PR 20 and 32
(73FR19749)

KELLEY DRYE & WARREN LLP
A LIMITED LIABILITY PARTNERSHIP
200 KIMBALL DRIVE
PARSIPPANY, NEW JERSEY 07054
(973) 503-5900

NEW YORK, NY
WASHINGTON, DC
CHICAGO, IL
STAMFORD, CT
BRUSSELS, BELGIUM
AFFILIATE OFFICES
MUMBAI, INDIA

FACSIMILE
(973) 503-5950
www.kelleydrye.com

DIRECT LINE: (973) 503-5911
EMAIL: wdangelo@kelleydrye.com

December 2, 2008

DOCKETED
USNRC

December 4, 2008 (3:00pm)

OFFICE OF SECRETARY
RULEMAKINGS AND
ADJUDICATIONS STAFF

VIA FEDEX

Secretary Annette L. Viette-Cook
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001
Attn: Rulemakings and Adjudications Staff

Re: Comments on the Proposed Expansion of the National Source Tracking System ("NSTS") 73 Fed. Reg. 19749

Dear Secretary Viette-Cook:

On behalf of the Metals Industry Recycling Coalition ("MIRC")[1], I respectfully submit for the U.S. Nuclear Regulatory Commission's ("NRC's") consideration the enclosed article on the threat posed by radioactive sources to the metals recycling industry and the public. While we understand that we are submitting this article outside the comment period for the NRC's proposal to expand the National Source Tracking System ("NSTS"), we believe that this article will provide the NRC with important information relevant to its decision-making on the NSTS issue.

In particular, this article from Bloomberg.com, entitled *Radioactive Beer Kegs Menace Public, Boost Cost for Recyclers*[2], provides a concise global perspective on the increasing risks posed by radioactive sources in the scrap metal recycling stream and the metals recycling industry's costly efforts to mitigate those risks. As MIRC stated in its comments from June 25, 2008, NSTS expansion would provide critical oversight and tracking over these sources. However, in order to truly protect the metals recycling industry and the public, NRC needs to track sources with activity levels as low as Category 5.

---

[1] MIRC is an *ad hoc* coalition of metals industry trade associations and companies comprised of the Copper and Brass Fabricators Council ("CBFC"), the International Metals Reclamation Company, Inc. ("Inmetco"), the Nickel Institute ("NI"), the Steel Manufacturers Association ("SMA"), and the Specialty Steel Industry of North America ("SSINA").

[2] Authored by Jonathan Tirone and Subramaniam Sharma

Template=SECY-067

SECY-02

We appreciate your consideration of this relevant article. If you have any questions, please feel free to contact me at 202.342.8514 or jwittenborn@kelleydrye.com.

Very truly yours,

Wayne J. D'Angelo
Counsel to Metals Industry Recycling Coalition

Updated: **New York**, Nov 24 09:57
London, Nov 24 14:57
Tokyo, Nov 24 23:57

news

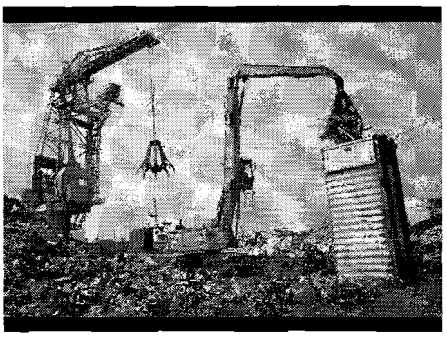
- Exclusive
- Worldwide
- Regions
- Markets
- Industries
- Economy
- Politics
- Law
- Environment
- Invest
- Science
- Opinion
- Spend
- Sports
- Arts and Culture
- Editors' Video Picks
- Bloomberg Markets Magazine
- Special Report

RESOURCES

- Bloomberg TV
- Bloomberg Radio
- Bloomberg Podcasts
- Bloomberg Press

Radioactive Beer Kegs Menace Public, Boost Costs for Recyclers

By Jonathan Tirone and Subramaniam Sharma


Enlarge/Details

Nov. 11 (Bloomberg) -- French authorities made headlines last month when they said as many as 500 sets of radioactive buttons had been installed in elevators around the country. It wasn't an isolated case.

Improper disposal of industrial equipment and medical scanners containing radioactive materials is letting nuclear waste trickle into scrap smelters, contaminating consumer goods, threatening the $140 billion trade in recycled metal and spurring the United Nations to call for increased screening.

Last year, U.S. Customs rejected 64 shipments of radioactive goods at the nation's ports, including purses, cutlery, sinks and hand tools, according to data released by the Department of Homeland Security in response to a Freedom of Information Act request. India was the largest source, followed by China.

``The world is waking up very late to this," said Paul de Bruin, radiation safety chief for Jewometaal Stainless Processing BV in Rotterdam, the world's biggest stainless-steel scrap yard. ``There will be more of this because a lot of the scrap coming to us right now is from the 1970s and 1980s, when there were a lot of uncontrolled radioactive sources distributed to industry."

