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10 CFR Parts 20 and 61

RIN 3150–AD33

Low-Level Waste Shipment Manifest Information and Reporting

AGENCY: Nuclear Regulatory Commission.

ACTION: Final rule.

SUMMARY: The Nuclear Regulatory Commission (NRC or Commission) is amending its regulations to improve low-level waste (LLW) manifest information and reporting. The amendments will: Improve the quality and uniformity of information contained in manifests that are required to control transfers of LLW that is ultimately intended for disposal at a land disposal facility; establish a set of forms that allows LLW to be tracked from its origin, and serves as a national Uniform Low-Level Radioactive Waste Manifest to meet NRC, Department of Transportation (DOT), and State and Compact information requirements; require LLW disposal site operators to electronically store container-specific manifest information; and require the disposal site operators to be capable of reporting the stored Uniform Manifest information on a computer-readable medium (e.g., magnetic disks or tapes).

EFFECTIVE DATE: This regulation becomes effective on March 1, 1998. However, licensees may implement the regulation at an earlier date, if a LLW disposal facility or its regulatory authority, to which shipped LLW is to be ultimately consigned, desires earlier implementation of these provisions.

ADDRESSES: Copies of documents relating to the proposed rule that was published on April 21, 1992 (57 FR 14500), or copies of this document may be examined and copied for a fee in the Commission's Public Document Room at 2120 L Street NW. (Lower Level), Washington, DC 20555. Copies of NRC's Uniform Low-Level Radioactive Waste Manifest forms and the general instructions can be obtained from the Information and Records Management Branch, Mail Stop T–6 F33, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001, or telephone (301) 415–7230.

FOR FURTHER INFORMATION CONTACT: William R. Lahs, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555, telephone (301) 415–6756 or Mark Haisfield, Office of Nuclear Regulatory Research, U.S. Nuclear Regulatory Commission, Washington, DC 20555, telephone (301) 415–6196.

SUPPLEMENTARY INFORMATION:

I. Background

Purpose of the Revision

The purpose of this amendment to 10 CFR parts 20 and 61 is to modify the NRC's LLW shipment manifest information and reporting requirements to address the regulatory information needs for the transfer and disposal of LLW. The amended information defines the chemical, physical, and radiological properties of LLW that can be used to determine the expected performance of disposal facilities during operations and following closure. Thus, a principal objective of these amendments is to ensure that the information, initially reported by those generating the LLW, eventually received and recorded by the LLW disposal facility operator, and made available to the NRC or an Agreement State regulatory agency, is sufficiently comprehensive and consistent for its intended use. To enhance regulatory oversight and assist regulatory agencies and others in their assessments of normal operations or potential problems, such as questions about the adequacy of a particular disposal container, the amendment requires that the manifest information be stored electronically at the disposal facility operated under an NRC license and be capable of being conveyed by a computer-readable medium. The specific content and schedule for any reports containing the stored information will be established as a condition of the license or, if necessary, in a future rulemaking action.

The Commission recognizes that several entities have legitimate needs for LLW shipment information that should reasonably be included on a shipment manifest. In fact, Compacts,[1] unaffiliated States, and an increasing number of consignees, including disposal facility operators, have interests in waste shipment and disposal information that could be contained in a shipment manifest. To provide a degree of standardization in format and a baseline of manifest

[1] With the passage of the Low-Level Radioactive Waste Policy Amendments Act of 1985 and the Low-Level Waste Policy Act of 1980, many States have organized into regional Compacts. These Compacts, together with unaffiliated States, are attempting to facilitate the development and operation of new disposal facilities.

information, the amendment requires the use of an NRC-developed Uniform Low-Level Radioactive Waste Manifest. This manifest, to which additional information can be added, responds to a request from the Host State Technical Coordinating Committee (TCC)[2] and the expressed views of several other parties having an interest in the information contained in the manifest. The uniform manifest meets DOT shipping paper requirements, contains the information required by the NRC, and provides a baseline set of information to address Compact, unaffiliated State, and consignee needs.

Low-Level Waste Shipment and Disposal

LLW may be shipped to a LLW disposal facility directly from a waste generator (potentially after the waste has been sent offsite for processing and has been returned) or may be shipped from a waste collector or processor. The collector is a licensee who typically handles prepackaged waste from hospitals, laboratories, or other licensees who generate only small volumes of waste. A shipment from a collector may have been temporarily stored at the collector's facility and, when eventually transported to a disposal facility, shipped with other containers of waste obtained from several generators.

Waste may be shipped from a waste processor, who has received radioactive material or waste from other licensees (generators, collectors, or other processors), and has repackaged the waste after possibly changing the waste's chemical or physical characteristics. For example, the waste processor may have compacted or incinerated the waste or segregated contaminated waste from non-contaminated material or waste. A single container of waste shipped from a waste processor may contain wastes from a number of different generators.

Companies generating, collecting, processing, or disposing of the waste are licensed either by the NRC or by an Agreement State.[3] Any step in the waste management chain (e.g., temporary storage by a collector, processing, or disposal) may have occurred in a State different from that in which the waste was generated. Thus, from a radiological safety standpoint, several regulatory entities may have an interest in particular waste shipments and disposals.

Each shipment of LLW is currently accompanied by a multi-page manifest that describes the shipment contents. These manifests, which include specifically formatted versions developed by the disposal facility operators, are frequently large multi-copy detailed documents that contain information required by the Commission's regulations in 10 CFR part 20,[4] DOT regulations in 49 CFR part 172, and State requirements imposed as conditions on disposal facility licensees. The manifests also include information required by the consignee who receives the LLW or radioactive material shipment.

Three disposal facilities are currently in operation. The Barnwell, South Carolina, disposal facility is operated by Chem-Nuclear Systems, Inc., the Richland, Washington, facility is operated by US Ecology, Inc., (both of these facilities are only accepting waste from their respective Compacts), and the Utah facility near Clive, Utah, is operated by Envirocare of Utah, Inc. Upon receipt of a shipment of LLW at these facilities, operators perform quality control checks on the shipment and the information in the manifest. Portions of the manifest information are transferred into their computer-based recordkeeping systems. The existing disposal facility operators have developed computer systems to store and process the voluminous manifest information because the operators receive thousands of shipment manifests each year.

Rulemaking History

In 1989, the NRC initiated this rulemaking to improve the quality and consistency in reporting of information that was contained on manifest documents. In that same year, a draft of the proposed rule was provided to the Agreement States for comment. As a result of this early interaction, the Commission became aware that a significant improvement to the current manifesting system would be the development of a national Uniform Low-Level Radioactive Waste Manifest. This was described in a letter to former Chairman Carr in May 1990 from the TCC and a corresponding letter from the LLW Forum. The NRC agreed that incorporation of a uniform manifest would provide a number of advantages and agreed to consider this concept. In November 1990, the TCC provided a draft uniform manifest for the NRC's consideration.

The NRC seriously considered the recommendations of the TCC in developing a draft uniform manifest. The NRC also consulted with the DOT on those parts of the proposed rule and uniform manifest that address DOT radioactive material transportation (shipping paper) requirements. Based on these interactions, a draft of the proposed rule and uniform manifest was developed and was sent to the Agreement States in March 1991. Subsequently, the proposed rule and uniform manifest forms were sent to DOT, and in July 1991, the NRC received DOT concurrence that the applicable parts of the uniform manifest met its requirements for shipping papers in 49 CFR part 172.

The proposed rule was published in the **Federal Register** on April 21, 1992 (57 FR 14500). The NRC received 40 comment letters on its proposed rule, and referenced forms and instructions. The issues raised by these commenters are discussed in Section III of this preamble. During the comment period, the LLW Forum members also received input from parties in their respective Compacts. As a result, the LLW Forum suggested that, to produce a more effective rule, the NRC should sponsor a public meeting to further discuss concerns raised by commenters, and thereby clarify the purpose of the rule. In response to this request, the NRC noticed a public meeting in the **Federal Register** on April 27, 1993 (58 FR 25578), and held the meeting on June 15, 1993, in Bethesda, Maryland. A transcript and detailed summary are available in the NRC Public Document Room.

The two most significant issues discussed at this meeting dealt with the format of the uniform manifest and how and when the manifest will be used. The formatting issue was a source of concern because the NRC changed the ''look and feel'' of the manifest from the style of the manifests developed by the LLW disposal facility operators and used for shipments consigned to these facilities. Furthermore, the NRC's formatting approach would require some data to be recorded twice on the same set of manifest forms. It was noted by NRC that the proposed changes were made to meet DOT requirements.

[2] NRC staff interactions with the Compacts and unaffiliated States has occurred principally with the Low-Level Radioactive Waste Forum and the Host State Technical Coordinating Committee (TCC). The TCC requested that the Commission consider the development of a uniform manifest in this rulemaking action, and on November 9, 1990, transmitted to NRC an example manifest with supporting material.

[3] Pursuant to the Atomic Energy Act of 1954, as amended, the Commission has the authority to relinquish part of its regulatory authority to a State, contingent upon making a determination that the State's regulatory program is compatible with the Commission's. Twenty-nine States, under formal agreements with the Commission, have assumed this regulatory responsibility. Negotiations with other States are underway.

[4] The Commission's LLW manifest and tracking requirements are codified in § 20.2006 and appendix F to 10 CFR part 20.

Although unable to satisfy individual commenters who prefer the existing manifest formats, the NRC staff has worked with DOT staff and has minimized any difference in the reporting burden for completing the uniform manifest as opposed to the burden imposed by existing manifests. As discussed in Section II of this preamble, before the compliance date specified in the rule, the NRC intends to facilitate trial uses of the manifest to ensure a common understanding of information reporting requirements.

The ''manifest use'' issue deals with industry concerns that the uniform manifest will be used to track radioactive material in addition to radioactive waste. The NRC manifest is designed to be used for the transfer of LLW, but the NRC recognizes industry's concerns that Compacts or unaffiliated States may require the NRC's or some other manifest format to be used for all shipments to processors or decontamination facility licensees. Existing NRC regulations require the manifesting of shipments of LLW to collectors and processors before eventual disposal. Nothing in these amendments changes that requirement, nor adds new requirements for shipments of material. Compacts or unaffiliated States may require additional reporting and this reporting could be accomplished through use of the NRC manifest format.

