A comprehensive, permanent ban should be placed on release for recycling, regular (unregulated) disposal and reuse of all radioactive wastes and materials, including potentially contaminated metals and materials from all DOE sites and activities.

1. **(A) DOE should maintain and make permanent, its ‘moratorium’ on the release and recycling of radioactive "volumetrically" contaminated metal.**
   The moratorium went into effect in January 2000. "Volumetric" contamination means the radioactivity is within/throughout the metal. It includes but is not limited to the nickel powder from uranium enrichment facilities.

   **(B) DOE should expand the ‘moratorium’ on "volumetrically" contaminated metals to cover all potentially contaminated materials and wastes in addition to metals.**

2. **(A) DOE should maintain, expand and make permanent, its ‘suspension’ on the recycling of "surface" contaminated radioactive metal from ‘radiological control’ areas of DOE sites.**
   The July 2000 suspension was put in place to prevent potentially contaminated surface metals from being sent to recyclers.
   **LOOPHOLES:** It allows the metals to be disposed at regular landfills, incinerators, or to be reused as if they were not contaminated, even if they are. It does not prevent potentially contaminated metals from being moved to non-control areas and later recycled. "Surface" contaminated means the radioactivity is on the surface of the metal but supposedly not within. When it gets melted for recycling, however, the radioactivity blends in and the final products will be volumetrically contaminated. The implication is that surface contamination can be removed, but it cannot be fully removed.

   **(B) DOE should expand its suspension on recycling of surface contaminated radioactive metal to also prevent disposal and reuse—that is to prevent potentially contaminated metal from being treated like regular garbage and sent to landfills, incinerators, etc. or reused as if it is not radioactive.** When
the suspension was put in place in July 2000, the then-DOE Secretary told the public no contaminated metal would get into regular daily items. But, DOE’s current implementation of the suspension allows contaminated metals to leave DOE sites from non-radiological control areas, which have varying definitions, and where wastes and materials could be contaminated.

(C) No potentially contaminated metal: volumetric, surface contaminated or both, should be released from regulated control, whether it is from radiological control areas or elsewhere in the DOE complex. Contamination and contaminated materials may be present outside of currently designated radiological control areas. There are several definitions of control areas, providing a loophole for recycling of contaminated metals.

3. **DOE should stop allowing other radioactive waste and materials out as regular trash or for reuse and recycling into everyday household items and raw materials.** The prohibitions on metal release should be expanded to prevent any radioactive wastes and materials out as regular trash, hazardous-only waste (if it is mixed hazardous and radioactive) or for reuse and recycling in everyday commerce.

Ex: Radioactive soil, concrete, asphalt, wood, plastics, chemicals and other materials are currently allowed to be dispersed into general commerce if they meet DOE’s internal "authorization limits," which are self-imposed and fulfilled by DOE.

4. **Call for replacing DOE’s "authorized limits" for release of radioactively contaminated materials with a clear, simple prohibition on release/recycle/reuse of radioactive wastes and contaminated materials.**

5. DOE should revise its authorizations (in DOE Internal Order 5400.5) to prohibit any radioactivity from DOE activities being released into commerce or regular trash.

6. **Restricted Release**- Although restricted release for use within the DOE complex might sound like a logical possibility for contaminated materials, they should not be ‘released’ at all. If they are no longer regulated, but used within the DOE complex, they could subsequently be released out of the DOE complex. Restricted release is a middle step to allowing release into the regular marketplace. Regulated reuse within the DOE complex without release from control might make sense, as long as continued to be treated as radioactive.

7. Once radioactive materials are released from the DOE complex, there is no limit on what can be made with them- frying pans, belt buckles, playgrounds, garden-fill, zippers, braces, hip-replacement joints and more. It can be used for anything. There can be multiple exposures from many different deregulated waste streams.
8. The burden of proof that materials are clean of DOE contamination, thus permitted to leave DOE Complex and purview must lie with the DOE and the generator of the material. **Full monitoring at the lowest achievable levels of detection for every isotope must be required to allow release of materials.** Monitoring to determine the amount and type of contamination is difficult, expensive and nearly impossible to carry out for all the wastes and materials DOE wants to release/recycle. Full monitoring and labeling would make it too expensive to release the materials.

9. **Scope must be expanded to cover all releases (all of DOE Order 5400.5)** not just surface contaminated metals in radiation control areas.

10. **Deliberate dispersal of nuclear wastes now held at atomic facilities will unnecessarily spread radioactivity into communities.** Background radiation already causes unavoidable exposures, so why add preventable doses from "recycled" nuclear waste to it?

11. We cannot trust unverified computer models, developed at DOE and NRC expense, with highly questionable assumptions to predict levels, doses and risks from an unlimited array of sources.

12. **Multiple exposures:** We could be exposed to radiation from many different contaminated consumer products, building materials, etc. The risks add up and are multiplied when we are exposed to more radiation and other carcinogens in our lives.

13. **"Released" waste is not tracked to recyclers to manufacturers to consumers and so on.** Metal and other recyclers now have detection equipment at their facilities to prevent most nuclear wastes from getting in, but they can miss some radioactivity and should not be expected be the watchdogs of the nuclear establishment. DOE waste contaminated sites in Knoxville and east TN when it was sent to facilities not licensed to deal with radioactive metals and wastes.

14. **Some in the nuclear industry want a standard, any standard, to legalize processing or directly dumping waste into the marketplace.** Since any standard set is unlikely to be enforced, in the long run, it essentially legalizes a potentially unlimited amount of nuclear waste being incorporated into our homes, vehicles, workplaces. We call for a prohibition on nuclear materials into commerce.

15. **DOE can’t be trusted to release any levels of contamination, nor can they be trusted to honestly carry out the EIS process.** A contractor (SAIC) with conflicts of interest, making money on releasing metals was originally hired, but now let go, to do the PEIS.