

FACT SHEET

"Frequently Asked Questions on the Suspension on Release for Recycling of Metal from Radiation Areas"

Office of Environmental Policy and Guidance
Air, Water and Radiation Division, EH-412

Currently: Office of Public Radiation Protection, AU-22
Reprinted November 2021

On January 12, 2000 the Secretary of Energy issued a moratorium on the Department's release of volumetrically contaminated metals pending a decision by the Nuclear Regulatory Commission (NRC) whether to establish national standards. On July 13, 2000 the Secretary issued a memorandum which directed further action in four areas: (1) improvement of the Department's release criteria and monitoring practices; (2) expansion of efforts to promote reuse and recycling within the complex of DOE facilities; (3) improvement of the Department's management of information about material inventories and releases; and (4) the accelerated recovery of sealed sources.

The July 13th, 2000 memorandum also suspended the unrestricted release for recycling of metal from radiological areas within DOE facilities. This suspension will remain in effect until improvements in DOE release criteria and information management have been developed and implemented. The Office of Environment, Safety and Health has been assigned the responsibility for developing the new directives that establish the criteria for implementing these improvements.

Since the memorandum, there have been many questions on the suspension and the directive. On July 21, 2000, the Co-Chairs of the Secretary's Reuse and Recycling Task Force (Messrs. Brian Costner and Steve Cary) conducted a conference call to respond to many of the questions. The discussion below summarizes those responses and responses to a few that have been submitted by email or telephone.

General:

1. What is the scope of the suspension?

- The Secretary's suspension applies to the release of metal for the purpose of recycling into commerce (unrestricted recycle) from "radiological areas" as defined by 10 CFR Part 835.
- The suspension applies to the recycle of all metal types. Recycle means that the metal will be melted and new products made from it.

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- The suspension became effective with the issuance of the Secretary's memorandum (July 13, 2000) and with the notification of the contractors of the requirements of the memorandum.
- The suspension will remain in effect until:
 - a) the Office of Environment, Safety and Health issues a directive or guidance to implement the requirement to control release of metal for recycle so as to ensure it contains no detectable residual radioactive material; and
 - b) the field office in conjunction with the responsible program office certifies procedures are in place to effectively implement the requirements.
- Because the suspension is intended to deter the recycle of metal that may contain residual radioactive material detectable above background, if field office managers are concerned that scrap metal containing detectable residual radioactive material is being released from non-radiological areas they are free to expand the area affected by the suspension.

2. What material is not covered by the suspension?

- The release (including public sales) of property or equipment for reuse for their intended purpose is not suspended.
- The recycle of non-metal material is not suspended.
- The recycle and reuse of excess property for use within the DOE complex. It is encouraged. Transfer of property for reuse by individuals licensed to use such material is also permitted.
- Property released or certified for release prior to July 13, 2000, is not affected by the suspension
- Property not covered by the suspension is still subject to all DOE requirements for control of property including DOE 5400.5 and associated guidance.

Specific Questions:

3. Does the suspension apply to items other than metal?

No. Releases of other materials are not affected and will continue under existing requirements and guidance. Such releases are subject to DOE 5400.5 requirements and guidance and will be subject to any new documentation, record keeping and reporting requirements set forth in the directive(s) to be issued by December 31, 2000.

4. Can scrap metal or equipment from a radiological area be released for reuse?

Yes, in some cases. Equipment from a radiological area may be released under existing guidance and reused for its intended purpose or released through current property management systems for reuse. For example, a machine tool may be taken elsewhere and

reused or sold for reuse as tooling as long as it meets current surface release limits for radiological materials as defined in Order DOE 5400.5 and associated guidance. Similarly, metal items may be surveyed and released as long as they are used in their **present form**. The key factor in determining what is permissible is whether the metal will be melted and re-fabricated into new products. All cases that involve re-melt and remanufacture of metal from radiological areas are suspended, unless the new product is to be used within the DOE complex.

