

DLD (SP03)

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**To:** OWFN\_DO.owf1\_po(TJO)  
**Date:** Mon, Nov 15, 1999 4:29 PM  
**Subject:** Request for Information (SP-99-074)

Response to Question Number 42:

"Waste" is defined in Rule 420-3-26-.01(2)(a)114 of Alabama Radiation Protection Rules (ARCR). The definition is consistent with the 10 CFR 61.2 definition.

"Disposal" is not defined in ARCR. However, the "authorized methods of disposal" are listed in Rule 420-3-26-.03(33)(a). The rule is equivalent to 10 CFR 20.2001(a). It does not contain the thoughts captured by the 10 CFR 61.2 definition of "disposal".

"Effluent" is not defined in ARCR. It is always used in terms of "airborne" and "liquid" releases as in equivalent tables in 10 CFR 20.

"Byproduct material" is defined in Rule 420-3-26-.01(2)(a)17. The definition is consistent with the 10 CFR 30.4 definition, except that the ARCR definition also includes mill tailings from uranium and thorium ore extraction.

"Transfer" is not defined. When used, as in ARCR 420-3-26-.03(33)(a)1., it always includes the phrase "to an authorized recipient as specified in - - - - -."

"Release limits" is not defined. The term is always used in relationship to release to the sanitary sewerage system, airborne releases, or releases of C-14 and H-3.

Response to Question Number 43:

(a). Yes it is possible. The question becomes one of how the NRC would react. Alabama has always understood the licensed radioactive material never becomes "exempt". We understand the importance of not releasing "radioactive material" except as authorized. WE also understand the importance of honoring our commitment of being consistent and compatible with NRC.

(b) The question of being able to ban the import of MSC nickel is more difficult to answer. By way of issuing orders through this office and through actions by the State Attorney General Office, I am advised that the probable answer to the question is "yes". Issuing orders to a non-licensee can be done. However, the effectiveness of that order would be in question. If someone received the "exempt" material in Alabama, this office would not be advised. Persons can receive quantities of radioactive material and be exempt from the rules provided the concentrations are below "exempt quantities" limits.

(c) Yes. But I am not sure that it would be all bad. This issue has raised its head because the Federal Agencies responsible for the fragmented national radiation policies of this country have

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failed miserably to deal with the issue of disposing of "nonharmful", very low-level quantities of radioactive material. We have wasted much needed resources taking care of nonproblems. I know what to do with curie quantities of contamination. Contamination that is barely detectable, and perhaps even below background (other isotopes) is a problem! NRC, EPA, DOE, FDA, etc., need to sit down together, at the senior (top) management level, and resolve this problem immediately! Its OK for a nuclear medicine patient to give 500 millirems dose to a member of the public, but if a little exposure comes from contaminated nickel or NORM sources, Congress and everybody gets upset. It makes no sense!

The following responses relate to the six questions contained in the attachment:

1. Up until NUREG/CR 5849 was released, we used Reg. Guide 1.86. I might add that we have been involved in contamination clean-ups. In every case we have consulted with NRC staff and followed NRC's recommendations. For NORM, CRCPD's "NORM Commissions Guides" are being used on a case-by-case basis. These guides apply to all types of radioactive material.
2. Radiation Protection Rules include release criteria and limits. Several licenses have license conditions added for emphasis or special conditions. Guidance in the form of documents is also provided. The Agency can always issue orders to deal with any action where other methods are not immediately available.
3. As stated in "1." above, Reg. Guide 1.86 was used until the release of NUREG/CR 5849. Currently we are working with the Army as they use MARSSIM in decommissioning Ft. McCellan in Alabama. We have the capability of using either.
4. This office has a wide variety of field survey instruments - microR meters, GM -pancake, portable sodium iodide, and we contract with a sister state agency for laboratory analysis of any samples. In addition, the National Radiation Laboratory is located next door to the contract laboratory. This is the best equipped radiation laboratory in the world today. This lab has also been used in the past.
5. We have always understood that licensed radioactive material never becomes exempt, even when the activity falls below the exempt quantity limits. That has always been enforced upon our licensees. It will never likely reach the "zero level"; therefore, we still apply NRC criteria to empty containers, cups, etc. used in connection with licensed materials that is disposed of as normal refuse. That is "no detectable radioactivity above the background level of a suitable survey instrument used to survey the material prior to disposal." The suitability of the survey instrument is determined at the time of license application review (one reason why applications should be reviewed before issuing a license).
6. We have no licensee in this category.

Please advise me if my response is not adequate.