(687)

STEEL MANUFACTURERS ASSOCIATION

Suite 907
1730 Rhode Island Avenue, N.W., Washington, D.C. 20036-3101
Fax: (202) 296-2506

Thomas A. Danjczek
President

(202) 296-1515
e-mail: danjczek@steelnet.org

DOCKET NUMBER
PROPOSED RULE PR 20
(64FR35090)

'00 JAN -5 A7:25

December 22, 1999

Secretary
U.S. Nuclear Regulatory Commission
Washington, DC 20555

ATTN: Rulemaking and Adjudications Staff

Re: **Release of Solid Materials at Licensed Facilities; Issues Paper, Scoping Process for Environmental Issues, and Notice of Public Meetings, 64 Fed. Reg. 35,090 (June 30, 1999)**

Dear Sir or Madam:

On behalf of the Steel Manufacturers Association ("SMA"), we submit the following comments regarding the United States Nuclear Regulatory Commission ("NRC") consideration of a rulemaking to establish clearance standards for solid materials, including steel scrap, from nuclear fuel cycle facilities. 64 Fed. Reg. 35,090 (1999). We support the comments of the Metals Industry Recycling Coalition, of which SMA is a member, opposing the free release of radioactively contaminated scrap. The SMA membership, which comprises the largest recycling industry in the United States, would be the primary recipient of radioactively contaminated scrap and stands to suffer the serious economic injury from a policy of free release of this scrap.

I. THE STEEL MANUFACTURERS ASSOCIATION

The SMA is the largest steel trade association in North America, and the primary trade association of electric arc furnace ("EAF") steel producers that make steel from a feedstock of virtually one hundred percent scrap. Several SMA members operate basic oxygen furnaces ("BOF"s) in which they make steel from a mixture of scrap and virgin iron ore. The 48 United States member companies of the SMA (*please see attached list*) are geographically dispersed across the country and account for 59% of US steel production.

POR PR 20 64FR35090

DS10

Steel is the nation's most recycled material. Last year, the EAF steel industry recycled over 66 million tons of iron and steel scrap which would have otherwise been landfilled or littered the countryside. For every ton of steel made with recycled scrap, the steel industry saves ten to fifteen million British thermal units ("BTUs") of energy. Last year, the EAF steel industry saved enough energy to provide power to the city of Los Angeles eight times over. It is steel's recyclability that renders the unrestricted free release of steel scrap inequitable and bad for the environment.

II. ENVIRONMENTAL AND ECONOMIC IMPACTS OF RADIOACTIVE SCRAP

The SMA recognizes the need of the nuclear power industry and the United States Department of Energy ("DOE") to manage significant tonnages of radioactively contaminated steel scrap. SMA also recognizes the need to set consistent dose-based clearance standards that are fully protective of the health of consumers of steel products and steel mill workers and the environment, and it does not support the continued reliance on case-by-case determinations for release of contaminated steel scrap made under current outdated policy documents. However, SMA does not support the mere establishment of clearance standards as a solution to problem. NRC's Federal Register announcement and draft technical report, "NUREG-1640," do not sufficiently address, or fail to address at all, several of the environmental and economic impacts that would result if NRC established clearance standards for the free release of radioactively contaminated steel scrap.

A. Consumer Perception

The release of radioactively contaminated steel scrap from nuclear facilities for unrestricted recycling into industrial and consumer products could adversely affect the marketability of steel products and severely tarnish the image of recycling. The establishment of release levels that NRC deems to be "safe" would not mitigate this problem. The public's perception is that any level or type of radioactivity is unsafe, official assurances to the contrary notwithstanding. Aversion to perceived risk or radioactivity could lead consumers to avoid products made of steel, especially those with a recycled steel content. This could have a significant economic impact on SMA members, which make steel from a feedstock of scrap. NRC's announcement fails to consider the economic impact of losses in sales, workforce reductions, and the loss of revenues in industries that supply materials, equipment, and services to the steel recycling industry.

B. Environmental Impact

SMA members make a major contribution to the environment each day by recycling hundreds of tons of scrap metal into new steel metal products. Currently, recycling is accurately perceived as a social good and thus something to be encouraged. The unrestricted release of radioactively contaminated steel scrap for recycling would tarnish this perception, because the mere possibility that products made with steel 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 virgin iron ore. Accordingly, free release would lead to an increase in the consumption of mined virgin ores, as consumers avoid products made with recycled metals. The environmental benefits of recycling, including the enormous energy savings, therefore would be diminished.