5. What is DOE's responsibility to assure that material or equipment sold is used for its intended purpose and not remelted as scrap?

DOE operations are expected to make a good faith effort to provide reasonable assurance that metal subject to the suspension is not released for the purpose of recycling. DOE and DOE contractors should not knowingly surplus material to individuals for the purpose of recycling or knowingly disposition it in a manner that it is likely to be recycled. However, if a good faith effort is made to ensure that the release is for the purpose of reuse, there is no need to track material once it has been released or to secure a special commitment from the owner.

6. A site has a lot of surplus electrical equipment and transformers that are contained in a radiological area. Can it be surveyed and sold under the present suspension?

Yes. If the transformers and electrical equipment are being sold for direct reuse, refurbishment, or refit as electrical equipment. Sale of the equipment with the sole intent of recovering copper, steel or other metal for re-melt and re-fabrication into electrical equipment or other products **is prohibited** under the suspension.

7. If scrap metal was surveyed and released from the site using established release criteria (DOE Order 5400.5) prior to the July 13, 2000 Secretarial Memorandum, is it covered in the suspension?

No. Material surveyed and approved to be released from a radiological area pursuant to DOE 5400.5 prior to July 13, 2000 is not covered by this suspension. This includes metal already released from contractor control and metal that is still on site but has been certified by the contractor under DOE 5400.5 prior to implementation of the July 13, 2000, suspension.

8. What about scrap metal or equipment not in a radiological area?

Scrap metal and equipment outside radiological areas are not affected by the suspension. However, all such material remains subject to DOE standards and reporting requirements. The material must be certified and verified that it meets release requirements.

9. When will the suspension be lifted?

The suspension will be lifted when new or revised directives and guidance for the release of metals (and other materials) are finalized and being implemented. New directive(s) and guidance (if necessary) will be issued by December 31, 2000. The directive(s) will include a certification process for a site to gain approval to resume release of metal for recycling. (NOTE: Directives and guidance have not been published to date.)

10. Can clean scrap or decontaminated scrap released from a radiological area (green tagged) be recycled after the July 13, 2000 Memo?

No. This scrap cannot be recycled until the suspension is lifted. The suspension may be lifted after the issuance of the new directive(s) in December 2000, once 1) the site operators have established procedures for implementing the new requirements and have completed public participation programs to inform the public of the process and availability of information; and 2) the responsible program office certifies that the site has procedures and processes in place that comply with the new requirements. (NOTE: Directives and guidance have not been published to date.)

11. Can the clean scrap or decontaminated metal from a radiological area be disposed of?

Yes, as long as it meets all the requirements for disposal. The suspension does NOT affect any waste management operations, only recycling is covered. However, the site should be aware of how off-site disposal facilities manage waste. There should be reasonable assurance the material sent to disposal will be dispositioned as waste. Sites should not ship metals for disposal to disposal sites which routinely recycle metal waste.

12. What should we do with our metal from radiological areas that are accumulating since the July 13, 2000 memo that we would normally recycle?

Each site must determine whether it is economical to store material that is generated in anticipation of the new directive(s) to be issued in December 2000. In making such decisions, it should be recognized that the new requirements will only permit the recycle into commerce of scrap metal that has been shown to have no detectable residual radioactive material. As noted, the suspension does not apply to waste disposal options consistent with DOE O 435.1 and EH November 17, 1995 guidance relating to disposal consistent with DOE 5400.5 authorized limits. It also does not preclude reuse or recycle within DOE. (NOTE: Directives and guidance have not been published to date.)

13. What about metals from radiological areas that will be used for shielding?

This is reuse. Internal (DOE) reuse or reuse options within the commercial nuclear industry are permitted. Furthermore, the refabrication of scrap metal into shielding components for use within DOE or the licensed nuclear, research or medical sectors is also allowed.

14. What about materials like light bulbs, batteries etc. that are in radiological areas that are routinely recycled, can we still recycle these type items?

