intended to, and do not, become regulatory limits in the operational permits of the Colorado regulated community. The Draft Revision would change that, effectively making the drastically reduced generic dose limit a permit cap on most facilities.

No Demonstration of Need for Reduction in Generic Dose Limit

It is now the widely accepted protocol that new environmental policy and regulation will be driven by sound science, supporting cost-benefit analyses, and a demonstrated need for the change. If it was

ever acceptable, the environmental regulatory community long ago abandoned the “less must be better” approach to environmental regulation in favor of scientifically demonstrated risk reduction and cost benefit analyses to support the increased costs of regulation. The increased costs of compliance are always passed on to the end user or tax payer, so the premise is that the additional regulatory cost burden must have a demonstrated benefit.

In this case, CDPHE has not even attempted to demonstrate that the benefits outweigh the costs. Instead of conducting a risk analysis, CDPHE generally states that lower levels of exposure are better. CDPHE is perhaps attempting to rely on the “as low as is reasonably achievable” (ALARA) approach to reducing the generic dose limit, but has not shown, or even attempted to show, that the proposed 25 mrem/yr limit is reasonable or achievable.

The bottom line is that CDPHE has no scientific studies to support a purported need for the reduction in the generic dose limit. If implemented, the generic dose limit could be prohibitively expensive to implement, difficult or impossible to achieve, and therefore not reasonable. CDPHE needs to scrap this unsupported, sub rosa attempt to regulate TENORM.

No Demonstration of Need to Shift to Media Specific Approach

The clear intent of the Draft Revision is to cast a wider regulatory net by shifting the Guidance from a material specific approach to a media specific approach. As with the reduction in the generic dose limit, CDPHE has not provided scientific data to justify this shift in policy. The apparent proposition is that regulating on a media specific basis will do a more thorough job of reducing exposure, and will therefore be better.

CDPHE does not have the resources to take this media specific approach, and basically admitted as much at the public meetings. Shifting the focus from industries with known material specific handling and disposal requirements to a disperse focus on any potential TENORM media will overwhelm the various regulatory agencies. TENORM, as the name itself makes clear, is naturally occurring radioactive material, contained in virtually every material that comes from the earth. Changing to a media specific approach could potentially require massive amounts of new sampling and monitoring to “prove the negative” for currently regulated and potentially regulated entities.

The much more effective approach would be to continue to focus on the industries where known TENORM materials are handled and disposed.

No Legal Authority to Regulate

As many parties at the public meetings have pointed out, this is a clear attempt to regulate through guidance. The Draft Revision uses language of mandatory compliance, more similar to a regulation than a policy document. CDPHE itself makes clear that these standards are expected to be incorporated into facility permits by divisions of the agency, including for example the Water Quality Control Division.

CDPHE cannot issue regulations more stringent than federal standards. See C.R.S. §§ 25-11-104(b) and 24-4-103. The Draft Revision recites in detail that there is no federal standard in this instance, merely a suggestion from EPA and the NRC that a lower generic dose standard is appropriate. The regulation, camouflaged as guidance, is therefore illegal.

Additional General Comments

By its own terms, TENORM is naturally occurring material, yet nothing in the guidance recognizes background quantities, or would allow reduction for source contamination. Issues may occur at the source, well outside of PWSD's control. The Draft Revision could potentially require PWSD to clean up background waters to levels that are significantly below currently adopted standards.

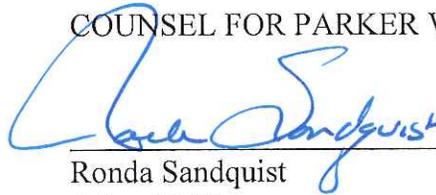
The Draft Revision also provides a significant disincentive for land application of beneficial use of wastes. The Draft Revision proposes to require new post application characterization and periodic monitoring, instead of the current sampling prior to application. These new standards may make beneficial uses cost prohibitive and therefore obsolete. Any policy changes should avoid a shift to wholesale landfilling of TENORM.

Conclusion

With so little information on why this policy is necessary or how it will be implemented, it is impossible to provide any more information to CDPHE at this time. PWSD respectfully requests that CDPHE reconsider this approach and simply stick with the current Guidance.

