COMMITTEES

NATURAL RESOURCES
RANKING DEMOCRAT

ENERGY AND COMMERCE

EDWARD J. MARKEY
7TH DISTRICT, MASSACHUSETTS

2108 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515–2107
(202) 225–2836

DISTRICT OFFICES:

5 HIGH STREET, SUITE 101
MEDFORD, MA 02155
(781) 396–2900

188 CONCORD STREET, SUITE 102
FRAMINGHAM, MA 01702
(508) 875–2900

http://markey.house.gov

Congress of the United States
House of Representatives
Washington, DC 20515–2107

January 11, 2013

The Honorable Steve Chu
Secretary, Department of Energy
1000 Independence Ave. S.W.
Washington, DC 20585

Dear Secretary Chu:

I write to convey my grave concerns regarding your December 2012 proposal[1] to rescind the agency-wide suspension of the release of radioactively contaminated scrap metal from Department of Energy (DOE) facilities for purposes of recycling it into consumer products that could ultimately be utilized by pregnant women, children or other vulnerable populations. This proposal is unwise, and should be immediately abandoned.

The public concerns associated with such a proposal cannot be understated. Just a year ago, Bed Bath and Beyond recalled tissue holders made in India that were contaminated with low levels of the radio-isotope cobalt-60 that were shipped to 200 of its stores in twenty states. The Nuclear Regulatory Commission, when discussing the discovery of the contaminated products, said that "There's no real health threat from these, but we advise people to return them.[2]" I do not believe that the public would have any more confidence in radioactive consumer products that are made in America than they did when faced with contaminated products made in India.

One of your predecessors, Secretary Bill Richardson, first suspended the Department's radioactive recycling efforts in 2000 in response to public concerns that the Department would not be able to assure its safety as radioactively contaminated metals could have been turned into everything from baby spoons to jewelry to medical devices that are implanted into the human body. In 2001, the Department announced that it would prepare a Programmatic Environmental Impact Statement (PEIS) in order to fully engage the public on this and other options for disposing of its contaminated metals.

In September 2011, you signed a memorandum[3] prepared by your staff that recommended the delegation of the authority to release contaminated metals to each Departmental Undersecretary contingent on the results of the a draft programmatic Environmental Assessment, in lieu of the more extensive analysis and public engagement that would be provided for in a PEIS. In December 2012, the Department released a draft programmatic Environmental Assessment that initially provided the public with only a few short weeks (which encompassed the Christmas and New Year's holidays) in which to submit its comments[4].

---

[1] http://energy.gov/nepa/downloads/ea-1919-draft-programmatic-environmental-assessment
[2] http://usatoday30.usatoday.com/news/health/story/health/story/2012-01-13/Radioactive-tissue-holders-pulled-from-stores/52528908/1
[3] http://energy.gov/sites/prod/files/Signed%20ACTION%20MEMO%209-28-2011.pdf
[4] The comment period has since been extended to February 11, 2013, following a request for a 90 day extension by several public interest groups.

The December proposal recommends that Departmental Undersecretaries be authorized to release contaminated metals into the marketplace from DOE facilities under their jurisdictions as long as it "can be shown that the release will result in less than 1 millirem (mrem) above background to a member of the public in any calendar year." I believe this standard, even if it were the appropriate standard, will be impossible to assure or enforce. If these metals are being released to companies who will subsequently manufacture new consumer products from them, DOE simply has no way to ensure that different samples are not aggregated into more highly radioactive products. DOE similarly will not be able to assure that a single consumer does not purchase numerous contaminated consumer products, each of which delivers the 1 mrem dose but together deliver far higher doses. Moreover, this standard, which was drawn from a DOE Order entitled "Radiation Protection of the Public and the Environment,"[5] references a dose of 1 mrem 'in *any* calendar year" to the public, but does not seem to consider the potential for many years' – indeed, potentially even decades' – worth of exposure to contaminated metals that are subsequently turned into long-used items such as jewelry or tableware.

It is for this reason that I urge you to abandon this new scheme to release up to 14,000 metric tons of radiologically contaminated metals into the marketplace. I also request that you provide me with responses to the following questions and requests for materials:

1. As stated in DOE Order 458.1, "personal property can be cleared from controlled areas if it can be shown that the release will result in less than 1 millirem (mrem) above background to a member of the public in any calendar year."
    a. Does the Department plan to require radiological scans of each piece of metal proposed for release to ensure that it meets the criterion above?
    b. If so, please list the technology or technologies the Department plans to utilize to conduct such scans, along with the number of each such devices currently owned by the Department, the plans and costs associated with acquiring sufficient additional such devices, and the time it will take each such device to conduct a single scan of a piece of metal.
    c. If not, then how does the Department plan to ensure that such criterion is met?

2. How exactly will the Department assure:
    a. That the recipients of any such releases of radioactive metals do not aggregate the materials in a manner that could result in a new material that contains a dose that exceeds 1 mrem/year?
    b. That a consumer does not inadvertently purchase more than one product made from radioactive metals and thus receive an exposure of more than 1 mrem/year?
    c. That the recipients of any such releases of radioactive metals provide consumer warnings indicating that any product made using the released radioactive metals may be radioactive?
    d. That the recipients of any such releases of radioactive metals do not use the materials to manufacture products that might be used by pregnant women, children, or other vulnerable populations?
    e. If for any of a, b, c or d above the Department has no such plans, please explain why not.

---

[5] https://www.directives.doe.gov/directives/0458.1-BOrder/view see in particular section 4k

3. The EA proposes to allow radioactive metal to be recycled if it "can be shown that the release will result in less than 1millirem (mrem) above background to a member of the public in any calendar year." But the EA also includes "Table A-1: Release Criteria for Surface Activity" that contains a footnote stating "The average and maximum dose rates associated with radioactive materials on surfaces resulting from beta-gamma emitters should not exceed 0.2 millirad per hour (mrad/h) and 1.0 mrad/h, respectively, at 1 cm." These dose rates could clearly lead to an average annual dose of more than 1 mrem. How can you explain this apparent discrepancy, since some products made using these materials (for example, jewelry) could be utilized at distances closer than 1 cm for long periods of time?

4. The EA states that its scope does not currently include the potential for releasing volumetrically contaminated metals into the market for purposes of recycling them. Is the Department currently considering such a proposal in a separate proceeding? If so, please provide me with a copy of all documents (including emails, memos, phone logs, correspondence or other materials) related to such a proposal. If not, does the Department plan to consider this possibility in the future, and if so, please fully describe the timeline and process by which such consideration will occur.

5. Why did the Department choose to proceed with an EA rather than an EIS? Please provide me with copies of all documents (including emails, memos, phone logs, correspondence or other materials) related to this decision.

6. Yesterday, the Portsmouth Site Specific Advisory Board - which is located in Piketon, Ohio at one of the financially troubled United States Enrichment Corporation's (USEC's) sites – voted to recommend that the site host a "national recycling center" in order to process DOE materials that would be released into the marketplace.
    a. Please provide me with copies of any cost estimates for the construction and operation of such a facility that have been prepared or obtained by the Department of Energy (including the Portsmouth/Paducah Project Office).
    b. Please provide me with the Department's assessment of the commercial value of each type of radioactive metal that would be processed at such a facility, including the volume and potential commercial value of each type of radioactive metal currently being stored at DOE sites.

Thank you very much for your attention to this important matter. Please provide me with your response no later than close of business Friday February 15, 2013. If you have any questions or concerns, please have your staff contact Dr. Michal Freedhoff of my staff at 202-225-2836.

Sincerely,

Edward J. Markey

Edward J. Markey