

Land Use & Environment Committee

Rappahannock-Rapidan Regional Commission

Meeting Minutes – March 5, 2009

Attendees:

Fritz Alderman	Town of Culpeper
Melissa Allen	John Marshall SWCD
Heather Ambrose	John Marshall SWCD
Josh Bateman	Town of Orange
David Grover	Orange County
Debbie Kendall	Orange County
Laura Loveday	Culpeper County Department of Development
John McCarthy	Rappahannock County
Mary Sherrill	Fauquier County
Deirdre Clark	Rappahannock-Rapidan Regional Commission

Uranium Mining in Virginia

Todd Benson, Land Use Attorney
Piedmont Environmental Council

Mr. Benson reviewed the brief and contentious history of uranium mining in Virginia, beginning with the 1980s when uranium leases were filed on thousands of acres across the Piedmont. At that time, an extensive study of uranium mining was conducted by the Commonwealth and in 1982 a moratorium was issued on its extraction. With Virginia Uranium, Inc. seeking to end the moratorium, Senate Bill 525, proposing a study on the safety of uranium mining in Virginia, was introduced during the 2008 General Assembly. Although it included some commendable aspects, the bill was killed in the House Rules Committee. Despite this opposition, a state commission will study the feasibility of safely extracting uranium in Virginia.

Mr. Benson focused on the environmental impacts of mining, chief among them being the contamination of surface and groundwater. Noting that impacts may vary with the mining method used, Mr. Benson summarized three common practices:

- In situ mining – a process in which a solution is injected into underground deposits and the leached uranium is pumped to the surface where it is precipitated out of solution. Waste water may be pumped back into the ground or stored at the surface. This is the only method regulated by the Nuclear Regulatory Commission.
- Underground mining – the mineral-bearing rock is accessed by underground shafts and extracted; and
- Open pit mining – overburden and surrounding rock are removed to expose the ore-bearing rock in expansive excavated pits.

In each case, ground and surface water contamination may result. It was noted that two of the most intense 12-hour storms in the U. S. have occurred in the mid-Atlantic region – 27" of rain fell in Nelson County in 1969 and 29" in Madison County in 1995. Substantial rainfall often accompanies hurricane events. Despite the use of preventive measures, runoff from tailings storage areas and failures of mine water impoundment structures are not uncommon. The contamination of the Rio Puerco in New Mexico by uranium-rich mine waste released by a sludge impoundment failure was cited as the largest nuclear accident in the United States.

Mr. Benson emphasized the fact that studies conducted to determine the environmental impacts of uranium mining have been unscientific in design and execution and therefore without merit. Of particular interest is the finding that no information of any sort is available that reflects uranium mining conditions similar to those that would be encountered in the Virginia Piedmont. If actively mined, currently identified deposits have the potential to impact natural and human communities in the Commonwealth for some time to come. Mr. Benson suggests that the committee tasked with determining the potential of safely mining uranium in Virginia consider the faulty models used in the past, the failure rates of poorly designed and monitored practices, and the challenges presented by Virginia's weather and climate. He challenges Virginia to consider the lessons learned by Colorado where any applicant for in-situ leach extraction is required to provide five examples of successful mining operations conducted under circumstances similar to those proposed. In any case, consideration of Virginia's climate, wet by any standard when compared with other U.S. uranium mining sites, should be paramount. Regardless of the mining method used, dispersal of uranium and radioactive materials through surface and ground water is a substantial threat.

Problems associated with collecting meaningful data to accurately represent impacts were discussed. Considering the potential energy base stored in supposedly spent nuclear fuel, the need for new uranium mines was questioned. Mr. Benson noted that the value of uranium has dropped considerably recently and that economically mineable sites would be determined by the market.

Virginia's Stormwater Regulations and LID Update

Mary Sherrill, Environmental Scientist
Fauquier County Department of Community Development

Ms. Sherrill succinctly summarized changes that are expected to be made to Virginia's stormwater regulations, as approved by the Soil and Water Conservation Board in September, 2008. She noted that following Administrative Review, the proposed regulations will be available for public comment, most likely in Spring, 2009. Although final adoption had been anticipated to occur in September 2009, recent legislation has amended that date to July, 2010. The date of implementation, originally proposed as the beginning of FY2011, has been amended to 15 to 21 months following the 2010

adoption, plus an additional 12 month grace period, resulting in an implementation date falling between October 2011 and April 2013.

It was noted that off-site controls may be used to meet water quality criteria at the discretion of the locality, but this approach must include a comprehensive stormwater management plan. Run-off reduction methods, supporting the use of LID, will be used to determine water quality compliance. Under the proposed regulations, man-made channels must convey the 2 year/24 hour storm without causing erosion.

Ms. Sherrill highlighted some of the more interesting aspects of the proposed regulations:

- The definition for "adequate channel" will include wetlands;
- Stormwater management requirements may vary based on the stability of the receiving channel with the determination being made by the locality; and
- Communities that do not fall under Chesapeake Bay regulations may choose to administer their own program. Seventy percent of program-related fees will be used by the locality for that purpose. The remaining thirty percent will be sent to DCR.

Discussion centered on the adequacy of the proposed fee schedule to meet staff needs for review, inspection, reporting and enforcement. Increased responsibilities in the monitoring of projects, collection of fees, repairs to structures and working with applicants and engineers to update them on new procedures and requirements will likely require additional staffing in most localities.

The merits of letting a storm event "blow through" a natural system compared with the extensive landscape alteration needed to accommodate stormwater management facilities were discussed. It was noted that the proposed stormwater regulations include a focus on low impact development. This approach will encourage, and hopefully result in, the preservation of natural drainage systems and landscapes, reliance on more discrete stormwater management practices and a more holistic approach to site development.

Draft regulations may be viewed at www.dcr.virginia.gov/lr2.shtml

BMP on-line clearinghouse may be viewed at: www.vwrrc.vt.edu/swc

Roundtable Discussion

Melissa Allen reported that increased cost share funding is available for BMPs in watersheds with TMDL Implementation Plans.

John McCarthy indicated that the Krebsler Fund is providing significant funding to help landowners close the gap between BMP cost share and the full cost of conservation practices. This is available only in Rappahannock County.

Items of Interest:

HB1991 may be viewed at: <http://leg1.state.va.us/cgi-bin/legp504.exe?091+ful+HB1991ER>

HB2168 may be viewed at:

<http://leg1.state.va.us/cgi-bin/legp504.exe?091+ful+HB2168ER>

Virginia Department of Forestry, in cooperation with the Virginia Extension Service, will host "Bio-Energy: Opportunities, Challenges and Connections" at the George Mason University, Prince William campus, April 10, 2009. Verizon Auditorium

NEXT LAND USE & ENVIRONMENT COMMITTEE MEETING

June 11, 2009

For future topics, please contact Deirdre Clark at the Regional Commission.