DOCKET NUMBER
PROPOSED RULE PR 20
68FR09595

Collier Shannon Scott

Collier Shannon Scott, PLLC
Washington Harbour, Suite 400
3050 K Street, NW
Washington, DC 20007-5108
202.342.8400 TEL
202.342.8451 FAX

John L. Wittenborn
202.342.8514
JWittenborn@colliershannon.com

2587

DOCKETED
USNRC

July 1, 2003 (10:05AM)

OFFICE OF SECRETARY
RULEMAKINGS AND
ADJUDICATIONS STAFF

June 30, 2003

VIA ELECTRONIC MAIL – pas@nrc.gov

Ms. Phyllis Sobel
United States Nuclear Regulatory Commission
11555 Rockville Pike
Rockville, MD

Re: Comments of the Metals Industries' Recycling Coalition on the Environmental Scoping Process; Controlling the Disposition of Solid Materials, 68 Fed. Reg. 9595 (February 28, 2003)

Dear Ms. Sobel:

On behalf of the Metals Industries Recycling Coalition ("MIRC") we are submitting the following comments regarding the scope of the United States Nuclear Regulatory Commission's ("NRC's") Environmental Impact Statement ("EIS") to be prepared for the rulemaking on alternatives for controlling the disposition of solid materials. MIRC is an *ad hoc* coalition of metals industry trade associations and is comprised of The Copper and Brass Fabricators' Council ("CBFC"), the Nickel Development Institute ("NiDI"), the Specialty Steel Industry of North America ("SSINA") and the Steel Manufacturers Association ("SMA"). All of these groups represent major recycling industries that make a significant contribution to the environment by recycling enormous tonnages of scrap metal. They also incur significant expenditures to keep radioactive contamination out of their mills. Accordingly, MIRC's position is that no scrap metal from impacted or restricted areas at NRC-licensed facilities should be released into commerce.

MIRC submitted comments in response to NRC's Release of Solid Materials at Licensed Facilities, 64 Fed. Reg. 35,090 (June 30, 1999). *See* Letter from John L. Wittenborn to Secretary, NRC (Dec. 22, 1999). These comments also addressed some of the negative environmental and socioeconomic impacts resulting from the release of radioactively contaminated scrap metal from NRC-licensed facilities. The comments in this letter are intended to supplement MIRC's 1999 comments.

I. THE METALS INDUSTRIES RECYCLING COALITION

MIRC opposes clearance of scrap metal containing residual radioactivity. Metal companies are concerned that the products they manufacture will be perceived as unsafe because of radioactive contamination. The public perception is that any level or type of unnecessary additional exposure to radioactivity is unsafe, official assurances to the contrary notwithstanding.

The public, including workers at metals companies, will neither understand nor accept the release of radioactively contaminated scrap[1] from nuclear facilities for use as a feedstock in the manufacture of consumer products. NRC must legislate safeguards to ensure that radioactively contaminated scrap metal will not escape regulatory control and be released into the stream of commerce.

NRC recently invited the public to comment on five disposition alternatives. The first three alternatives (clearance under existing survey capabilities, clearance under a dose-based criterion, and conditional use) are not acceptable. Under the first two alternatives, NRC would allow scrap metal with detectable contamination to be cleared from NRC regulatory authority and be released into the economy. Under the conditional use alternative, NRC would restrict the further use of materials to only certain authorized uses with limited public exposure. NRC's examples of such uses include metals in bridges, sewer lines, industrial components in a factory, or concrete in road fill. *Id.* at 9597. The fourth and fifth alternatives are, respectively, disposal at landfills regulated under the Resource Conservation and Recovery Act ("RCRA") Subtitle C or D and disposal at NRC/Agreement State-licensed Low-Level Radioactive Waste ("LLRW") disposal facilities. We have separately provided comments to NRC on these options. This letter addresses our concerns with the National Environmental Policy Act ("NEPA") process.

I. COMMENTS ON THE SCOPING PROCESS

As required by NEPA, NRC intends to prepare an Environmental Impact Statement (EIS) in connection with this rulemaking. The purpose of the EIS is to ensure that Federal agencies are fully aware of the impact of their decisions on the environment.[2] In fact, federal agencies are required to consider environmental issues just as they consider other matters within their mandates.[3] If NRC omits significant issues in the scoping process, it will not be able to determine the full environmental impact of the policy alternatives under consideration and therefore would not be able to fulfill its NEPA obligations.

A. Clearance of Radioactively Contaminated Scrap Metal Will Affect Metals Companies' Ability to Comply with Environmental Laws and on Their Ability to Minimize Environmental Liabilities

---

1 MIRC defines "radioactively contaminated scrap metal" as scrap metal that originated in impacted or restricted areas at NRC-licensed facilities, because of the presumption that this material is or may be radioactively contaminated. MIRC would not consider scrap metal to be radioactively contaminated if it did not originate from the impacted or restricted areas, was never present in such areas, and that can be certified as never having been exposed to radiation.

