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JUL 01 2003

**DOCKET NUMBER**  
**PROPOSED RULE** 20  
(68FR 09595)

DOCKETED  
USNRC

Office of the Secretary  
Attn: Rulemaking and Adjudication Staff  
U. S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

July 8, 2003 (2:26PM)

OFFICE OF SECRETARY  
RULEMAKINGS AND  
ADJUDICATIONS STAFF

**SUSQUEHANNA STEAM ELECTRIC STATION  
COMMENTS TO FEDERAL REGISTER NOTICE  
TITLED "RULEMAKING ON CONTROLLING THE  
DISPOSITION OF SOLID MATERIALS: SCOPING  
PROCESS FOR ENVIRONMENTAL ISSUES AND  
NOTICE OF WORKSHOP" - 68FR9595  
PLA-5643**

**Docket Nos. 50-387  
and 50-388**

The purpose of this letter is to provide PPL Susquehanna, LLC (PPL) comments on the Federal Register Notice titled "Rulemaking on Controlling the Disposition of Solid Materials: Scoping Process for Environmental Issues and Notice of Workshop," published in the Federal Register on February 28, 2003 (68FR9595).

The NRC is conducting rulemaking on alternatives for controlling the disposition of solid materials that originate in restricted areas of NRC-licensed facilities and that have no, or very small amounts of, radioactivity resulting from licensed operations. PPL commends the NRC on this initiative. The operation of nuclear power plant facilities requires that materials enter and depart the facilities on a routine basis. Operational and regulatory decisions regarding the acceptability for release of potentially slightly contaminated materials are an ongoing consideration of plant operations. A rulemaking that will continue to protect public health and safety while improving the flexibility of process implementation will be of benefit to the various stakeholders of the electric power industry.

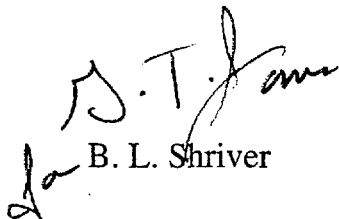
PPL encourages the establishment of a clear and consistent approach to the release of potentially contaminated materials. The standard should be practical and measurable, so that it can be implemented by industry without an undue burden. It also needs to be verifiable by the regulator and the public. Consistency with international standards is also desirable, to avoid the potential for adverse effects on international trade. A dose-based release standard in the range of a few millirem per year would meet these criteria.

Template = SECY-067

SECY-02

practical, reasonable, and consistent to ensure that the release of solid materials is fair and equitable to all involved stakeholders.

Please contact Mr. C. T. Coddington at (610) 774-4019 if there are questions concerning these comments.

A handwritten signature in black ink, appearing to read "B. L. Shriver", is written over the printed name.

Enclosure

cc: NRC Region I  
Mr. S. L. Hansell, NRC Sr. Resident Inspector  
Mr. R. V. Guzman, NRC Project Manager  
Mr. R. Janati, DEP/BRP

**COMMENTS OF PPL SUSQUEHANNA LLC ON THE PROPOSED  
RULEMAKING ON CONTROLLING THE DISPOSITION OF SOLID  
MATERIALS**

References: Federal Register of February 28, 2002, pages 9595-9602  
Federal Register of April 18, 2003, pages 19232-19233

1. Current NRC regulation limits options for disposition of solid radioactive materials (in or on which licensed material has been detected) to disposal in a NRC-licensed facility or transfer to another licensee. Other potential means of disposition (e.g., release of certain materials for unrestricted or restricted uses, or disposal in an EPA-regulated landfill) are generically not allowed, even though a risk-informed process may show that such other means may be protective of public health and safety and be more practical to implement. For this reason PPL supports the rulemaking process; that is, there is the potential to develop amended rules which are protective of public health and safety but may allow flexibility in implementation to the benefit of electricity consumers and other involved stakeholders. Potentially, the amended rules may even reduce the small calculated doses to members of the public due to reduced distances over which the materials must be transported. As an additional benefit of modified rules developed using a risk-informed process, there is the likelihood that regulation will no longer result in disposition determinations being tied to limitations in detection equipment but rather being linked to established risk analyses.
2. PPL believes that rules developed from Alternatives 3 (conditional use) and 4 (EPA regulated landfill disposal) can be effective, responsive to the need for public confidence in the process, and practicably implementable.
3. Either a dose-based or a derived concentration-based criterion could be established to define a threshold below which the materials would no longer be considered "licensed material." (Such a criterion would need to be able to address items in or on which multiple nuclides may have been detected at very low levels.) Analyses can be performed to establish reasonable alternative dispositions to those now required, such as alternative disposal or continued use in an unrestricted manner.
4. Conditional uses might also be authorized on a case-by-case basis, with some of those uses having expected lifetimes reducing even further the very small doses that may hypothetically be calculated for those uses. Such beneficial uses to be further evaluated might include road surfacing material or sewer pipes. Such case-by-case evaluations could be conducted using rules similar to those now contained in 10 CFR 20.2002. The dose-based criterion established for the purpose of unrestricted release might be fully useable as guidance for this case-by-case evaluation process.