C. Steel Company Operations

SMA members are already burdened by the problem of shielded radioactive sources that have escaped NRC's licensing program and have been negligently discarded in shipments of ferrous scrap. All BOF and EAF steelmaking facilities have implemented sophisticated radiation detection systems and employ expensive, highly sensitive radiation detectors to prevent the accidental smelting of shielded radioactive sources that have been improperly discarded in shipments of iron and steel scrap. Detectors are set at, or only slightly above, background levels. SMA members reject incoming shipments that trigger their radiation detectors, because of the significant economic risks that result from accidental melting of shielded sources. Steel companies respond to detector alarms by stopping the production process wherever the radioactivity is detected and taking appropriate measures, which can include outright rejection of a load of scrap, hand sorting through a truckload of scrap, or prompt sequestration and notification of the proper authorities. These measures are necessary but unfairly impose significant costs on the steel industry.

The unrestricted release of metal from NRC-licensed fuel cycle and DOE-operated facilities presents a far more onerous problem, as scrap with slight levels of surface or volumetric contamination would trigger the radiation detectors at steel mills across the country. Free release of radioactively contaminated steel into the stream of commerce would greatly increase the volume of radioactive scrap arriving at steel mill gates. This poses a serious problem for the suppliers and transporters, who must manage and arrange for the ultimate disposition of the rejected scrap.

D. Cost Shifting

Compelling the steel industry to accept increased radioactivity in their metal scrap feedstocks is economically inequitable and inefficient. The cost to nuclear facilities of disposing radioactively contaminated metal scrap in low level radioactive waste landfills can exceed three hundred dollars per ton. Free release of radioactively contaminated scrap into the economy saves the nuclear power industry a significant amount of money, but at a much greater expense to the steel industry. The level of monitoring at fuel cycle facilities is not sufficient to guarantee that SMA member do not receive radioactively contaminated scrap. Consequently, the burden falls on scrap metal brokers and processors and, ultimately, onto the metals industries, to screen the scrap metal for radioactivity.

Furthermore the release of radioactively contaminated scrap into the stream of commerce should not be considered a "market solution," because there are no willing buyers of this scrap. Steel companies spend a substantial amount of money each year on detection and monitoring to ensure that they do not receive shipments of radioactive scrap. It is more economically efficient overall to require the nuclear power industry to adopt stringent monitoring to control radioactive contamination at the source, rather than foisting this cost onto SMA members.

III. PROPOSED SOLUTION: RESTRICTED RELEASE

A. Restricted Release

SMA urges NRC to support a policy of "restricted release," whereby release of scrap metal from nuclear facilities is limited to one of the two following options:

(1) Recycling or recovery at a dedicated, licensed facility for use only at an NRC-licensed fuel cycle facility or at nuclear facilities operated by the DOE; or

(2) Disposal into an appropriate landfill (i.e., licensed radioactive waste, low-level radioactive waste, municipal or industrial landfill).

Under the restricted release alternative, certain products could be manufactured from the radioactively contaminated scrap metal, as long as the metal stays within NRC licensing or DOE regulation as radioactive metal. NRC must emphasize to other agencies, notably DOE, that these restrictions should apply to releases of scrap from nuclear facilities not under NRC's jurisdiction. DOE facilities are a major source of radioactively contaminated scrap.

B. Release with Manifesting, Labeling, and Tracking

Alternatively, SMA would support a program of releasing scrap metal from nuclear fuel cycle and DOE-operated facilities, provided additional controls were put in place ensure that SMA members do not face the market disruption and operating problems associated with radioactive contamination in scrap. Such measures would include a requirement that any scrap to be released into the stream of commerce meet NRC dose-based clearance levels, not exceed background radiation levels for the area from which they are released, and that the scrap metal be manifested, labeled, and tracked.

NRC would have to establish appropriate manifesting, labeling, and tracking requirements designed to ensure that any scrap processing or recycling facility to which the scrap metal ultimately may be sent will be advised of its origin and can make an informed decision as to whether to accept the material. Manifests would have to indicate content, tonnage, origin, and radioactive content.

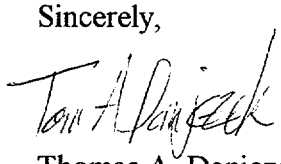
Non-scrap steel items, or steel-containing equipment and products from licensed facilities that are to be re-used for their originally intended purpose, could also be released under this option, provided they are labeled and released solely for specified restricted applications that would preclude the items' being scrapped, melted, and recycled for use in consumer or commercial products. This solution would only be acceptable to SMA if NRC required the facilities releasing the scrap to implement monitoring and sampling protocols sufficiently advanced to detect above-background levels of alpha, beta, and gamma radiation for all relevant isotopes. Also, NRC would have to include technology-based requirements for detectors and whistleblower protections to ensure compliance.