II. Implementation

Sections 20.2006, 61.12(n), and 61.80 (f) and (l) of the amendments to 10 CFR parts 20 and 61 in this final rule require NRC licensees to use the Uniform Manifest in appendix G beginning March 1, 1998. This late date is intended to allow existing LLW disposal facility licensees (all located in Agreement States), and their respective Agreement State regulators, to consider the length of time that the existing disposal facility will continue to operate under current rules before closure, and to make revisions to existing Agreement State regulations. For example, shippers to a facility that will close before March 1, 1998 need not use the new manifest unless required to do so by a disposal facility operator or its regulatory authority.

A few of the amendments in this final rule have been incorporated into the existing 10 CFR part 20 to be applicable at the stated future date in a manner that retains existing requirements in the interim. The majority of the new requirements imposed by this final rule have been included in a new appendix G to §§ 20.1001 through 20.2402.

NRC Agreement States each have regulations compatible with the existing 10 CFR part 20. Agreement States normally amend their regulations to preserve compatibility within three years after NRC issues final rules. In the Commission's view, it is desirable to publish this rule before any new LLW disposal site is licensed and operating. Even if Agreement State regulations are not yet final, LLW facility operators will have knowledge available on NRC's future manifesting requirements.

Before the Uniform Low-Level Radioactive Waste Manifest becomes mandatory, the NRC intends to initiate trial use of the manifest to reveal any practical problems in its use.

III. Summary of Public Comments and Changes From Proposed Rule

This section presents the principal issues raised in public comments on the proposed rule, the Uniform Low-Level Radioactive Waste Manifest forms, and the instructions that support the manifest. This section also contains the NRC response to the comments and a summary of the principal changes that were made to the proposed rule or to the Uniform Low-Level Radioactive Waste Manifest and its supporting instructions. This section has been arranged so that it corresponds to the structure of the proposed rule. However, a number of comments addressed specific aspects of the manifest forms or the supporting instructions. These comments are addressed following those that relate to specific provisions of the rule. The overall format involves a listing of the applicable rule section, any minor changes to that section, principal comments and issues, NRC's response, and the effect on the final rule section.

The NRC received 40 comment letters. Fourteen were from States or their representatives (i.e., LLW Forum and Compact Commissions). Eight were from LLW generators or their representatives. Six were from utilities or their representative. Four were from service industries (processors and collectors) or their representative. Four were from Federal agencies. Two were from environmental organizations. And two were from LLW disposal facility operators.

10 CFR Part 20

Section 20.2006 Transfer for Disposal and Manifests

In addition to the changes discussed in this section of the preamble, the final rule has been clarified by specifically stating that the manifesting requirements apply to any licensee who ships LLW to a licensed LLW land disposal facility, a waste collector, or a waste processor.

Comment: Four commenters believe that it is too early to promulgate a uniform manifest rule. These commenters pointed to the fact that this rulemaking would change 10 CFR part 20 before the new 10 CFR part 20 regulations have been implemented and argued that the Compacts and States are unsure, at this time, as to what information they need. One commenter stated that the uniform manifest would not be accepted by State jurisdictions. Other commenters believe that, to facilitate development of Compact or State LLW tracking systems, the rulemaking should be finalized without delay.

Response: These comments on 10 CFR part 20 have been overtaken by the fact that all licensees were required to implement the new standards for protection against radiation in 10 CFR part 20 by January 1, 1994. The NRC sees no other reason to delay promulgation of this rule. From NRC's perspective, the schedule for this rule is, in large measure, driven by the need to gain access to the waste form, content, and disposal container information that is expected to be useful in assessing the performance of LLW disposal sites. Although a significant fraction of this information is currently collected by the current disposal facility operators, the compatibility and completeness of the existing data was of concern. The NRC concluded that these drawbacks could be accentuated if each future LLW disposal site collected, stored, and reported data in an uncoordinated manner. Thus, the timing for implementation of the rule has considered the proposed schedules under which new LLW disposal sites are being developed.

Other parties also have critical interests in manifest information. The DOT imposes regulations applying to shipping papers for hazardous materials. The Compacts and States, given the responsibility for developing LLW disposal sites under provisions of the Low-Level Radioactive Waste Policy Amendments Act of 1985 (LLRWPAA), are interested in tracking LLW. Publication of the rule, at this time, provides these parties the information requirements needed to effectively develop their tracking systems and allows all parties involved in LLW shipments to become familiar with the presentation of shipping paper information that has been found acceptable by DOT.

Finally, because all the existing disposal sites are located in Agreement

States, these States must be provided sufficient time to work closely with the NRC and their licensees, especially existing LLW disposal facility operators, to implement this rule. To facilitate a smooth transition, the rule allows approximately 3 years from publication for Agreement States to implement their regulations. The rule also allows implementation prior to March 1, 1998 for any LLW disposal facilities that are operating prior to this date.

On the question of manifest acceptability by State jurisdictions, the NRC is not aware of any States that would not accept the manifest. The NRC notes that State and Compact groups have been in the forefront in suggesting the need for a uniform manifest and that the manifest has been approved by the DOT as meeting that agency's shipping paper requirements.

Final rule: § 20.2006(b) has been divided into two paragraphs. The first, (b)(1), is the existing § 20.2006(b). The second, (b)(2), reflects the new § 20.2006(b), but with added phrases reflecting the implementation provisions discussed in Section II, affecting the change from appendix F to appendix G. A clarifying paragraph, § 20.2006(a)(2), has also been added to describe implementation provisions, and a consistent clarifying phrase has been added to §§ 20.2006 (c) and (d).

Comment: Several commenters questioned whether implementation of the rule would provide any significant public health and safety benefit. These commenters stated that the rule identifies no current problems or concerns that could jeopardize the safe transportation or disposal of LLW. Two commenters supported the rule citing the need for source term and waste characteristic information. One commenter believes that the increased cost of documentation and recordkeeping is outweighed by the need to have reliable up-to-date information.

Response: The benefit of the rule is tied to: (1) Being able to develop specific data needed for assessments to demonstrate compliance with the performance objectives in 10 CFR part 61, specifically pertaining to protection of the general population from the releases of radioactivity at LLW disposal facilities, and to the understanding of potential wastes requiring special consideration, (2) the improvement in quality and uniformity of data collected and reported that could affect the aforementioned performance estimates, and (3) efficiencies in data recovery and use when addressing health and safety issues. Benefits may also occur in transportation-related emergency response situations from the use of a standard DOT shipping paper format and a reduction in the manifest paperwork needed to accompany the LLW shipments. Finally, by providing information that the States and Compacts believe necessary to carry out their responsibilities, a consistency in view of LLW is fostered that could minimize the potential creation of waste that cannot be disposed of (''orphan waste'') and assist in efficient and safe LLW management nationwide.

Final rule: No change.

Comment: Three commenters questioned whether the rule explicitly or implicitly expands the authority of LLW Compacts to regulate the shipment of radioactive materials that are not LLW.

Response: The rule does not change the intent of the regulations as expressed in § 20.311 of the expired provisions of part 20 or in appendix F to part 20. In both cases, the (waste) generating licensees who transfer waste to a licensed waste processor are subject to manifesting requirements. In this context, the rule provides definitions for ''waste generator,'' ''waste collector,'' and ''waste processor.'' The rule is not viewed as having any impact on the Compact or State authorities defined in the LLRWPAA. In fact, the NRC believes that the manifesting required by the rule should provide most information sought by State or Compact LLW tracking systems. See comment and response under appendix F, I. Manifest—Introduction and Definitions sections, for related discussion.

Final rule: No change.

Appendix F to Sections 20.1001 Through 20.2401 (Appendix G to Sections 20.1001 Through 20.2402 in this Final Rule)

I. Manifest—Introduction

In addition to the changes discussed in this section of the preamble, corrections have been made to the Title number referred to in citing Environmental Protection Agency (EPA) regulations and the definition of ''EPA identification number.'' The reference to Xerox copies has been deleted because the word ''photocopy'' is sufficient. In response to a point made by some commenters, the first paragraph under ''I. Manifest'' has been amended to be consistent with the remainder of the rule in stating that the rule applies only to shipments of LLW intended for ultimate disposal at a licensed LLW land disposal facility.

Comment: Five commenters and several attendees at the June 15, 1993, public meeting questioned the need for licensees to be required to complete the uniform manifest for shipments to waste processors, especially in those cases where the processor could be making significant changes to the volume, form, activity, or radionuclide concentration. These commenters also questioned whether shipments of LLW from processors or decontamination facilities back to the original ''generators'' for interim storage should be manifested using Form 541. One commenter questioned whether the intent of the rule was to require manifesting of ''materials'' (e.g., laundry from a nuclear facility). Another commenter stated that the rule is confusing with regard to when various forms must be used.

Response: The five commenters are correct in stating that the primary interest of NRC (i.e., for performance assessment purposes) is on the characteristics of LLW that is being shipped for disposal. However, the manifesting requirement for those shipping LLW to processors originated with the 10 CFR part 61 rulemaking. One of the reasons for this requirement was to develop a representative data base unskewed by large volumes of LLW that may pass through waste processors and collectors. Moreover, for waste being shipped to a processor for compaction, the information provided by the waste generator would be the basis for completing and certifying the manifest that the processor must complete when the LLW is forwarded for eventual disposal at a land disposal facility. In considering shipments to incinerators, the NRC agrees that NRC's need for incoming manifest information is not relevant to the gathering of information useful to conduct performance assessments but is directed at waste tracking. The NRC believes, based on its interactions with the States and Compacts, that these parties are primarily interested in large volume or high activity LLW for which they are responsible under the LLRWPAA. Thus, NRC believes the shipments to an ''incinerator'' processor should not generally be subject to the manifesting provisions of this rule and that any resultant contaminated ash should be considered residual waste assigned to the processor. If this interpretation is agreed to by the appropriate State or Compact authorities, manifesting of material sent to incinerators is not required. The case of shipments of laundry from a nuclear facility is more clear-cut. The incoming laundry shipment is not considered waste and would not be required by NRC to be manifested.