2 *Friends of Endangered Species, Inc. v. Jantzen*, 760 F.2d 976 (9th Cir. 1985).

3 *Calvert Cliffs' Coordinating Comm., Inc. v. United States Atomic Energy Commission*, 449 F.2d 1109 (D.C. Cir. 1971).

Radioactive isotopes present on or in scrap metal may partition to the metal, slag, or emission control dust. Even small concentrations may build up over time, especially in the emission control baghouse, potentially leading to health risks to workers or to expensive disposal requirements. By releasing scrap metal with residual radioactivity into the economy, regardless of whether this is done on a case-by-case basis under Reg. Guide 1.86 or pursuant to a dose-based standard to be established later, NRC is increasing the risk of metals company property contamination. NRC must consider the accumulation of radioactive materials on equipment and in metals industry by-product and waste streams, and exposure of workers and members of the public to this contamination. Contamination of waste streams may generate mixed wastes, for which disposition is prohibitively expensive. NRC has not adequately explored the impact of processing radioactively contaminated scrap metals on personnel or equipment in metals production facilities and at scrap processing operations.

The metals industries also are concerned about liability in potential civil suits. In 2001, a jury awarded more than one billion dollars in punitive damages to a landowner whose property was contaminated by radioactive materials left over from an oil field pipe operation.[4] The defendant company also was ordered to pay $56 million to clean up the property and $145,000 for lost property values. Metals companies do not want to face similar liabilities and therefore strive to keep radioactivity out of their mills. This jury decision also attests to the strong public aversion to even low levels of radioactive contamination.

NRC therefore must consider and study all potential radioactive contamination risks to metals companies, downstream producers, and firms engaged in handling the by-products and wastes of the metals producing industries, as well as the employees of these companies and other individuals who may be exposed to increased levels of radioactivity resulting from the free release policy, in its EIS.

B. Clearance of Radioactively Contaminated Scrap Metal from NRC-Licensed Facilities Would Interfere with Metals Companies' Detectors and Increase the Likelihood of Inadvertent Meltings of Sealed Sources.

Metals companies have installed and operate sensitive, highly sophisticated radiation detection systems and adhere to rigorous monitoring protocols and procedures, to ensure that they do not inadvertently allow contaminated scrap metal, including sealed sources that have escaped NRC regulation, to enter their mills. The metals industries in fact have become the second "net" for catching sealed sources. Inadvertent meltings of sealed sources can put workers and the public at risk and contaminate products, waste streams, mill equipment and the surrounding property. Sealed source incidents have caused individual metals companies to incur tens of millions of dollars in clean-up and decontamination costs, per incident. These costs can bankrupt individual metals companies. Accordingly, metals companies have a strong interest in

---

[4] *Grefer v. Alpha Technical Services, Inc.*, CA 97-15004 (New Orleans Civ. Dist. Ct. May 22, 2001).

keeping sealed sources out of their mills, and have set their detectors to detect at or slightly above background radiation levels, to protect against the possibility of sealed sources ending up in the melt. Moreover, these detection systems protect the environment by minimizing the risk of generating radioactive wastes and contaminating steel mill facilities and large areas of land.

Although orphan sources are not within the scope of this rulemaking, the presence of additional radioactively contaminated scrap metal in the stream of commerce would undermine metals companies' ability to intercept sealed sources. If NRC issues a dose-based standard that raises the allowable levels radioactivity in the scrap supply, this would affect metals companies' detection capabilities. Accordingly, NRC's EIS must include an assessment of this impact on metals producers and of the impact of reduced detection capability on the environment and the economy. For example, NRC must determine the increase in probability that a sealed source will escape detection at a metals company's portal monitors, under a dose-based standard. (A dose-based standard could lead to an *increase* in the allowable levels of radioactivity in scrap metal, for certain isotopes.) After determining the increased risk of an inadvertent source melting, NRC must determine the environmental and economic impacts of that additional risk. Even a one percent increase could result in an accidental smelting. An accidental melting could have a severe impact on the environment and on the viability of the company that melted the source.

C. NRC Is Required to Consider the Cumulative Impact of Its Rulemaking and Actions by Other Federal Agencies.

NRC also is required to consider the cumulative impacts of alternatives. Where several actions have cumulative or synergistic environmental effects, those consequences must be considered in the EIS.[5] Thus, NRC must take into account the prospect that the United States Department of Energy ("DOE") will lift the current suspension on its free release policy and consider how this will compound the impact of the disposition alternatives on the metals industries. There are two main impacts: (1) the likelihood that DOE will adopt standards that NRC develops, when DOE lifts the moratorium; and (2) the volume of scrap that DOE presumably would release.