Yes. The metal in these items is protected by either glass, plastic or other non-metallic material. These items may be surveyed and released per existing guidance and submitted for recycle.

15. What about a scrap metal recycle project that is currently in process, can we still proceed if the green tagged scrap metal or 'equipment is coming from a radiological area?

Scrap metal released per DOE Order 5400.5 authorized limits from radiological areas prior to July 13, 2000 are not affected by the suspension. Release of scrap metal from

radiological areas from all projects after July 13, 2000 is suspended. Any metal not certified as complying with DOE authorized limits by the date that the contractor was notified of the suspension is subject to the suspension.

16. What about the release of radioactive contaminated scrap metal or equipment to a NRC licensee?

Materials and equipment may be transferred to an Agreement State or NRC licensee per their license authorization(s). However, the material or equipment must be used for its intended purpose and not transferred as metal scrap. Under the suspension, DOE may not transfer metal scrap to a licensee for the purpose of releasing the metal for recycling into commerce by the licensee.

17. What about a scrap metal recycle project where the suspect contaminated material is being transferred from DOE to a NRC licensee and is currently in progress? Can we complete the project?

No, metal subject to the suspension may not be transferred to an NRC or Agreement State Licensee for the purpose of recycling. There is nothing to prohibit the transfer to the licensee for the purposes of decontaminating or surveying the material but the metal may not be released to commerce until the new directive(s) is complete and the activity has been certified compliant with the requirements. (NOTE: Directives and guidance have not been published to date.)

18. Is the recovery of precious metals from radiological areas subject to the suspension?
Precious metals recovered from a radiological area are covered by the suspension if their intended disposition was purification, melting and recycle outside of DOE.

19. Is the recycle of concrete from radiological areas subject to the suspension and what if it contains rebar?

Only scrap metal is affected by the suspension; concrete may be released for recycle if it is in compliance with DOE Order requirements. The presence of rebar in the concrete does not make the material subject to the suspension. If the concrete is released under current authorized limits, recovery and recycle of the rebar through concrete crushing is permitted since the rebar was never exposed to radiological contamination when the facility or structure was in use. However, in cases where the concrete was used as shielding or in walls subject to beams that may induce activity, there is the potential for volumetric contamination which is subject to the Secretary's January 12, 2000, moratorium on the release of volumetrically contaminated metals.

20. There are many areas and equipment in radiological areas that are not contaminated and that there is no potential for contamination. Is this metal subject to the suspension on recycling?

Yes, the recycling of scrap metal from radiological areas is suspended until procedures that ensure it contains no detectable residual activity are developed and certified as being in place. Although this may be a temporary burden, the Secretary has set a very aggressive schedule for issuing the new directive and if these metals are clearly free of contamination, field and program offices should be able to certify the process for

confirming that the materials are acceptable soon after the new directive is issued in December 2000. (NOTE: Directives and guidance have not been published to date.)

21. When will the public and concerned individuals see the details of the new directive?

The Department expects to make the draft directives available in mid-September 2000. (NOTE: Directives and guidance have not been published to date.)

22. How can I get more information on the DOE directive development or the suspension?

DOE will periodically post information on the "www.eh.doe.gov/OEPA" (No longer valid webpage, see below) WEB site. DOE staff in the Office of Environmental Policy and Guidance, EH-41, can also provide information related to the status of directives development:

Original POCs:

Mr. Stephen Domotor
Mr. Harold Peterson
Mr. Andrew Wallo
Mr. Gustavo Vazquez

NOTE: All wording in red has been added to original FAQ for clarification.

NOTE: The Metal Moratorium is still in effect as of November 2021.

NOTE: Directives and guidance to specifically address this have not been published to date but DOE 458.1 and associated materials have been revised to improve the clearance process consistent with the recommendations in the Secretarial Memoranda.

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For questions regarding this Fact Sheet or to request the original document, please contact Mr. Mike Stewart at mike.stewart@hq.doe.gov.