For shipments of LLW being shipped to and subsequently returned by a

processor to the original ''waste generator'' or ''generator,'' the NRC believes that, under these special circumstances, completion of the uniform manifest is not necessary to meet NRC needs and this exception has been included in the rule. The potential need for NRC to track LLW in storage may result in a reexamination of this exemption. Licensees should be aware that, because the shipments in question are LLW, the States or Compacts may require completion of manifest documentation. Note also, that if the processor ships processed LLW to a licensee other than the original generator, manifesting under this rule is required.

Final rule: A sentence has been added to the introductory paragraph of appendix G which states that ''Licensees are not required by NRC to comply with the manifesting requirements of this part when they ship: (a) LLW for processing and expect its return (i.e., for storage under their license) prior to disposal at a licensed land disposal facility, (b) LLW that is being returned to the licensee who is the 'waste generator' or 'generator,' as defined in this part, or (c) radioactively contaminated material to a 'waste processor' that becomes the processor's 'residual waste'.''

Comment: Two commenters noted that NRC will allow the use of substitute forms if they are equivalent in all respects (content, size, shading, color, etc.). They noted that the requirement for equivalent color and shading will create problems for computer generated forms, and suggested the following definition, ''* * * Licensees need not use originals of these NRC Forms as long as any substitute forms are equivalent to the original documentation in respect of form, content and location of information.''

Response: The NRC agrees that the requirement that any substitute forms use the same color and shading of the NRC Forms would likely preclude the use of licensee generated forms.

Final rule: The NRC is modifying the definition in a manner consistent with the commenter's proposal. The appropriate part of the definition will read, ''* * * Licensees need not use originals of these NRC Forms as long as any substitute forms are equivalent to the original documentation in respect to content, clarity, size, and location of information.''

I. Manifest—Definitions

In addition to the changes discussed in this section of the preamble, definitions have been added for the terms: ''consignee'' and ''computer-readable medium.'' The definitions for ''shipper'' and ''decontamination facility'' have been expanded to provide the basis for deleting the ''Note'' in the originally proposed definition of ''waste generator.''

Comment: Two commenters stated that the definitions of ''decontamination facility,'' ''waste generator,'' and ''waste processor'' were muddled in that a clear distinction between these terms may not be evident. One commenter suggested that, if waste is created from a service industry (e.g., decontamination facilities), the service organization should be considered the generator of the waste.

Response: The three definitions were considered necessary to allow the Compacts/States the greatest flexibility in carrying out their authorities to track low-level waste generated, processed, decontaminated or disposed of within their Compact/State. This includes the possibility that, as the commenters suggested, wastes created from certain service organizations in the treatment of contaminated material could be attributed to the service organization.

The definition of ''decontamination facility'' is included in the rule to ensure that these facilities complete the uniform manifest (at a minimum, Forms 540 and 541) if they were shipping waste to a licensed land disposal facility. The Compacts or States must decide whether the radioactivity resulting from the processes undertaken at these facilities must be assigned to originating generators. The rule includes a definition of ''residual waste,'' that provides a basis for this waste to be assigned to the decontamination facility for waste tracking purposes. This approach may also apply to certain processors. The rule would allow the Compacts and States to determine what constitutes ''residual waste,'' and as a result, if the decontamination facility or processor can be considered a ''waste generator'' and, therefore, need not complete Form 542 of the manifest. This rule does not require shippers of *radioactive materials* to either decontamination facilities or waste processors to comply with the rule's manifesting requirements. The rule does apply to shippers of *radioactive waste* to waste processors. In the context of the rule, decontamination facilities would not be expected to be consignees for shipments of LLW.

Final rule: A phrase has been added to the definition of ''decontamination facility,'' which states that, ''* * *, and for purposes of this Part, is not considered to be a consignee for LLW shipments.''

Comment: One commenter stated that the distinction between the terms ''generator'' and ''waste generator'' was confusing and, in view of the definition of ''residual waste,'' was not needed. Other commenters stated that the phrase, ''* * * for which no further use is foreseen * * *,'' used in the definition of ''waste generator,'' is inappropriate. Three commenters and attendees at the June 15, 1993, public meeting suggested that the rule focus on the entity to whom LLW or radioactive material is being shipped—suggesting one manifest for shipments to a LLW disposal site and a different manifest for shipments to material/waste processors. One commenter stated that the starting and ending points for the paper trail for material/waste shipments were unclear.

Response: All three terms, ''generator,'' ''waste generator,'' and ''residual waste'' are needed. Under the approach followed in the rule, the definition of the term ''generator'' is included to ensure that information is collected on Forms 541 and 542 of the manifest that will allow Compacts and States to demonstrate that the wastes disposed of at their LLW sites is that for which they are responsible under the LLRWPAA. In the rule, the term ''waste generator'' is used to define a category of licensees who must use the uniform manifest. The term ''generator'' defines the licensee to whom specific LLW must be attributed in the context of the LLRWPAA. A ''waste processor'' (including ''decontamination facilities'') must reasonably attempt to assign the waste shipped from the processor's facility to the originating ''generator.'' The rule provides an exception to this accountability provision if the waste being shipped by the processor can be categorized as ''residual waste''; that is, waste originating as a result of processing or decontamination activities performed for others, but which cannot be easily categorized into distinct batches attributable to specific ''generators.'' Conceptually, the definition of ''residual waste'' would be used for small volumes of waste containing minimal levels of radioactivity. The NRC has encouraged the Compacts and States to develop a common definition of what constitutes ''residual waste.'' The rule would not be affected if different Compacts or States impose a different definition. However, ''waste processor'' or ''decontamination facility'' licensees could be required to complete Form 542 of the uniform manifest.

The phrase ''* * * for which no further use is foreseen * * *,'' was included in the definition of ''waste generator'' to provide one basis upon

which a licensee can decide if a shipment to a waste processor is considered a LLW shipment that must be manifested under the provisions of this rule. The intent of the rule is to require manifesting if the licensee considers the entire shipment to be LLW.

The commenter's suggestion for a ''two-manifest'' approach, although theoretically feasible, was considered a less justifiable regulatory approach, because it would impose manifesting requirements for certain material shipments. The NRC did not consider it necessary to require manifesting of material shipments sent for decontamination or sorting, or coupled to energy recovery, because the waste processor would be manifesting the subsequent outgoing LLW shipment. In the outgoing shipment from the waste processor, the assignment of the radioactivity on the manifest, completed by the waste processor, would be to either a particular ''generator'' or if appropriate, to the waste processor, as ''residual waste.''

The starting and ending points for the paper trail may not be completely clear because different Compact/States may impose different requirements based on their authorities. The approach taken in the rule was to provide a manifesting system that could accommodate these differences.

Final rule: The phraseology of the ''waste generator'' definition has been changed to clarify that, under this definition, the shipping licensee, absent any regulation or guidance to the contrary, must decide if the shipment constitutes a LLW shipment.

Comment: One commenter suggested that the definition of ''waste type'' be expanded to cover ''chemical'' description.

Response: The chemical description is reported separately for each waste type and therefore, the definition of ''waste type'' does not need to be expanded. The major purpose of defining ''waste type'' in the rule is to identify the detail needed when describing the contents of containers including two or more specific waste types as further discussed in the response to comments under ''Disposal Container Information.''

Final rule: No change.

A. General Information

Corrections have been made in appendix G, paragraph A.2 to change ''identifier'' to ''identifiers'' and appendix G, paragraph A.3 to properly refer to the EPA identification number for the carrier transporting LLW.

Comment: Six commenters expressed views on whether the Uniform Manifest and its supporting instructions should be incorporated in the rule. Some commenters stated that because completion of the manifest forms is required by the rule, the forms should be incorporated in the rule. This action was suggested to facilitate comments on the forms and to allow Agreement States appropriate opportunity for their involvement and sufficient time to make any changes that NRC may make to the forms over time. One commenter stated that the failure to include the manifest forms in the rule could be considered arbitrary. Three commenters argued that the Manifest and its supporting instructions should not be a part of the regulation. With this approach, the NRC would retain the flexibility to make non-substantive changes to the Forms or instructions without a rulemaking action.

Response: Although the uniform manifest forms are not physically a part of the rule, their availability was noticed and they were widely distributed. The advantage of separating the forms from the rule is that minor changes to the forms, such as additions to the container description, waste descriptor, or sorption, solidification, and stabilization media codes that appear at the bottom of Form 541, can be made without the need for a rulemaking action or the replacement of the manifest forms then in use. Minor changes, or any changes in the format or instructions for the uniform manifest, would be treated as NRC currently treats regulatory guides. Regulatory guides are issued for public comment and these comments are analyzed before the guide is issued in final form. As one commenter presumed, the minor revision and changes to the manifest or instructions would be tracked (e.g., a form revision number). Any significant changes to the uniform manifest forms, such as a request for further basic information on the waste or disposal container, would be accomplished through a rulemaking.

The NRC recognizes the importance of input from those most immediately affected by the requirement to complete the uniform manifest. It was principally this reason that led to the NRC holding the public meeting on June 15, 1993. Thus, the NRC does not consider separation of the Forms and instructions from the rule arbitrary.

Final rule: No change.

Comment: One commenter suggested that the rule should require the generators to provide the ''generator type'' code called for in item 5 of Form 540.

Response: Because this information would be obtainable through the generator ID or user permit number, the need to complete the block in question was not sufficiently important for the NRC to require its completion. The States, Compacts, or the consignee could require this information to be completed.

Final rule: No change.

B. Shipment Information

Comment: One commenter questioned the need to report small quantities of Tc-99 on manifests while another commenter was unclear on why certain nuclides were singled out in reporting source and special nuclear material. One commenter stated that the reporting of § 20.311 radionuclide LLD values and the delisting criteria, as described in the instructions for uniform manifest completion, should be incorporated in the rule.

Response: The need to report Tc-99 represents an existing manifest requirement in § 20.2006 and appendix F to §§ 20.1001 through 20.2402 and was addressed in the 10 CFR part 61 rulemaking; that is, the nuclide's long half-life, mobility, and influence on performance assessment results. The singling out of specific nuclides for source and special nuclear material was done to emphasize that it was the weight of these nuclides that was being requested and not the weight of any compound or media with or within which these nuclides may be associated or contained. The instructions for the uniform manifest specify the minimal levels of activity that must be reported on the manifest and, without a specific reason to include this information in the rule, this information continues to be addressed in the instructions.

Final rule: No change.