In 2000, DOE suspended its free release policy with respect to scrap metal originating from within radiological areas, but it can lift the suspension at any time. If and when it does so, DOE and its contractors would resume the release of massive tonnages of radioactively contaminated scrap metal. The amount of materials to be released from DOE facilities over the next several decades far exceeds that to be released by NRC-licensed facilities. DOE estimates that it will have a 1,084,664-ton surplus metal inventory, from Deactivation and Decommissioning ("D&D") activities over the next 35 years.[6] DOE is in the process of

---

5 *City of Tenakee Springs v. Clough*, 915 F.2d 1308 (9th Cir. 1990), *see also Carolina Environmental Study Group v. United States*, 410 F.2d 796 (D.C. Cir. 1975) (requiring agency to describe reasonably foreseeable effects in EIS).

6 *Dedicated Steel Mill Feasibility Study*, DOE (January 2001).

preparing its own EIS to support resumption of free release. DOE began the EIS process in the summer of 2000; it still has not issued a draft EIS for comment. DOE clearly is waiting for the NRC rulemaking to proceed to set its own standards.

Although DOE is likely to adopt the dose-based standards NRC plans to develop, DOE facilities do not have the same safeguards and practices in place to ensure that radioactively contaminated scrap metal is not inadvertently released. D&D work at former DOE sites is being handled by private contractors, with insufficient oversight. According to a DOE Inspector General's ("IG's") report, radioactively contaminated scrap metal exceeding the guidelines in DOE Order 5400.5 had been released into commerce from the East Tennessee Technology Park, (the former K-25 uranium enrichment facility). The IG attributed this release to insufficient oversight over DOE contractor British Nuclear Fuels, Ltd.

> As a result of inaccurate surveys, the risk to the public that contaminated metals were released from the site was increased. Since the verification team does not verify every item in each lot, additional surveying errors would not be detected, and in some cases, lots exceeding the release criteria may have been released. As of the end of May 2000, about 6.6 million pounds of unrestricted metal were released for recycling from the site.[7]

The Inspector General found that BNFL did not perform accurate surveys of contaminated metals before release for recycling on the open market and that employees who performed the surveys were not adequately supervised. Depending upon the outcome of NRC's rulemaking, DOE could release an additional, significant amount of radioactively contaminated scrap metal into the economy, without the same rigorous screening that such metal undergoes before its is cleared from an NRC-licensed nuclear fuel cycle facility. DOE's resumption of free release, which we understand will include volumetrically contaminated material, will exacerbate the problems for the metals industries. NRC must take into account the potential impact (volumes, activity levels, etc.) that will follow if DOE adopts an NRC recommended dose-based release standard.

D. NRC Is Required to Consider Direct and Indirect Impacts.

NRC is not limited to exploring the direct impacts of additional radiation in the scrap supply; it also must consider any impacts that significantly affect the environment, whether the impact is a primary or secondary one, direct or indirect.[8]

---

[7] The Decontamination and Decommissioning Contract at the East Tennessee Technology Park, DOE/IG-0481 (Sept. 2000).

[8] *Environmental Defense Fund v. Hoffman*, 566 F.2d 1060 (8th Cir. 1977). 40 C.F.R. § 1502.16.

MIRC already has submitted comments to NRC informing it that the release of radioactively contaminated scrap metal from nuclear facilities for unrestricted recycling into industrial and consumer products would undermine the marketability of metal products and severely tarnish the image of recycling. NRC must give serious consideration to the adverse market impact on the metals industries and on recycling. The mere possibility that products made with recycled metals may contain materials that were released from nuclear facilities would cause a significant number of consumers to purchase consumer goods made of substitute materials or to demand certification that their products are made with mined virgin ores. Consequently, clearance would lead to an *increase* in the consumption of mined virgin ores, as consumers avoid products made with recycled metals.

III. CONCLUSION

MIRC already has submitted extensive comments for the record on the major environmental, economic and socioeconomic impacts of releasing radioactively contaminated scrap metal into the stream of commerce. NRC also is required to consider the impacts on metals companies' ability to comply with environmental laws, the increase in liability exposure likely to result from implementation of one of the three "release" alternatives, the impact on metals companies' ability to intercept sealed sources and the environmental and economic impacts of inadvertent sealed source meltings that would result from reduced detection capability. Moreover, NRC must consider the synergistic effect of DOE's resumption of its "free release" policy and the actions of other federal government agencies that would exacerbate the impact on the metals industries. Finally, NRC is required to consider indirect as well as direct impacts.

If you have any questions, please do not hesitate to contact us.

Sincerely,

John L. Wittenborn
Counsel to the
METALS INDUSTRIES
RECYCLING COALITION