On Oct. 21, the French nuclear regulator said elevator buttons assembled by Mafelec, a Chimilin, France-based company, contained radioactive metal shipped from India. Employees who handled the buttons received three times the safe dose of radiation for non-nuclear workers, according to the agency.

Operations at the factory are now back to normal and the company has cut ties

with the ``source'' of the radiation, Mafelec said in a statement. ``In the worst-case scenario the exposure would have been under that of a medical scan,'' Chief Executive Officer Gilles Heinrich said.

1 Million Missing Sources

Many atomic devices weren't licensed when they were first widely used by industry in the 1970s. While most countries have since tightened regulations, it is still difficult to track first-generation equipment that is now coming to the end of its useful life.

Abandoned medical scanners, food processing devices and mining equipment containing radioactive metals such as cesium-137 and cobalt-60 are often picked up by scrap collectors and sold to recyclers, according to the International Atomic Energy Agency, the UN's nuclear arm. De Bruin said he sometimes finds such items hidden inside beer kegs and lead pipes to prevent detection.

There may be more than 1 million missing radioactive sources worldwide, the Vienna-based IAEA estimates.

``We're passing by the first era of nuclear applications, so disused material is increasing,'' said Vilmos Friedrich, an IAEA inspector. ``Until recently, there hasn't been licensing'' for industrial devices.

`Alarms Will Go Up'

Smelting such items contaminates recycled metal used to make new products and the furnaces that process the material. Cleanups cost as much as $30 million, according to the Brussels-based Bureau of International Recycling, which represents metal, paper and glassmakers.

The danger increases when metal prices rise, pushing scavengers to pick up and sell more material, said Martin Magold, who led a Geneva-based UN team that tracked radioactive metal shipments in Europe.

Prices for scrap steel quadrupled to $665 a ton in Rotterdam over the past five years. After peaking on July 3, prices dropped to $115.50 last week as the slowing global economy eroded demand.

``Because of high scrap prices, any little piece is being sold for recycling,'' Magold said. ``Alarms will go up dramatically in coming years.''

Nucor Corp., the biggest U.S.-based steel producer, has spent more than $1 million installing and upgrading radiation detection equipment at its plants, said Steve Roland, environmental director for the Charlotte, North Carolina company.

``Orphaned sources are a significant problem worldwide for the recycling industry,'' Roland said. ``Anything governments can do to remove sources from commerce and hold people accountable for the loss is to our benefit.''

Cancer, Birth Defects

Chronic exposure to low doses of radiation can lead to cataracts, cancer and birth defects, according to the U.S. Environmental Protection Agency.

A study of 6,252 Taiwanese people who lived in apartments built with radioactive reinforcing steel found that 117 cancer cases were diagnosed from 1983 to 2005. The research showed a statistically significant increase in leukemia and breast cancer.

``People don't understand the risk,'' said Dr. Peter Chang, a professor of environmental health at Taiwan's National Medical Center who developed the study. ``We have an extreme lack of education.''

Spanish Cloud

In 1998, equipment containing cesium-137 was smelted at a foundry in Los Barrios, Spain, operated by Acerinox SA, the world's largest stainless steel producer. Radiation spread over Italy and France, triggering concern that a reactor had melted down in Russia, according to an IAEA report on the incident.

While only six people were exposed to radiation, the cleanup, hazardous waste storage and interruption of business cost the company an estimated $25 million, the report said.

At the time, Acerinox had radiation detectors installed in parts of the factory and assumed the scrap it purchased had been inspected by the dealer, said Juan Garcia, a Madrid-based spokesman for the company. Acerinox has since improved security by spending about 100 million euros ($129 million) on ``advanced contamination-detection technologies,'' he said.

The event also led Spain to rewrite rules governing the scrap metal industry and to create an agency that helps recyclers dispose of radioactive materials.

The IAEA may recommend that governments increase monitoring of scrap shipments at international borders and recyclers screen all material entering their plants, according to draft guidelines circulated by the agency.

ArcelorMittal Scanners

Many large metal producers in the U.S. and western Europe say they already screen for nuclear material.

``All our steelworks are equipped to verify possible radioactivity contamination of the scrap shipments,'' Jean Lasar, a spokesman for Luxembourg-based ArcelorMittal, the world's biggest steelmaker, said in an e-mail.

Much of the contaminated scrap originates in or passes through countries with inadequate licensing regulations and detection equipment.

For example, about 1,000 radio-electronic thermal generating units were misplaced after the collapse of the Soviet Union, said Abel Gonzalez, a former IAEA inspector who helped retrieve such orphaned sources in Russia. The

devices, used to power remote lighthouses, each contain as much radiation as was released by the Chernobyl meltdown in 1986, he said.