C. Disposal Container [and Waste] Information

In addition to the changes discussed in this section of the preamble, the heading has been broadened to more precisely reflect the general types of information being requested and the listing of items has been reorganized and clarified to describe the variations in required information that are dependent on whether: (1) The waste is containerized or uncontainerized, and (2) the consignee for the waste is a licensed low-level waste disposal facility. Furthermore, a clarification has been made in Appendix G, paragraph I.C.4 to indicate that the gross weight of the waste and disposal container is required. The NRC requirement to report contamination levels on the surface of disposal containers has been deleted to correct a typographical error. This item still appears on the manifest

as a non-Federal informational need because it is required by one of the current disposal facility operators for operational safety reasons.

Comment: One commenter suggested that the level of reporting required in the current appendix G, paragraph I.C.9 (previously appendix F, paragraph I.C.8) did not go far enough and that Class A sorbed or solidified waste should be reported in a similar manner to Class B and C wastes. Other commenters stated that shippers of Class A waste were being unduly impacted. One commenter stated that it was impractical and/or not meaningful to provide separate isotopic breakdowns for all mixtures of Class B and C wastes. Another commenter believes the requirements for nuclide reporting of Class A versus B and C wastes was unclear.

Response: The principal purpose of requiring wastes to be described by individual waste descriptors is related to the capability of performance assessment methodologies to distinguish between certain types of wastes in terms of their public health significance. The commenter who indicated that the proposed rule was too broad in its requirement to distinguish between all Class B and C waste types is correct. The data likely to have the greatest significance are those associated with waste types from which radioactivity releases could reasonably be limited. The ability to distinguish differing radioactivity release rates from Class A wastes could also be significant to site performance assessments.

Final rule: Appendix G, paragraph I.C.9 (previously appendix F, paragraph I.C.8) has been modified to delete the phrase at the end of the proposed paragraph which stated, ''if the media is claimed to meet stability requirements in 10 CFR 61.56(b)''; and paragraph I.C.10 (second sentence) has been modified to read, ''For discrete waste types (i.e., activated materials, contaminated equipment, mechanical filters, sealed source/devices, and wastes in solidification/stabilization media), the identities and activities of individual radionuclides associated with or contained on these waste types within a disposal container shall be reported.''

Comment: One commenter asked that the need to identify each drum (disposal container) of waste be reconsidered because of the impact on small generators. Another commenter noted that the proposed disposal container for most new disposal sites is a concrete overpack and stated that, although each container of each shipment must be indicated on the manifest, tracking of the waste by overpack is more relevant. One commenter believes that accountability necessitated a drum/container number.

Response: The need for disposal container information is not only to provide data that could be useful for performance assessment purposes but is required by DOT if the disposal container and transport package are identical. Identification of each drum would provide a basis for associating a waste generator with specific waste in a shipment. The suggestion regarding tracking of waste by overpack at the disposal site is allowed under the provisions of this rule if the container description code indicates, through use of the symbol ''-OP,'' that disposal in an approved structural overpack is required.

Final rule: No change.

D. Uncontainerized Waste Information

Final rule: The introductory language of appendix G, paragraph I.D. has been made consistent with the revised paragraph I.C, and paragraph I.D.1 has been modified to require that information on the approximate volume, as well as the weight of the uncontainerized waste, be provided on the manifest.

E. Multi-Generator Disposal Container Information

Final rule: The wording of appendix G, paragraph I.E.2 has been changed to be consistent with the change made to appendix G, paragraph I.C.10. The ''note'' has been clarified to state that, ''The origin of the LLW resulting from a processor's activities may be attributable to one or more 'generators' (including 'waste generators') as defined in this part.''

III. Control and Tracking—Appendix G, Paragraph III.A

Appendix G, paragraph III.A.2 has been modified to allow the label indicating classification of the waste (including the potential for a ''greater-than-Class C classification'') to be provided on the transport package (instead of the container) for those shipments for which labeling of the disposal container presents a potential radiation hazard.

Comment: Two commenters stated that Form 541 of the manifest may contain information important to emergency response teams responding to a transportation accident involving a LLW shipment and may be required by State agencies to accompany shipments. One commenter indicated that the New York State Department of Environmental Conservation requires information that is found on both Forms 540 and 541.

Response: The DOT has the Federal responsibility to determine what information must accompany a shipment to meet potential emergency response needs. The NRC has obtained DOT concurrence that the information provided on Form 540 meets their requirements for shipping papers. However, the rule does not preclude Form 541 from accompanying the shipment. Thus, if authoritative State requirements exist for information contained on Form 541, this information could accompany the shipment as Form 541 or a separate additional item of paperwork.

Final rule: No change.

Comment: One commenter stated that 60 days between a consignee's receipt of an advance manifest and a requirement to inform the NRC and the shipper that the consignee has not received the shipment seemed like a long time. Another commenter questioned what, exactly, needed to be completed within the one week window provided in the acknowledgement of shipment receipt.

Response: Advance notification can take place weeks before a shipment leaves the consignor's facility. As a result, 60 days is not considered too long a period. This period has not been changed from the current regulation. The rule states that the consignee must send the acknowledgement of receipt (a signed copy of Form 540) within one week of shipment receipt. Paragraph E of the existing rule, which has not been changed, addresses actions to be taken if acknowledgement of receipt is not received.

Final rule: No change.

Comment: One commenter asked who would be responsible for verifying and assuring the currentness of generators' QA programs.

Response: As indicated in the ''Certification'' section, the person signing the shipment manifest is certifying that the transported materials are properly classified, described, packaged, marked, and labeled. To the extent that a processor must rely on the information supplied by the waste generator, the processor must assure that the information received is sufficient, accurate, and current. Any QA program mandated by this rule, as adopted by Agreement States, would be subject to either NRC or Agreement State inspection and enforcement. On this subject, this rule has not instituted any substantive change.

Final rule: No change.

Comment: One commenter stated that the rule, in the current appendix F, paragraphs III.A.5, III.B.3, and III.C.6,

requires that a manifest both precede and be delivered to the consignee at the time the LLW is transferred. This commenter also suggested that the licensing authority be informed of a shipper's failure to receive acknowledgement of receipt of shipment at the time the shipper begins the required investigation or when the shipper has reason to believe a problem exists.

Response: The NRC does not see an NRC need to transmit both manifests. However, States or Compacts could impose this requirement. Similarly, because failure to receive acknowledgement is highly likely to be an administrative problem, the NRC sees no reason to change the existing regulation that requires reporting within two weeks of completion of the shipper's investigation.

Final rule: No change.

III. Control and Tracking—Appendix G, Paragraph III.B

Comment: Two commenters questioned whether the chain of custody of wastes handled by waste collectors can be determined under the requirements of this rule if more than one entity was involved with the waste before its handling by the collector. Another commenter stated that the identification of the original generator of LLW sent through processors or collectors must be ensured.

Response: Under the final rule, all waste collectors and processors must complete NRC Manifest Forms 540, 541 and 542. The information on these forms (including previous manifest numbers of shipments in which radioactive material was received) would allow any waste the collector or processor handles to be tracked back through one or more manifests to the originating ''generator'' or ''waste generator,'' as defined in the final rule.

Final rule: No change.

10 CFR Part 61

Section 61.12 Specific Technical Information (As Contained in Section 61.80)

Comment: Nine commenters discussed the concept of requiring that the storage of data be kept on electronic recordkeeping systems and reporting of data be accomplished on a machine (computer) readable medium. This requirement only applies to LLW disposal facilities. Eight of these commenters supported the requirements in the proposed rule. One commenter agreed with the NRC view that Agreement States should determine whether or not they will require their licensees to report stored information on a computer-readable medium. One commenter stated that there will be a need for quality assurance programs for both hardware and software of both the disposal facility operator and the generator of the waste. This commenter asked who would be responsible for verifying the generator's quality assurance programs. Because the disposal facility operators have different hardware and software, this commenter was concerned that information transfers may be so garbled as to be unusable.

Response: This rule does not change the existing requirement in 10 CFR Part 20 for a quality assurance program by any licensee who transfers radioactive waste to a land disposal facility. The appropriate licensing authority is, therefore, responsible for verifying that an acceptable program is in place. The disposal site operators currently verify incoming shipments as part of their quality assurance program. The NRC does not envision any change to these existing procedures. Any reporting of the information electronically stored at the LLW disposal facility would comply with the American Standard Code for Information Interchange requirements.

Final rule: No change.

Section 61.80 Maintenance of Records, Reports, and Transfers

In addition to the change discussed in this section, the proposed rule made an administrative correction to § 61.80(i)(1) regarding to whom the annual report should be submitted. This correction has been revised in the final rule to reflect the most recent NRC organizational changes. References to ''Appendix F'' have been changed to ''Appendix G.''

Comment: One commenter questioned the need to record and track discarded material (pallets, bracing, etc.), as the volume of these materials is insignificant and does not impact the performance of the facility. The commenter also believes this will be a burdensome chore.

Response: The NRC believes the commenter is correct and will make this requirement only applicable to contaminated material that is disposed of.

Final rule: The requirement will read, ''* * * the volume of any pallets, bracing, or other shipping or onsite generated materials that are contaminated, and * * *.''

Uniform Manifest Forms and Instructions

General Comments

Over two thirds of the commenters specifically stated their support for the development of a Uniform Radioactive Waste Manifest. None opposed the concept, but a few saw no problem with the manifests currently being used.

Many commenters went on to identify specific areas which they believe could improve upon the NRC's proposal. The NRC has incorporated many of these suggestions into the final rule, the Uniform Manifest forms, and the supporting instructions. One of the most significant comments on the forms dealt with the format in which the material is presented. As discussed in the Rulemaking History Section of this preamble, the NRC has attempted to meet the requirements of various Federal, State, and operator needs.

Several commenters noted that the proposed forms require some duplication of reporting between what is required for the DOT and the NRC. By far the most significant element of duplication dealt with reporting radionuclides and their activity on both NRC Forms 540 and 541. This resulted from the NRC staff's understanding of DOT's views of the regulatory acceptability of manifests currently in use, and was confirmed in a DOT letter to the NRC dated January 6, 1994. The DOT requires all their information to be together and not commingled with information requirements of the NRC, States, or the operating facility. Given this requirement to separate the information, the NRC believed that, in complying with the DOT requirements, a significant amount of physical paperwork accompanying the shipment could also be reduced by the use of electronic or other transfer of non-DOT information. Only DOT-required information must physically accompany the shipment. Therefore, the concept of three forms, each with a specific purpose, was developed.

