

Rocky Mountain Peace and Justice Center

P. O. Box 1156, Boulder, CO 80306 USA 303-444-6981 Fax 720-565-9755 <http://rmpic.org/>

To: Rocky Flats Stewardship Council
From: LeRoy Moore
Date: June 1, 2015
Re.: Needed corrections

Executive Director David Abelson's Report in the packet for the RFSC June 1, 2015, meeting says my April 1, 2015, letter to DOE's Office of General Counsel "alleges that the Stewardship Council was doing something illegal by discussing the proposed DOE-USFWS visitor center with the USFWS. David clarified that the Stewardship Council was not discussing the visitor center with USFWS, and thus the premise of Moore's letter was inaccurate."

Calling my letter "inaccurate" is itself inaccurate. I never alleged that the RFSC was doing anything illegal. I simply raised questions to DOE General Counsel about what RFSC is doing regarding the proposed visitor center. Here is my exact language:

David Abelson, Executive Director of the Rocky Flats Stewardship Council (RFSC) recently announced that the RFSC would play a role in the creation of a visitor center at Rocky Flats, most likely on the site of the Rocky Flats National Wildlife Refuge, which is administered by U.S. Fish & Wildlife Service (FWS). A local citizens' group with substantial technical knowledge of this site wishes urgently to know: Does this contradict what the DOE Office of General Counsel has said in the past about the role of the RFSC?

Why does Mr. Abelson say I alleged that the RFSC was doing something illegal when I alleged nothing of the sort? I simply raised a question about the behavior of the RFSC regarding the proposed visitor center. The packet for the RFSC meeting on April 6, 2015, contains a two page March 25, 2015, memo on the visitor center from Mr. Abelson. Here are his words: "At this meeting we will begin discussing our goals and priorities for the visitor center, and identifying criteria the agencies should consider when designing and siting the visitor center." The passage quoted provides the basis for my questions to DOE General Counsel. Despite the fact that the RFSC is not an advisory body functioning according to FACA (Federal Advisory Committee Act) rules, it appears from the quoted language that Mr. Abelson intended for the RFSC to advise both DOE and FWS on the visitor center.

Interestingly, the RFSC web site says the RFSC "works with the United States Fish and Wildlife Service on issues related to the management of the Rocky Flats National Wildlife Refuge." Though the RFSC web site says this, when the RFSC was created Michael Owen, then Director of DOE LM, stated that DOE could not allow an

organization it funded to work with another federal agency. So there appears to be a discrepancy between what the RFSC web site says the RFSC can do and what DOE says it can do.

I would be glad to see Mr. Abelson's incorrect statement about my letter to DOE Office of General Counsel corrected. But he evidently said what is recorded, and I do not wish to change what he actually said. So I simply write to RFSC members to state that I am aware of his fallacious remark and want his falsehood acknowledged by posting this memo on the web site in the minutes of the June 1, 2015, meeting.

Mr. Abelson has a history of making unjust attacks. The most egregious example in my case was his January 13, 2010, letter to Colorado Congressional staff criticizing my op-ed, "Playing with plutonium at Rocky Flats," published in the *Boulder Camera* on January 10, 2010. The op-ed urges Fish & Wildlife to test quarterly for plutonium in respirable dust in surface soil at Rocky Flats for at least five years before they consider allowing public access to the Wildlife Refuge. My appeal to a federal agency on behalf of unassuming people who might be exposed to plutonium at the Refuge proposed a type of sampling never done on the Rocky Flats site. Three days after its publication, Mr. Abelson wrote Congressional staff criticizing the op-ed, as if this was his responsibility as Executive Director of the RFSC. His letter was not copied to me. When I learned about it, I requested a copy and only then became aware of its contents. Here I refrain from commenting on the letter's factual errors.

In 2010 when it appeared to me and others that the RFSC was advising both DOE LM and USFWS, I asked DOE Office of General Counsel whether RFSC was required to meet the rules of the Federal Advisory Committee Act. In response, I was told that RFSC is not an advisory body and thus is not required to meet FACA requirements. Its role, according to Susan Beard of the Office of General Counsel, is simply to serve two-way communication between DOE and the public, and in the process neither to edit nor to filter comment from the public for the DOE.

I am writing to members of the RFSC because Executive Director David Abelson continues to edit and filter stakeholder concerns not only to DOE, but also to the RFSC and the public. Please post as a public comment this message. I am attaching two other items that also need to be posted, my op-ed of January 10, 2010, and David Abelson's January 13, 2010, letter to Congressional staff about the op-ed. Also from 2010, RFSC should post the full exchange regarding FACA, especially the letter to David Geiser of DOE LM from Susan Beard of DOE Office of General Counsel.

Playing with plutonium at Rocky Flats

By LeRoy Moore

BOULDER DAILY CAMERA 01/10/2010

http://www.dailycamera.com/ci_14151325

Playing with plutonium is not a good idea. But this is exactly what will happen if the US Fish and Wildlife Service (FWS) implements its plan to open the Rocky Flats National Wildlife Refuge for public recreation.