IV. CONCLUSION

SMA opposes policies or rulemaking activities that sanction or encourage the free release of radioactively contaminated scrap metals, without any additional regulatory controls. SMA members do not want radioactive contamination, even at minimal levels that NRC has deemed "safe" in their incoming shipments of scrap, and incur great expenses each year to keep radioactive scrap out of their mills. NRC has not sufficiently explored the economic impact and other effects on the metals industries that would result from the free release of radioactive scrap, nor has it given adequate consideration to alternative policies such as restricted release. We urge the NRC to consider the impacts of radioactively contaminated scrap on the steel recycling industry and the policy alternatives to free release.

If you have any questions, please contact us at (202) 296-1515.

Sincerely,



Thomas A. Danjczek

Attachment

STEEL MANUFACTURERS ASSOCIATION

58 MEMBER COMPANIES

Tel: (202) 296-1515 Fax: (202) 296-2506

A.B. Steel Mill, Inc.	Cincinnati, Ohio
AmeriSteel	Tampa, Florida
Arkansas Steel Associates	Newport, Arkansas
Auburn Steel Company, Inc.	Auburn, New York
Bayou Steel Corporation	LaPlace, Louisiana
Beta Steel Corporation	Portage, Indiana
Bethlehem Steel Corporation	Bethlehem, Pennsylvania
Birmingham Steel Corporation	Birmingham, Alabama
Border Steel, Inc.	El Paso, Texas
Calumet Steel Company	Chicago Heights, Illinois
Cascade Steel Rolling Mills, Inc.	McMinnville, Oregon
Charter Manufacturing Company, Inc.	Mequon, Wisconsin
Chicago Heights Steel	Chicago Heights, Illinois
CitiSteel USA Inc.	Claymont, Delaware
Commercial Metals Steel Group	Seguin, Texas
Compañia Siderurgica de Guadalajara, S.A. de C.V.	Guadalajara, Jalisco, México
Connecticut Steel Corporation	Wallingford, Connecticut
Co-Steel Inc.	Whitby, Ontario, Canada
CSC, Ltd.	Warren, Ohio
Deacero, S.A. de C.V.	Monterrey, N.L., México
FirstMiss Steel, Inc.	Hollsopple, Pennsylvania
Franklin Industries	Franklin, Pennsylvania
Gallatin Steel	Ghent, Kentucky
Geneva Steel Corporation	Provo, Utah
Gerdau Courtice Steel Inc.	Cambridge, Ontario, Canada
GS Industries	Charlotte, North Carolina
Hylsa, S.A. de C.V.	San Nicolas de los Garza, N.L., México
IPSCO Saskatchewan Inc.	Regina, Saskatchewan, Canada
IPSCO Steel Inc.	Muscatine, Iowa
Ispat Inland Bar Products	East Chicago, Indiana
Ispat Sidbec Inc.	Montreal, Québec, Canada
J & L Structural, Inc.	Aliquippa, Pennsylvania
Jersey Shore Steel Company	Jersey Shore, Pennsylvania
Kentucky Electric Steel Inc.	Ashland, Kentucky
Keystone Steel and Wire Company	Peoria, Illinois
Koppel Steel Corporation	Beaver Falls, Pennsylvania
Laclede Steel Company	St. Louis, Missouri
Lone Star Steel Company	Lone Star, Texas
Marion Steel Company	Marion, Ohio
McDonald Steel Corporation	McDonald, Ohio
North Star BHP Steel Ltd.	Delta, Ohio
North Star Steel Company	Minneapolis, Minnesota
Northwestern Steel and Wire Company	Sterling, Illinois
Nucor Corporation	Charlotte, North Carolina
Oregon Steel Mills, Inc.	Portland, Oregon
Qualitech Steel Corporation	Cleveland, Ohio
Republic Technologies International	Johnstown, Pennsylvania
Roanoke Electric Steel Corporation	Roanoke, Virginia
Sheffield Steel Corporation	Sand Springs, Oklahoma
Slater Steel, Inc.	Hamilton, Ontario, Canada
Steel Dynamics, Inc.	Butler, Indiana
Stelco Group of Businesses	Alberta and Québec, Canada
Sydney Steel Corporation	Sydney, Nova Scotia, Canada
TAMCO	Rancho Cucamonga, California
Tuscaloosa Steel Corporation	Tuscaloosa, Alabama
TXI (Chaparral Steel Company)	Midlothian, Texas
W. Silver, Inc.	El Paso, Texas
Wheeling-Pittsburgh Steel Corporation	Wheeling, West Virginia

1730 Rhode Island Avenue, N.W., Suite 907
Washington, D.C. 20036-3101

10/12/99