NRC Form 540 is used to meet DOT shipping paper requirements for transportation and NRC waste tracking requirements. NRC Form 541 is used for waste and container information needed for assessing and monitoring disposal of radioactive waste. NRC Form 542 is used to collect waste generator information for LLW shipped from a waste collector or processor that can be used by the Compacts to establish the ''generator'' of LLW in the context of the LLRWPAA.

The NRC has worked with DOT in an attempt to minimize the burden of duplicative reporting. The DOT has

made an interpretation of its regulations that the shipping paper need only include a listing of the significant nuclides in a transportation package and document the total activity information on a ''package'' basis. The proposed rule required activity information by radionuclide. The NRC believes that this interpretation will significantly reduce duplicative reporting initially required for each nuclide and its respective activity.

Within the Department of Energy's (DOE's) National Low-Level Waste Management Program, a software package is under development that will prompt the user to provide the information needed to complete the uniform manifest and will then be capable of producing the completed manifest forms. It is intended that this software will be provided to requesters, and, if this activity is successful, the reporting burden will be further minimized.

Comment: Six commenters noted that the NRC Forms use a combination of English and metric (International System of Units (SI)) units. These commenters wanted the NRC to standardize the use of reporting units to reduce the inherent confusion. Of the commenters stating a preference, English units is the preferred choice.

Response: The NRC agrees that the use of dual units causes confusion. The proposed forms were designed to combine proposed requirements of DOT with standard reporting currently in use. Based on the presumed final DOT requirements and NRC's policy statement on the use of units (57 FR 46202; October 7, 1992), the forms and instructions have been revised to require the use of metric units (except one column on Form 540 to comply with a unique DOT requirement). The NRC has presumed that final DOT regulations will require the use of metric units for shipping papers (NRC Form 540). Because this requirement is consistent with NRC goals, the NRC Forms 541 and 542 will also require reporting in metric units. Note that reporting in metric units with English units following would also be acceptable. The rulemaking also modifies § 20.2101 (which requires records required by 10 CFR part 20 to use the curie, rad, and rem units) to require use of SI units for the manifest forms.

Comment: Nine commenters responded to NRC's request for comments on the potential to broaden the current purpose of the manifest number to provide information other than that required for tracking. These commenters were about equally split on the advisability of broadening the use of the manifest number. The supporters generally believe that a unique number may reduce some reporting requirements and would add a degree of control. One commenter noted that, while supporting the concept of a unique manifest number, its implementation could, however, be cumbersome, confusing and difficult. Those commenters not supporting broadening the manifest number's purpose, generally did not see a clear benefit to the change.

Response: While the NRC believes a unique manifest number could provide some benefits, the difficulty in implementing the concept at this time does not appear to warrant the resources that would be necessary. Also, at this time, the NRC does not have a clear concept of what a unique manifest number would include. Therefore, for this rulemaking, the NRC will not change the manifest number's purpose. After the Uniform Manifest is in use, the NRC will evaluate all aspects of the forms to identify potential improvements. The usefulness of the manifest number will be reviewed at that time to determine if changes are warranted.

Form 540

Comment: One commenter stated that it appeared that Form 540 is intended to replace the Bill of Lading.

Response: Form 540 is not intended to replace the Bill of Lading. However, the form does provide a format for reporting information to satisfy DOT's shipping paper requirements.

Box 1—Emergency Telephone Number and Organization

Comment: Several commenters questioned what organization is to be identified with the emergency telephone number. Information in this box was stated as being insufficient in light of other information accompanying shipments.

Response: The organization to be identified may be the shipper but could also be an organization, such as Chemtel. The telephone number is all that is required on the shipping paper by DOT. Other emergency response information required by DOT (49 CFR 172.602), but not as a shipping paper requirement, would still have to accompany the shipment.

Boxes 2 and 4—Exclusive Use and Regulated Waste Checkoff Boxes

Comment: Several commenters questioned why it is necessary to check these boxes indicating whether the shipment is ''Exclusive Use'' or includes EPA or State-designated hazardous waste. One commenter also asked whether a negative declaration would satisfy EPA that no material is present.

Response: Box 2 is provided to comply with the proposed DOT descriptive requirements for § 172.203 of title 49. The current Chem-Nuclear manifest contains this information item. Box 4 provides a crosscheck to ensure that an EPA Uniform Hazardous Waste Manifest is attached to the Uniform Low-Level Radioactive Waste Manifest, if required. It is not necessarily intended to provide a basis to satisfy EPA.

Box 5—Shipper—Name and Facility, Identifiers

Comment: Several commenters suggested that unique generator ID numbers should be developed to allow optimal tracking and possibly reduce the information required on the manifest. One commenter supported the addition of ''Fuel Cycle Industry'' to the ''Generator Type'' codes but suggested that the ''Other'' Code be deleted.

Response: The development of an ID system has merit. The NRC has concluded, however, that the development of such a system would be a significant undertaking and would have a serious impact on the rulemaking schedule. The NRC may consider development of an ID system after implementation of the rule if it appears necessary or worthwhile. Although the listed codes should cover the universe of generators, the ''Other'' code is being retained. A review of the use of this code may lead to appropriate expansions or clarifications of the coding system.

Box 6—Carrier Name and Address

Comment: One commenter suggested that space for more than one carrier was needed to be consistent with the requirements on the uniform hazardous waste manifest.

Response: The NRC believes that the required tracking can be accomplished through identification of the original carrier.

Box 7—Listing of the Number of Manifest Form Pages

Comment: Several commenters expressed views on the flexibility implied by this box that indicates the possibility of additional information being appended to the manifest by disposal facility operators, States, or Compacts. Four commenters believed that the rule should specifically prevent the possibility of unfettered additional uniform manifest requirements. Four other commenters supported this flexibility. However, most of these

commenters recognized that wide ranging additional reporting requirements would defeat the purpose of the Uniform Manifest. On a different point on this box, two commenters stated that the page numbering system was absurd.

Response: The NRC believes that the information being collected on the uniform manifest may not always be completely sufficient to meet a variety of legitimate needs. Because the manifest data requirements have been selected to satisfy the great majority of needs, the NRC believes the need for additional information should not present an overwhelming burden. If additional information is required on the manifest, it must be appended to the uniform manifest forms. This information, along with Forms 541 and 542, if required, may be transmitted electronically, by mail, or by some other mutually accepted method. The NRC agrees with those commenters that stated that transfer of unnecessary information would dilute a major purpose behind the development of a Uniform Manifest.

The NRC believes there may be some confusion on the page numbering system. All that is being asked for is the total number of pages comprising the manifest. The NRC believes this is a standard pagination scheme for ensuring completeness of a documentation package.

Box 8—Manifest Number

Comment: One commenter suggested that further guidance for uniquely identifying manifests is needed because LLW can move between several entities before being shipped to a disposal site. Two commenters questioned how tracking would be accomplished if the chain-of-custody involved more than one entity.

Response: As currently envisioned, all collectors or processors must complete Form 542 and, in so doing, identify a manifest number associated with the incoming shipment. Thus, LLW received at an LLW disposal site will be traceable back to the original generator, and no further guidance is needed.

Box 10—Certification

Comment: One commenter suggested further guidance on whose signature should appear in this block. One commenter stated that site-specific needs may dictate different wording. Another commenter stated that, in certain cases, certification to 10 CFR part 61 requirements is being requested for shipments not directed to a disposal facility. One commenter suggested that the certification statement should include an appropriate caveat for collectors who do not alter the form of LLW. One commenter generally addressed the responsibility issue.

Response: The NRC envisions that the person certifying the shipment will not change from existing practice. If it is necessary to change the wording of the statement, an additional certification sheet may be necessary. The words ''if applicable,'' have been added before the reference to 10 CFR part 61. The NRC believes the wording in the rule, appendix G, Section II, provides the caveat the commenter suggests.

Column 11—U.S. Department of Transportation Description

Comment: One commenter stated that the instructions were confusing in defining whether shipment or package information was being requested. Another commenter believes it was not clear how a shipper would describe a shipment of multiple disposal containers contained within a single transportation package.

Response: All information on Form 540 is on an individual package basis in compliance with DOT shipping paper regulations. Thus, Form 540 would include total package information while the information called for on Form 541 is on a ''disposal container'' basis.

Columns 12 and 14—DOT Label and Physical/Chemical Form

Comment: One commenter suggested that codes be used in documenting this information.

Response: The NRC seriously considered this possibility, but decided that, given the typical ''single word entries'' required, the flexibility provided without the use of codes outweighed the minimal savings in reporting burden that would be achieved.

Column 13—Transport Index

Comment: One commenter postulated an accident event involving a Low Specific Activity (LSA) shipment for which the information on Form 540 would not be useful because the Transport Index (TI) is not currently required to be contained on the shipping paper documentation. For this reason, the commenter suggested that NRC eliminate the requirement to use Form 540.

Response: The information requirements on NRC Form 540 are required by DOT for transportation of hazardous materials. The principal information on this form is for use by the first-on-the-scene responder to a transportation accident. Identification of the proper shipping name and U.N. ID number provides valuable information. These identifiers correlate with proper emergency actions. The TI is information which would be more useful in controlling normal occupational exposures.

Column 15 (Now Divided Into Columns 15 and 16)—Individual Radionuclides and Activity (Now Total Package Activity)

Comment: One commenter questioned what is meant by, ''* * * list all radionuclides that are present in the transport packaging,'' and suggested that guidance be provided on the specific SI units to be used. One commenter stated that requirements for listing of a radionuclide should be included in the rule. Two commenters stated that insufficient space is provided for both a listing of the nuclide and activity. Six commenters suggested that only a vertical listing, with one nuclide per line, should be considered. Another commenter suggested that the column be split into nuclide and activity columns.