Cesium-137 in Kyrgyzstan

In December, officials in Kyrgyzstan discovered cesium-137 that probably came from discarded food-irradiation equipment in a trainload of scrap bound for Iran. Four emergency workers were exposed to high levels of radiation when they responded to the incident, according to local media reports. Kyrgyzstan's delegation to the IAEA declined to comment.

Russia and the other former Soviet states accounted for 13 percent of the scrap exported worldwide last year, according to the World Steel Association, which represents about 180 metal companies.

Overall, 123 shipments of contaminated goods have been denied entry to U.S. ports since screening began in 2003, according to the Homeland Security data. Of those, 67 originated in India, 23 came from China and 20 were from Canada. This year, a total of 32 cases had been reported through early July.

`No Authority, No Control'

There is no guarantee materials rejected by the U.S. won't reappear in countries with less stringent monitoring.

``The only authority we have is that we don't let them into the U.S., so that ship was turned around and those components left the U.S.," said Dale Klein, chairman of the Nuclear Regulatory Commission. ``Where they went, we have no authority and no control."

Homeland Security declined to give information on where shipments ended up after being turned away from the U.S.

At Kandla, India's biggest port by volume, most scrap is imported in shipping containers that are unloaded at one of 12 cargo docks. None of it is screened for contamination.

``There are no means as of today to check the radioactive material in the scrap that's imported or exported," said H.C. Venkatesh, a traffic manager at Kandla Port Trust.

India plans to install scanners at Kandla and three other ports that handle about 80 percent of the nation's container traffic. They will become operational starting in April.

A year ago, Dutch authorities seized a shipment of radioactive purses in Amsterdam and traced them to Maple Exports Ltd., a Kolkata-based leather goods maker, according to the inspectors who impounded the cargo.

`Rogue Supplier'

Gaurav Bhalotia, a director at Maple Exports, denied that any of his company's purses were contaminated, though he said, ``It's impossible for us to check

every item." The merchandise belonged to another company that shared space in the same shipping container, he said in a telephone interview.

Maple Exports has become more careful about who it buys metal from and may buy a radiation scanner, Bhalotia said.

Competition discourages some manufacturers from asking questions about where metal originates, he said.

``People are driven so much by price, they buy from any supplier," Bhalotia said. ``They want to buy cheap, and when there is this rogue supplier the whole chain suffers."

Some firms already screen products for contamination. Indian Union Manufacturers Pvt. sends samples of its bells, buckles and belts to Indian labs, said D. Roy Chowdhury, a director of the company based at Kanpur in northern Uttar Pradesh state.

Cobalt and Nickel

The problem for Chowdhury is that the nickel he uses to burnish his products is prone to contamination. Cobalt-60 and nickel are often melted together and are chemically suited to stick to each other.

``There is concern among exporters about the presence of radioactive substances," Chowdhury said. ``I have heard from my buyers in Kolkata about consignments coming back."

India began probing the nation's scrap-metal handlers after the radioactive elevator buttons were detected in France.

``This is causing a big economic loss to the exporters," said Satya Pal Agarwal, head of radiological safety at India's Atomic Energy Regulatory Board. ``We are trying to trace the source. Most probably it is from imported metal scrap."

Homeland Security and the U.S. Department of Energy are funding a $60 million program to install radiation monitors at ports around the world. The Secure Freight Initiative started in October 2007 at three sites in the U.K., Pakistan and Honduras. About 800 ports worldwide handle cargo containers, according to London's Drewry Shipping Consultants Ltd.

`You Die'

Similar equipment is already used in Rotterdam, Europe's busiest port, where 30-meter (100-foot) mountains of disfigured metal wait to be processed.

At nearby Jewometaal, De Bruin switched on a dosimeter, the modern equivalent of a Geiger counter. The device squealed as he entered the corner of a warehouse where radioactive metals are stored until they are sent to Covra NV, the Netherlands' state- run nuclear waste dump.

In his office, De Bruin donned gloves before selecting a pair of long tweezers and pulling a piece of cesium-137 the size of a match head out of a bottle.

``If you get a dose of this on your hands it's no problem," said De Bruin, a former customs agent who has worked in nuclear research reactors. ``If you get it in your lungs you die."

Hours before, he'd sent a truckload of Venezuelan scrap to the Netherlands' nuclear waste dump.

Covra charges a one-time fee of 110 euros a liter (1.06 quarts) to watch over corroding cobalt and cesium metals.

``We should accept these orphaned sources rather than making a fuss over which country is responsible and who should bear the burden," said facility manager Henry Codee, in his office overlooking the mango-colored waste hangar. ``That's the only way to solve the problem."

To contact the reporter on this story: Jonathan Tirone in Vienna at jtirone@bloomberg.net; Subramaniam Sharma in New Delhi at ssharma@bloomberg.net

Last Updated: November 10, 2008 18:01 EST