For almost four decades the Rocky Flats Plant located about nine miles south of Boulder produced the explosive plutonium "pit" at the core of every warhead in the U.S. nuclear arsenal. Major accidents and routine operations released very fine plutonium particles to the environment on and off the site. Because this highly toxic material remains radioactive for a quarter-million years, its presence in the environment poses a permanent danger.

Inhaling or otherwise taking such particles into the body can induce cancer, disrupt the immune system or damage genetic material. Children, who would be encouraged to visit the refuge, are especially vulnerable, because they stir up dust, breath in gasps, eat dirt, or may scrape a knee or elbow.

After production ended at Rocky Flats, the badly contaminated site was cleaned up. Because a ceiling was placed on how much could be spent on the cleanup, unknown quantities of plutonium were left in the soil on the assumption that it was "safe." This conclusion was based on some 4,400 samples of surface soil. But these samples produced misleading results, because they were "whole soil samples" that diluted the breathable dust by including it with other matter.

In 2006, after the cleanup was completed, the Department of Energy transferred about seven square miles (roughly three-fourths) of the Rocky Flats site to FWS to operate as a wildlife refuge. FWS has not yet opened the refuge to the public because it lacks the funds to prepare the site.

Before FWS even considers opening the refuge to the public, the breathable dust in surface soil there should be sampled quarterly for at least five years with each particular sample analyzed for plutonium content. Repeated sampling is necessary because burrowing animals are constantly bringing buried material to the surface where it can be picked up by the wind. This type of sampling has never been done on the Rocky Flats site. It would show to what extent plutonium is present in respirable particles, its most dangerous form.

FWS plans to burn some of the vegetation annually to rid the site of weeds. This would potentially spread plutonium particles in the smoke throughout the Metro area. Requests that they analyze the plants for plutonium have been repeatedly refused.

In the spring of 2009 I asked FWS to hire independent scientists to test the respirable dust at Rocky Flats for plutonium content. In September I received a reply from Will Shafroth, a high-ranking official in the Department of Interior, of which FWS is a part, rejecting my proposal and saying he was passing it along to the Colorado Department of Public Health and Environment (CDPHE).

CDPHE has a little known history in relation to dust sampling at Rocky Flats. Though dust sampling has never been done on the Rocky Flats site, in 1975 it was done on land east or downwind of the site. Dr. Carl Johnson, then head of the Jefferson County Health Department, and two soil-scientists from the US Geological Survey took dust samples at 25 locations. They found plutonium concentrations on average 44 times greater than had been measured at the same locations in previous whole soil sampling done by CDPHE (then Colorado Department of Health). Their results led to cancellation of a planned residential development on the land in question.

Johnson proposed that, for purposes of assessing health risk at offsite locations, the State of Colorado test for plutonium in respirable dust on the surface of the soil. Coarser materials that cannot be inhaled and retained in the body, he said, have no bearing on actual health hazards. Including such material in samples that are analyzed dilutes the amount of radioactivity and provides results that are inaccurate and misleading.

State officials asked Dr. Karl Z. Morgan, the "father of health physics," whether the state should adopt Johnson's respirable dust method or continue the practice of whole-soil sampling. Morgan favored Johnson's approach because it produces results that are more accurate and more protective of the public health. Colorado officials, having sought Morgan's advice, ignored it.

In September Mr. Shafroth passed the buck regarding dust samples to CDPHE. To date there's been no response. To better protect the health of the public and the environment, CDPHE should announce by not later than Valentine's Day 2010 that they will do for plutonium in surface dust what they already do for plutonium in surface water at Rocky Flats, namely, establish a permanent regime of periodic sampling at Rocky Flats to determine the plutonium content in respirable dust there. Such an announcement would be a Valentine's gift to the people of the metro area.

LeRoy Moore is a consultant with the Rocky Mountain Peace and Justice Center of Boulder.

ROCKY FLATS STEWARDSHIP COUNCIL

P.O. Box 17670 (303) 412-1200
Boulder, CO 80308-0670 (303) 412-1211 (f)
www.rockyflatssc.org

Jefferson County -- Boulder County -- City and County of Broomfield -- City of Arvada -- City of Boulder
City of Golden -- City of Northglenn -- City of Westminster -- Town of Superior
League of Women Voters -- Rocky Flats Cold War Museum -- Rocky Flats Homesteaders
Karen Imbierowicz

MEMORANDUM

TO: Colorado Congressional staff
FROM: David Abelson
SUBJECT: LeRoy Moore's 1/10/10 Daily Camera Op-Ed
DATE: January 13, 2010

The Sunday Daily Camera contained an op-ed by LeRoy with the Rocky Mountain Peace and Justice Center in which he raises specious claims about the cleanup and calls on the Colorado health department to conduct additional environmental analyses. (http://www.dailycamera.com/guest-opinions/ci_14151325 and included below). This memo addresses his claims. Please let me know what questions you have.