Response: Reporting of radionuclides in the transport packaging is a DOT shipping paper requirement in which the instructions reference the appropriate DOT regulations for more information. The NRC is not providing detailed interpretive instructions of DOT regulations. The NRC has explained what is meant regarding the reporting units needed on NRC Form 541 (for NRC use). The NRC believes that the radionuclides reported on Form 541 should also be appropriate for DOT purposes. A DOT telephone number is provided if additional information or interpretation is needed. On the spacing issue, the NRC has completed several manifests from actual shipments and these examples indicate that more than enough space is provided for at least a double columnar listing of nuclides and respective activities on NRC Form 541, although the choice on the formatting in this column is left to the shipper and consignee. Because the DOT has agreed that only the total package activity needs to be reported, the spacing issue would now only involve Form 541. On the multiple columnar presentation, the NRC would note that current Transportation Shipment Package Records, that have been used when conveying radioactive material to processors, portray nuclides and their respective activities in a triple columnar field.

Column 16 (Now Column 17)—LSA/SCO Class

Comment: One commenter suggested codes for documenting this information,

while two commenters questioned the regulatory basis.

Response: The information in this column is based on a requirement proposed by DOT in their ''IAEA Compatibility'' rulemaking. Coding is not allowed by DOT for reporting this information. The NRC has presumed that this classification system will be incorporated into DOT's final rule.

Column 17 (Now Column 18)—Total Weight or Volume

Comment: One commenter questioned the multiple number of times that this type of information was requested on the three manifest forms.

Response: Although requests for volume and weight information do occur on each of the manifest forms, the volumes or weights requested are not necessarily identical. For example, the transportation package volume may not be the same as the disposal container volume, if multiple disposal containers are contained within a shielded overpack. The total volumes requested on Form 542 would represent the sum of all generator volumes which may be contained in a number of different disposal containers. This Form 542 summary contains information very similar to that required on the Manifest Index and Regional Compact Tabulation Sheets used by a current disposal site operator. This information is used for waste tracking purposes to ensure that sites are receiving wastes for which their State or Compact is responsible for disposal.

Column 18 (Now Column 19)—Identification Number of Package

Comment: One commenter suggested that this instruction should be worded as a requirement.

Response: Although the listing of the disposal container number on Form 541 is a requirement, this does not generally carryover to the transport packaging when the packaging and the disposal container are not identical. DOT does not require a package number to be provided on shipping papers.

Form 541

Box 1—Manifest Totals

In addition to the change discussed in this section of the preamble, the headings for the shipment volume and weight totals have been changed to reflect that total net values are being requested for any low-level radioactive waste shipment to which manifesting applies.

Comment: Five commenters brought up the issue of reporting of radionuclides (specifically Tc–99 and I–129) that are reported based on lower limits of detection (LLD). Concerns were expressed that if the totals, as presented in this box, represent the sum of the LLDs, or LLD's and ''real'' values in all disposal containers, a very significant overestimation of these nuclides in a disposal facility could result. One commenter suggested that this block require entry of net waste volume and weight.

Response: The NRC believes these comments have merit. Because it would be important to distinguish between ''real'' and LLD values, the instructions have been modified to indicate that the sums of the ''real'' and LLD values should be separately reported in this box, with the summed LLD value in parenthesis. Although the NRC recognizes that this reporting scheme does not solve the problem, this reporting approach will ''flag'' the conservative nature of the appropriate fraction of the inventories of these nuclides. The commenter is correct in presuming that net waste volumes and weights are being requested. Appropriate clarifications have been made to the manifest forms and instructions.

Columns 5 through 10—Disposal Container Description

Comment: One commenter stated that repetitive listing of a generator ID number, if more than one container is attributed to a generator, is unnecessary. Another commenter pointed out that the container described may not always be the ''disposal'' container and that, in these cases (e.g., shipments (of LLW) to waste processors), this column may not need to be completed. One commenter suggested that Column 8 should pertain to net waste weight. One commenter asked how a shipper should respond if more than one container description code applies. Another commenter asked if it was intended to use the numeric codes or the actual verbiage.

Response: The instructions have been clarified to avoid unnecessary repetition of generator ID numbers. The ''exemption'' referred to by the commenter was included in the instructions. This ''exemption'' is now the subject of a ''Note'' preceding the instructions for Column 5. The possibility that some of the container information may be required by the consignee also appears *italicized* in the introductory paragraph in the instructions for Form 541. Instructions that are not ''tied'' to information being required to comply with Federal regulations also now appear in *italics.*

Column 8 refers to total container and waste weight (See discussion pertaining to Column 12).

The intent is to report code numbers, if applicable. If more than one container description code applies, multiple codes can be reported.

Column 9—Surface Radiation Level

Comment: Two commenters suggested that this column could be better situated on Form 540 adjacent to the Transport Index.

Response: Combining this information with the information required by DOT on shipping papers would not, based on NRC staff interactions with DOT staff, be accepted by DOT. The information in this column is also required by one of the current disposal facility operators.

Column 10—Surface Contamination

Comment: Four commenters questioned the need for this information, especially in light of DOT standards.

Response: The information being requested in this column is directed at contamination levels on the surfaces of disposal containers, not transportation packagings. This information is currently requested by one of the disposal facility operators on their manifest in order to minimize contamination and control potential operational exposures. Through typographical error, this informational need was included as an NRC requirement in the proposed appendix F, paragraph I.C.10. As indicated in the response to comments on the rule, this requirement has been deleted from the rule but remains as a non-Federal information item on the manifest.

Column 12—Approximate Waste Volume(s) in Container

Comment: Two commenters suggested that if the waste volume information is only intended to meet disposal site acceptance criteria, this column could be deleted because the certification statement could be used to accomplish the same purpose. One commenter questioned whether the information on the manifest allowed an accurate estimate of the mass of the waste and whether the NRC recognized that the volume of the inner container may be substantially different from the actual waste volume. One commenter suggested that adjustments be considered so that the weight of the waste would be documented. One commenter suggested that this column be completed if the container fill volume was less than 90%. One commenter asked whether, if perlite was

used to fill void volume, this volume should be included in the total.

Response: For discrete waste items (e.g., activated metals), the volume of these items is of interest for waste classification purposes. The instructions have been expanded to make this clear and, for homogeneous type wastes, the instructions indicate that ''>85%'' can be entered if this fill volume is exceeded. The NRC believes that the weight of the waste can be estimated by either knowing the volume and density of the waste or subtracting container weight from the weight of the waste and container. If fill material is used, this volume may be included in the reported volume, but may not be considered for waste classification purposes. An alternative approach would be to report waste volume, but note that a ''fill'' has been used (e.g., to comply with disposal site acceptance criteria).

Column 14—Weight % Chelating Agent

Comment: One commenter suggested a code for ''None present'' and ''O'' be provided in this column. Another commenter asked what methods would be used to identify chelating agents.

Response: The commenter's suggestion was not taken because only an ''NP'' or ''O'' would need to be entered, and space for providing the preprinted codes is limited. NRC's intent in identifying chelating agents is described in general terms in the ''Final Waste Classification and Waste Form Technical Position,'' dated May 11, 1983.

Column 15—Radiological Description

Comment: Two commenters questioned the desirability of reporting individual nuclide activities as a percentage of total container activity. One commenter erroneously thought that this column limited the recording of nuclides to three entries. Another commenter suggested that the NRC consider establishing reporting thresholds for H–3, C–14, Tc–99, and I–129, and stated that explicit instructions are needed on the reporting of source and special nuclear material, ''daughter radionuclides,'' and the impact of nuclides with less than 5-year half-life on waste classification. One commenter pointed out that the passage of ''Reportable Quantity'' requirements should be considered in establishing the reporting thresholds defined in the instructions. A number of commenters questioned the effectiveness of allowing multiple-columnar reporting of radionuclides with their respective activities.

Response: Percentage reporting is not being mandated, but allowed. This method of reporting is allowed by a current disposal facility operator. The instructions have also been appended to clarify how the reporting of more than three significant radionuclides in a container should be achieved.

Although the concept of establishing threshold reporting quantities for the four indicated nuclides has merit, the analysis needed to support a specific threshold has not been defined. Thus, consistent with the existing regulation, no threshold for the reporting of these four nuclides is included in the instructions.

On the reporting of source material, the instructions have been expanded to clarify that the ''mass'' being asked for applies only to the elemental mass of uranium and thorium (including uranium and thorium contained in ''unimportant quantities,'' as defined in 10 CFR 40.13), and not the weight of the waste containing these nuclides. The instructions now also specifically state that the activities of the nuclides specifically referred to in the ''Manifest Total'' Box (i.e., H–3, C–14, Tc–99, and I–129) must always be manifested. The instructions also state that daughter products must be either individually reported or, if within a factor of 2 of being in equilibrium with its (their) parent, be reported as the parent with its activity listed, but with the symbol ''D'' or ''NAT'' indicating daughter products in equilibrium (i.e., Cs–137D or ThNAT). ''Significant quantities'' of nuclides with half-lives less than 5 years must be included in determining the waste classification of a disposal container (note that this will only apply in determining whether the Class should be Class A or B). Finally, the instructions have been expanded to indicate that any radionuclide whose activity represents a Reportable Quantity under DOT regulations must be included on the manifest.

In response to comments on multicolumnar reporting, the NRC has reconfigured the item 15 column to indicate the possibility of using two subcolumns. The first subcolumn must include the radionuclide and its activity in metric units. The second subcolumn may be: (1) Used to include the activity in English units, if required by the State or operating facility, (2) left blank if not needed, or (3) used to report a second radionuclide and its activity. The line which splits column 15 is provided to minimize imputing and checking errors, if the third option is chosen.

Column 16—Waste Classification

Comment: One commenter suggested that boxes be provided to check a waste class. Two commenters stated that the ''Class'' designations do not establish whether Class B and C waste has been stabilized.

Response: The instructions have been broadened to indicate that Class B and C waste should be classified as BU or BS, or CU or CS; the U or S indicating whether the waste is in stable or unstable form. Because the combination of possibilities has been increased to six, the information to be recorded would only consist of two letters, and space on the form is limited, ''checkoff'' boxes have not been added to the form.