5. A clearance standard on the order of 0.01 mSv/yr (1 mrem/yr) appears to be appropriate. Use of a value such as 0.01 mSv/yr (1 mrem/yr) assures a low hypothetical risk, below which further regulatory-agency or licensee action is not warranted. It is also notable that guidance such as that in ANSI N13.12 is available for implementation at such a clearance standard.
6. Use of a RCRA "C" landfill to contain materials to be disposed should provide adequate isolation of the material from the public. A RCRA "C" landfill is designed for control of hazardous materials and utilizes administrative processes to enhance the control features in the facility design. Use of a RCRA "D" landfill to contain materials to be disposed might also provide adequate isolation of the material from the public. The use of RCRA "D" landfills for such purposes should be allowed after case-by-case evaluation of a specific application, whereas the use of RCRA "C" landfills might be authorized by generic rule after appropriate initial evaluation.
7. A desired objective would be release for alternative disposal or continued use without the need for additional NRC or other regulatory-agency involvement in that use or disposal process. That is, use of a risk-informed process for disposition determinations should be sufficient to enable continued use or disposal after that decision-making has occurred without new NRC or other agency licensing processes being established.
8. If it is determined that a "cap" on dose is necessary (requiring the assumption that a very unlikely "worst case" has occurred, that is, conditional-use or disposal process controls were found to be ineffective), that value should be in the range of 1 mSv/yr (100 mrem/yr). Such a value would be consistent with the dose allowed to a member of the public from licensed activities such as power plant operations.
9. PPL recognizes the potential that generic release standards for the direct recycle of scrap metals contaminated at low levels may be difficult to develop. That may also be true for the direct recycle of some solid materials other than metals. 10 CFR 20 should be amended to allow for case-by-case approvals of specific requests for the direct recycle of very slightly contaminated materials, where such requests are found to be protective of public health and safety. (Disposal of scrap metals and other materials in RCRA "C" landfills should of course be permissible, consistent with rules that may be developed in this rulemaking to permit such disposal consistent with protection of public health and safety. Recycling within the confines of the NRC licensed community should also be permissible, with appropriate evaluations having been conducted to ensure protection of health and safety.)

10. Responding to NRC's request for information on volumes of material generated, PPL's operating plant generates on the order of several hundred cubic meters of dry active wastes in a year (unprocessed). It is difficult to state the percentage of that amount that may be handled differently should amended rules be promulgated. Certainly, a substantial percentage of the amount of dry active waste generated contains very small amounts of activity, and its handling may be subject to change under amended rules. It is also possible that operating events and/or decommissioning of some equipment and facilities may result in a substantially higher volume of activity that may be very slightly contaminated. Estimation of such volumes is difficult. There have been events in the industry where volumes of material on the order of thousands of cubic meters have been generated, with very low levels of activity within that generated volume. Given the burden of current processing and disposal methodologies, substantial benefits may result to electricity consumers and other involved stakeholders should amended rules protective of public health and safety be promulgated.
11. Responding to NRC's request for information on segregation techniques, PPL uses knowledge of the plant and its operations, and the skills of trained and qualified personnel using available, sensitive detection instrumentation to segregate materials according to radiation level. That is part of the day-to-day operation of the plant now and would be so under any amended rules that might be established. Indeed, the NRC might wish to build upon the foundation of the current safe and effective practices used at nuclear power plants in defining the regulatory guidance associated with implementing amended rules for disposition of solid materials.
12. NRC licensees have facilities located across the various states. Some of those licensees use volume reduction and other facilities (under federal or state regulatory control) for the segregation and processing of waste materials. Those contracted facilities may be located in states different from that of the contracting licensee. For that reason, the NRC should ensure that amended rules for disposition of solid materials are applicable across the nation. Nation-wide applicability is also desirable to avoid unnecessary burdens on international trade.