Respectfully Submitted,

COUNSEL FOR PARKER WATER & SANITATION DISTRICT



Ronda Sandquist
Adam DeVoe
Brownstein Hyatt Farber Schreck, LLP

cc: Ron Redd, District Manager, Parker Water & Sanitation District
James Roche, Utilities Director, Parker Water & Sanitation District

SAN MIGUEL COUNTY

BOARD OF COMMISSIONERS

ELAINE FISCHER

ART GOODTIMES

JOAN MAY

February 11, 2014

Steve Tarlton, Radiation Program Manager
Radiation Management Unit
Colorado Department of Public Health and Environment
4300 Cherry Creek Drive South, Denver, CO 80246

Re: Interim Policy and Guidance for Pending Rulemaking for Control and Disposition of Technologically-Enhanced Naturally Occurring Radioactive Materials in Colorado

Dear Mr. Tarlton,

Thank you for the opportunity to comment on the Department's revision to the policy and guidance relating to Technologically Enhanced Naturally Occurring Radioactive Materials (TENORM). San Miguel County believes CDPHE has the responsibility to protect the public and the environment from levels of radiation above background levels.

The focus of the current policy guidelines seems to be the proper handling and disposal of water treatment residuals. However, it is San Miguel County's opinion that in the process of revision the guidance should be expanded to address other waste products that represent potential radioactive exposure pathways to humans and the environment. San Miguel County is home to several potential uranium mining sites and may also experience future oil and gas development in shale formations. It seems the TENORM guidance would be an appropriate place to address the residuals from these activities.

While uranium mining is primarily the purview of the Division of Reclamation, Mining and Safety (DRMS) we believe there is a lack of standards for the disposition of waste rock and sub-grade ore regarding radiation. There are historic mine sites in San Miguel County where cleanup has been completed but residual radioactive materials continue to pose an increased exposure risk to the public on public lands and surface waters. This is particularly true in sites along the Dolores River where there are historic mine sites and waste rock piles directly adjacent. These sites discharge stormwater that has been in contact with waste rock and the sites are on public lands where the public could spend considerable time recreating and camping. The San Miguel County Board of County Commissioners (BOCC) believes it would be reasonable for the TENORM guidelines and policy to require that these sites not contribute more to environmental or human exposure post-mining than area background or pre-mining conditions.

While oil and gas development is primarily the purview of the Colorado Oil and Gas Conservation Commission (COGCC), there appears to be a gap in the regulations as they pertain to disposal of process water and waste water from well development. There have been concerns raised by the environmental community that these waste waters may

contain radioactive constituents. To what extent this is the case has not been subject of investigation by the regulatory agencies to our knowledge. We believe that the potential radioactive nature of these residual should be addressed in the upcoming revision to the TENORM policy and guidelines. In addition, we believe CDPHE should work with the COGCC to better quantify the levels of radioactivity and develop policies to ensure their proper disposal in a fashion that does not increase exposure of the environment or the public to increased radioactivity. We believe uranium mining and oil and gas development activities potentially relocate and concentrate radioactive constituents. They also may increase exposure of humans or the environment to these constituents. We feel that the TENORM guidelines would be an appropriate place to address these issues.

In addition, we believe another source of potential release into the environment of radioactive constituents is the disposal of residuals of the combustion of fossil fuels. The disposal and handling fly ash and bottom ash should be regulated by the TENORM guidelines if there is radioactivity above background associated with them.

San Miguel County would be supportive of a standard of activity for all residuals such as the 25 millrems/year suggested on the CDPHE webpage if it can be demonstrated that it poses no greater risk to the environment or the public than its pre-enhancement state.

Because the language in the Radiation Control Act requires the EPA to pass TENORM regulations before the state can, the BOCC believes that these revised TENORM Policy and Guidelines may be the controlling guidance for the foreseeable future. Consequently, we request CDPHE make these guidelines as robust and specific as possible.

Thank you for the consideration of these comments. Please keep San Miguel County informed as these policies are developed.

Sincerely,

SAN MIGUEL COUNTY, COLORADO
BOARD OF COUNTY COMMISSIONERS



Art Goodtimes, Chair