Container, Waste, and Media Codes

Comment: One commenter stated that the waste descriptor codes should be consistent with existing NRC classifications of LLW. Another commenter pointed out that the codes do not match directly with those of US Ecology. One commenter suggested that ''EPA (or State) hazardous'' should not be a physical descriptor for waste and questioned why ''concrete'' was specifically identified as an encapsulation media. One commenter suggested that the descriptor, ''wooden box'' be dropped and ''woven polypropylene bulk bag'' be added to reflect actual practices. This commenter also believed that the waste descriptors were excessive for the purposes being addressed. One commenter suggested that Zonolite grade 4 be deleted and ''Vinyl Chloride'' replace ''Vinyl Toluene.'' One commenter suggested that ''State hazardous'' be added along with ''EPA hazardous.''

Response: The NRC believes the codes are somewhat more detailed than the waste streams characterized in the Environmental Impact Statement that supported the 10 CFR part 61 rulemaking. Although the codes are not identical to those used by US Ecology, the NRC staff believes that all the US Ecology codes can be related to the codes on Form 541, and the ''other'' code can also be used. If a rationale for a specific code, that is not included exists, it can be added to the list. The ''EPA (or State) hazardous'' descriptor is provided as a ''tie-in'' to EPA's or a State's Uniform Hazardous Waste Manifest. The specific identification of concrete as an encapsulation media has been deleted and the commenter's suggestion on container descriptions has been accepted. The NRC believes that feedback from the performance assessment process may indeed lead to a consolidation of waste descriptor codes, with time. The suggestions that Zonolite grade 4 be deleted and ''Vinyl Chloride'' replace ''Vinyl Toluene'' have been accepted. The phrase ''EPA

hazardous'' has been modified to read ''EPA or State Hazardous.''

Form 542

Column 5—Generator Name, Permit Number, and Telephone Number

Comment: One commenter suggested that the ''generator type'' code should also be included. Two commenters questioned why ''permit number'' is called for, given that the generator ID number is provided in Column 4.

Response: Because the generator ID number should allow the determination of generator type, the inclusion of this information was not considered necessary. Permit number was included because, for certain generators, the generator ID number assigned by the disposal facility operator is not identical to the permit number assigned by the appropriate regulatory authority. Optimization of these identifiers could lead to elimination of this reporting need.

Column 9—Waste Code

Comment: One commenter suggested that boxes be provided to check whether the waste represents processed or collected waste.

Response: Given the single letter entry needed, and the fact that an existing manifest does not preprint these letters, the NRC did not see a need to provide individual ''C'' or ''P'' boxes to be checked.

Column 10—Originating Compact Region or State

Comment: One commenter suggested that codes be used for the Compacts or States. Another commenter stated that if the Generator ID number included the two-digit State abbreviation, there would be no need to report this information in Column 10.

Response: The NRC's intent was that codes be used. The instructions have been expanded to state this preference. Because current generator ID numbers do not uniformly include the State abbreviation, it was included in Column 10. If generator ID numbers are systematized, as the commenter suggests, and as membership in Compacts stabilizes, this column could be deleted.

National Data Base Comments

Comment: In the proposed rule, the NRC discussed possible uses of and needs for a national computer LLW data base. The NRC expressed interest in public views on the benefits in developing such a system, and if developed, who would be an appropriate operator. Eighteen commenters spanned a spectrum of responses, from support for a national data base with NRC as the operator, to the belief that a national data base is unnecessary. Comments also spanned the topic of data availability, from making sure the information is publicly accessible to the need to ensure that sensitive data is protected. One commenter noted that because disposal options have been significantly reduced, much LLW may end up in extended storage and a national data base as envisioned (data reported by the LLW disposal facilities) would not yield the quantity of data originally expected. Two commenters noted that LLW data bases already exist and that the NRC should use these existing systems and work with the DOE to make any necessary modifications to meet the informational needs of both NRC and state regulators.

Response: The NRC believes that because there will only be a few LLW facility operators in the near future, it is premature to establish a new national LLW data base. The NRC agrees with those commenters that stated that the existing systems can be the basis for a broad and uniform national system. The NRC will work with DOE and Agreement States to improve the existing data base, as necessary. Improvements may result from the use of the Uniform Manifest and the improved ability to report and compile this data.

Regulatory Analysis Comments

Comment: One commenter stated that the economic impact analysis is unclear in the ''Regulatory Flexibility Certification'' section. The commenter stated that according to the discussion, the proposed rule would have a negative $480,000 to a positive $100,000 impact on the regulated community. If one back calculates to the 34,000 cubic feet generated by hospitals, the range would be negative $13,600 to a positive $2,400. These figures deserve to be substantiated and justified.

Response: The costs and cost savings associated with the uniform manifest are mainly associated with additional entry costs from the uniform manifest having more fields than the currently used shipment manifest forms and from the development of computer software to generate the forms. The data entry costs are related to the amount of additional data entered per shipment, the number of shipments, and the degree of automation of data entry. It appears that data entry costs were underestimated and the final regulatory analysis contains updated estimates. Whether there is a cost or cost savings related to development of manifest generation software depends on the number of different manifest forms there would be in the absence of a uniform manifest. If each regional disposal facility would require its own manifest forms, a savings in software development costs would result from the use of a uniform manifest. If the current US Ecology and Chem-Nuclear Systems forms would still be used for all regional disposal facilities, additional software generation costs would result from use of the uniform manifest. Because costs are not related to waste volume, the impact of the proposed rule on hospitals that generate LLW is not directly related to the volume of LLW that these hospitals generate.

Comment: Two commenters questioned the incremental time and cost to generate the new uniform manifest versus current manifests in use. One commenter stated that the requirements of Form 540 could increase the time to generate a manifest to 5 hours or more for a large shipment rather than the 0.65 hours shown in the **Federal Register** notice (57 FR 14500; April 21, 1992). One commenter stated that the response time for collection of information is substantially underestimated and that the increased complexity of the forms is expected to significantly increase clerical costs well beyond the estimate of $5,000 to $15,000.

Response: The estimate of the amount of time it takes to enter data on the uniform manifest was based on the number of fields, the nature of the field (i.e., whether it contains fixed point, floating point, or alphanumeric data) and whether the data is entered manually on the forms, on a computer, or from a waste management database. An experienced data entry clerk was consulted. From this and other comments to the notice of proposed rulemaking, including the comments made at the public meeting held on June 15, 1993 and subsequent NRC experience, it appears that the effort required to complete the manifest forms was underestimated. In the final regulatory analysis, the estimated time to complete a manifest by a generator (NRC Forms 540 and 541) has been changed from 2.5 hours to 2.8 hours. The estimated time to complete the manifest for a collector/processor (NRC Forms 540, 541, and 542) has been changed from 3.1 to 9.2 hours. The significant change for the collector/processor comes from information in a January 1994, report prepared for the NRC (NUREG/CR–6147) that resulted in more than twice the estimated size (number of containers) in collector/

processor shipments. The end result, however, is not as drastic since the total number of shipments is accordingly reduced.

Final rule: The Regulatory Analysis has been updated to reflect more accurate estimates of effort. The resulting changes have not changed the conclusion to implement the final rulemaking.

IV. Compatibility of Agreement State Regulations

The Commission is requiring that the Uniform Low-Level Radioactive Waste Manifest be used by all shippers of low-level radioactive waste; that is, by all waste generators, waste collectors, and waste processors licensed by either the Commission or Agreement States. The Commission and Agreement State licensees required to use the Uniform Manifest, therefore, would also be required to record the minimal information requirements as called for on the applicable Uniform Manifest forms.

In the development of the three sets of forms comprising the Uniform Manifest, the NRC staff has coordinated its efforts with staff at DOT and with Agreement and non-Agreement States. Most State representatives have indicated support for a base set of information needs and a uniform manifest. The Commission believes the information called for on the Uniform Manifest not only satisfies Commission requirements and DOT shipping paper requirements, but also the majority of requirements of Agreement State regulatory authorities (and land disposal facility operators).

The Commission recognizes that a particular Agreement State may require additional information for their unique regulatory purposes and that disposal site operators may require further information to satisfy operational and administrative considerations. Therefore, this regulation does not prohibit Agreement States or disposal site operators from broadening manifest usage or from imposing additional manifest requirements which may be transmitted as additional pages to the Uniform Low-Level Radioactive Waste Manifest. Serious consideration should be given to the need for specific additional information vis-a-vis the advantages in maintaining a ''uniform'' manifesting system. Caution must be taken, however, to ensure that any additional requirements for information are reported in a format which does not conflict with DOT regulations for shipping papers (i.e., 49 CFR part 172). Also, the NRC Forms, although requiring the use of metric units, does not preclude reporting in metric and English units.

Accordingly, the Commission designates 10 CFR 20.2006, Transfer for Disposal and Manifests (excluding appendix F)—as Division 1. This designation maintains uniformity in manifest format and content while at the same time allowing flexibility for additional information being supplied in the manifest by adding supplemental pages. 10 CFR 20.2101, which discusses units to use, is designated Division 2, since although SI units must be used, English units can also be reported.

The Commission designates 10 CFR 61.12, Specific Technical Information, including the new paragraph (n) that deals with a description of an electronic record keeping system, as Division 2 because Agreement States can satisfy the principles using alternate language.

10 CFR 61.80, Maintenance of Records, Reports and Transfers, remains designated Division 3, except for § 61.80(l)(1) which is designated Division 2 because it requires that the disposal facility licensee maintain an electronic record keeping system. This designation will help ensure that manifest information will be available in an electronic format for both NRC and Agreement State licensed sites. The new requirement to report such stored information on a computer-readable medium, however, should be the prerogative of each Agreement State, and this new requirement in § 61.80(l)(2), is designated Division 3.

V. Environmental Impact: Categorical Exclusion

The Commission has determined that this final rule is the type of action described in categorical exclusions 10 CFR 51.22(c)(3) (ii) and (iii). Therefore, neither an environmental impact statement nor an environmental assessment has been prepared for this final rule.

VI. Paperwork Reduction Act Statement

This final rule amends information collection requirements that are subject to the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.). These requirements were approved by the Office of Management and Budget, approval number 3150–0014, –0135, –0164, –0165, and –0166.