Every 12 months or so, the Camera publishes a similar op-ed by Mr. Moore. Often these pieces precede State Rep. Wes McKinley (D-Walsh) introducing legislation aimed at condemning the Rocky Flats cleanup under the guise of visitor notification. With our understanding that McKinley is planning on introducing another Rocky Flats bill this session, I assume Moore's piece is again tied to McKinley.

Facts

As is often the case, Moore's piece hides certain key facts and misappropriates others.

Sampling -- Moore asserts the cleanup was based on 4400 surface soil samples. I am not sure whether this number is accurate, but that figure for soil samples alone is enormous. What he does not say is that the cleanup was also based on 20+ years of extensive and independent air monitoring (throughout the site, at the site boundary, and in neighboring communities), extensive surface water and groundwater sampling (including independent sampling by communities downstream of the site), and independent reviews such as the actinide migration panel (analyzed plutonium and other hazardous and radioactive constituents moving in the Rocky Flats environment). These data sets are based on methodologies established by state and federal regulators, and were subject to numerous independent reviews. These analyses also accounted for the respirable fraction of dust in the Rocky Flats environment, a fact critical to Moore's argument and one that he ignores

Importantly, air monitoring took place prior to, during, and after remediation activities. Air monitoring was ultimately discontinued because the monitoring was showing air quality for radioactive and hazardous constituents was a non-issue. The greatest problem was fugitive dust from mining in the western part of the buffer zone.

Accordingly, Moore's assertion that a new type of sampling is needed is a red herring. His argument is designed to divert public attention from the extensive sampling that was done and is ongoing. Moore's argument in favor of additional sampling is rooted in 40 year old scientific studies. These scientists are unable to speak to new technology and new methodologies, and are unable to evaluate our current understanding of the effects of plutonium on human health and the environment.¹ His argument is analogous to relying on climatologists' data from the 1970s to support contemporary arguments regarding climate change.

Cleanup standards – Airborne plutonium contamination was transported to lands east of the site in the 1950s and 1960s. This contamination was from leaking drums of contaminated liquids stored outside in an area known as the 903 Pad. Plutonium was spread when the Atomic Energy Commission uses road graders to scrape the pad in an effort to remediate it. During the 1990s DOE, CDPHE, and the EPA sampled these offsite lands and determined the soil met all federal and state standards for plutonium and thus did not require environmental remediation. The 903 Pad, however, was remediated.

Because the chemical composition of plutonium is insoluble, the most accurate measurement of plutonium moving in the environment at Rocky Flats is surface water. Prior to closure, the greatest concern community members had was whether the source removal activities would result in a decrease in plutonium concentrations in surface water. The answer is yes.

As members of the Rocky Flats Stewardship Council know from their quarterly site monitoring briefings, plutonium in water at this time is a non-issue. Plutonium continues to be well below all applicable standards. **The state water standard for plutonium leaving the site is 100 times more stringent (lower) than the applicable federal drinking water standard – and that lower number is being met.**

Monitoring – Rocky Flats continues to be extensively monitored. There are more than 100 surface and groundwater monitoring sites. The greatest problems the site faces are uranium (mostly natural) and nitrates in surface water and groundwater. Both of these constituents need to be (and are) taken seriously. Moore knows, though, that plutonium strikes a greater fear in people, so instead of focusing on the problematic constituents, he resorts to plutonium.

Prescribed burns – DOE's controlled burn in 2001 generated widespread community concern about the potential for dispersing plutonium off-site via air. In response, DOE and the regulators placed an air monitor directly in the smoke plume and measured plutonium and other constituents. Because of the weight of plutonium particles, very little plutonium was recorded in

1. Interestingly, what Moore does not state is that based on our understanding of plutonium in the body, permissible exposure standards have decreased since the mid-1970s. These more conservative numbers were central to adopting cleanup standards for the site.

fire-specific air monitors; none was captured in the other air monitors throughout the site, at the site boundary, or off-site.

Following that burn, there was an uncontrolled burn in April 2006. This wildland fire occurred in lands now comprising the Rocky Flats refuge. Surface soil levels of plutonium throughout the refuge are very low, well below federal and state standards, and low enough to support residential development.² As expected, the air monitors nearby to the burn recorded a number of constituents, but not plutonium.

USFWS controlled burns – Moore is correct that the US Fish and Wildlife Service (USFWS) site conservation plan anticipates USFWS will use prescribed burns as a management tool. He is not correct when he states the agency will use controlled burns annually. He also fails to note that as part of the conservation plan, USFWS will conduct “step-down” plans in which they analyze in greater detail specific management decisions. One of those plans, which will be subject to public comment, is the vegetation management plan. That plan will analyze controlled burns, pesticides, and other management tools.

Diverting attention from what is important

I agree with Moore that we must remain vigilant and evaluate monitoring data, including plutonium data. However, the more pressing issue remains groundwater contamination. That is why the lands DOE retained were not delisted from the CERCLA national priorities list as groundwater remediation will take 70+ years to complete.

² It is important to remember that a prime motivation for the Rocky Flats refuge act was to protect the site from industrial and/or residential development.