Public reporting burden for this collection of information is estimated to average 1.04 hours per response under 10 CFR parts 20 and 61, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. The time to complete standard shipping manifests required by this rulemaking, NRC Forms 540, 541, and 542, depends upon the size and complexity of the shipment and whether the shipment is from a generator or a collector/processor. A shipment from a generator is estimated to require 2.8 hours (63 minutes to complete Form 540 and 103 minutes for Form 541—no Form 542 is needed). A shipment from a collector/processor is estimated to require 9.2 hours (161 minutes to complete Form 540, 363 minutes for Form 541, and 26 minutes for Form 542). The representative collector/processor's manifest takes longer to complete primarily because it is assumed that their shipments have more than twice as many containers as from a generator's shipment. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Information and Records Management Branch, Mail Stop T–6 F33, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001; and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB–10202, (3150–0014, –0135, –0164, –0165, and –0166), Office of Management and Budget, Washington, DC 20503.

VII. Regulatory Analysis

The Commission has prepared a regulatory analysis on this final regulation. The analysis examines the costs and benefits of the alternatives considered by the Commission. The analysis is available for inspection in the NRC Public Document Room, 2120 L Street NW. (Lower Level), Washington, DC. Single copies of the analysis may be obtained from M. Haisfield, Office of Nuclear Regulatory Research, U.S. Nuclear Regulatory Commission, Washington, DC 20555, Mail Stop T–9 F33.

VIII. Regulatory Flexibility Certification

As required by the Regulatory Flexibility Act of 1980 (5 U.S.C. 605(b)), the Commission certifies that this rule does not have a significant economic impact upon a substantial number of small entities. A significant number of hospitals and academic institutions are LLW waste generators, and most of these are non-profit organizations. During 1986–1990, about 4.6% of the 7.8 million cubic feet of disposed of LLW was generated by hospitals and academic institutions. Thus, a substantial number of small entities could be affected by the rule.

With an expected disposal fee of approximately $150/cubic foot, annual disposal costs for these small entities will be in the range of $11 million. The estimated upper limit costs to implement this rule for the small entities is approximately $65,000. Similarly, the estimated upper limit of annual operational cost for these small entities is approximately $2,000. These costs are insignificant relative to the annual disposal costs (which do not include costs such as packaging and transportation). Because the percentage increases in disposal costs that may be caused by the rule is substantially less than 1%, the rule would not have a significant economic impact on the small entities affected by the rule.

IX. Backfit Analysis

The Commission has determined that the backfit rule, 10 CFR 50.109, does not apply to this final rule because these amendments do not involve any provisions which would impose backfits as defined in 10 CFR 50.109(a)(1). The additional information to be placed on NRC manifest forms will not require nuclear power licensees to change existing procedures used in operation of their facilities. Therefore, a backfit analysis is not required.

List of Subjects

10 CFR Part 20

Byproduct material, Criminal penalties, Licensed material, Nuclear materials, Nuclear power plants and reactors, Occupational safety and health, Packaging and containers, Radiation protection, Reporting and recordkeeping requirements, Source material, Special nuclear material, Waste treatment and disposal.

10 CFR Part 61

Criminal penalties, Low-level waste, Nuclear materials, Reporting and recordkeeping requirements, Waste treatment and disposal.

For the reasons set out in the preamble and under the authority of the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974, as amended, and 5 U.S.C. 552 and 553, the NRC is adopting the following amendments to 10 CFR parts 20 and 61.

PART 20—STANDARDS FOR PROTECTION AGAINST RADIATION

1. The authority citation for part 20 continues to read as follows:

Authority: Secs. 53, 63, 65, 81, 103, 104, 161, 182, 186, 68 Stat. 930, 933, 935, 936, 937, 948, 953, 955 as amended (42 U.S.C. 2073, 2093, 2095, 2111, 2133, 2134, 2201, 2232, 2236), secs. 201, as amended, 202, 206, 88 Stat. 1242, as amended, 1244, 1246 (42 U.S.C. 5841, 5842, 5846).

2. Section 20.1009 is revised to read as follows:

§ 20.1009 Information collection requirements: OMB approval.

(a) The Nuclear Regulatory Commission has submitted the information collection requirements contained in this part to the Office of Management and Budget (OMB) for approval as required by the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.). The OMB has approved the information collection requirements contained in this part under control number 3150–0014.

(b) The approved information collection requirements contained in this part appear in §§ 20.1101, 20.1202, 20.1204, 20.1206, 20.1301, 20.1302, 20.1501, 20.1601, 20.1703, 20.1901, 20.1902, 20.1904, 20.1905, 20.1906, 20.2002, 20.2004, 20.2006, 20.2102, 20.2103, 20.2104, 20.2105, 20.2106, 20.2107, 20.2108, 20.2109, 20.2110, 20.2201, 20.2202, 20.2203, 20.2204, 20.2206, and appendices F and G to 10 CFR part 20.

(c) This part contains information collection requirements in addition to those approved under the control number specified in paragraph (a) of this section. These information collection requirements and the control numbers under which they are approved are as follows:

(1). In § 20.2104, NRC Form 4 is approved under control number 3150–0005.

(2). In §§ 20.2106 and 20.2206, NRC Form 5 is approved under control number 3150–0006.

(3). In § 20.2006 and appendix G to 10 CFR part 20, NRC Form 540 and 540A is approved under control number 3150–0164.

(4). In § 20.2006 and appendix G to 10 CFR part 20, NRC Form 541 and 541A is approved under control number 3150–0165.

(5). In § 20.2006 and appendix G to 10 CFR part 20, NRC Form 542 and 542A is approved under control number 3150–0166.

3. Section 20.2006 is revised to read as follows:

§ 20.2006 Transfer for disposal and manifests.

(a)(1) The requirements of this section and appendices F and G to 10 CFR part 20 are designed to

(i) Control transfers of low-level radioactive waste by any waste generator, waste collector, or waste processor licensee, as defined in this part, who ships low-level waste either directly, or indirectly through a waste collector or waste processor, to a licensed low-level waste land disposal facility (as defined in part 61 of this chapter);

(ii) Establish a manifest tracking system; and

(iii) Supplement existing requirements concerning transfers and recordkeeping for those wastes.

(2) Beginning March 1, 1998, all affected licensees must use Appendix G. Prior to March 1, 1998, a LLW disposal facility operator or its regulatory authority may require the shipper to use appendix F or appendix G. Licensees using appendix F shall comply with paragraph (b)(1) of this section. Licensees using appendix G shall comply with paragraph (b)(2) of this section.

(b)(1) Each shipment of radioactive waste intended for disposal at a licensed land disposal facility must be accompanied by a shipment manifest in accordance with section I of appendix F to 10 CFR part 20.

(2) Any licensee shipping radioactive waste intended for ultimate disposal at a licensed land disposal facility must document the information required on NRC's Uniform Low-Level Radioactive Waste Manifest and transfer this recorded manifest information to the intended consignee in accordance with appendix G to 10 CFR part 20.

(c) Each shipment manifest must include a certification by the waste generator as specified in section II of appendix F or appendix G to 10 CFR part 20, as appropriate. See paragraph (a)(2) of this section to determine the appropriate appendix.

(d) Each person involved in the transfer for disposal and disposal of waste, including the waste generator, waste collector, waste processor, and disposal facility operator, shall comply with the requirements specified in section III of appendix F or appendix G to 10 CFR part 20, as appropriate. See paragraph (a)(2) of this section to determine the appropriate appendix.

4. Section 20.2101 is amended by redesignating paragraph (b) as paragraph (c) and adding a new paragraph (b) to read as follows:

§ 20.2101 General provisions.

* * * * *

(b) Not withstanding the requirements of paragraph (a) of this section, when recording information on shipment manifests, as required in § 20.2006(b), information must be recorded in the International System of Units (SI) or in SI and units as specified in paragraph (a) of this section.

* * * * *

5. A new appendix G is added to 10 CFR part 20 to read as follows:

Appendix G to 10 CFR Part 20—Requirements for Transfers of Low-Level Radioactive Waste Intended for Disposal at Licensed Land Disposal Facilities and Manifests

I. Manifest

A waste generator, collector, or processor who transports, or offers for transportation, low-level radioactive waste intended for ultimate disposal at a licensed low-level radioactive waste land disposal facility must prepare a Manifest (OMB Control Numbers 3150–0164, –0165, and –0166) reflecting information requested on applicable NRC Forms 540 (Uniform Low-Level Radioactive Waste Manifest (Shipping Paper)) and 541 (Uniform Low-Level Radioactive Waste Manifest (Container and Waste Description)) and, if necessary, on an applicable NRC Form 542 (Uniform Low-Level Radioactive Waste Manifest (Manifest Index and Regional Compact Tabulation)). NRC Forms 540 and 540A must be completed and must physically accompany the pertinent low-level waste shipment. Upon agreement between shipper and consignee, NRC Forms 541 and 541A and 542 and 542A may be completed, transmitted, and stored in electronic media with the capability for producing legible, accurate, and complete records on the respective forms. Licensees are not required by NRC to comply with the manifesting requirements of this part when they ship:

(a) LLW for processing and expect its return (i.e., for storage under their license) prior to disposal at a licensed land disposal facility;

(b) LLW that is being returned to the licensee who is the ''waste generator'' or ''generator,'' as defined in this part; or

(c) Radioactively contaminated material to a ''waste processor'' that becomes the processor's ''residual waste.''

For guidance in completing these forms, refer to the instructions that accompany the forms. Copies of manifests required by this appendix may be legible carbon copies, photocopies, or computer printouts that reproduce the data in the format of the uniform manifest.

NRC Forms 540, 540A, 541, 541A, 542 and 542A, and the accompanying instructions, in hard copy, may be obtained from the Information and Records Management Branch, Office of Information Resources Management, U.S. Nuclear Regulatory Commission, Washington, DC 20555, telephone (301) 415–7232.

This appendix includes information requirements of the Department of Transportation, as codified in 49 CFR part 172. Information on hazardous, medical, or other waste, required to meet Environmental Protection Agency regulations, as codified in 40 CFR parts 259, 261 or elsewhere, is not addressed in this section, and must be provided on the required EPA forms. However, the required EPA forms must accompany the Uniform Low-Level Radioactive Waste Manifest required by this chapter.

As used in this appendix, the following definitions apply:

Chelating agent has the same meaning as that given in § 61.2 of this chapter.

Chemical description means a description of the principal chemical characteristics of a low-level radioactive waste.

Computer-readable medium means that the regulatory agency's computer can transfer the information from the medium into its memory.

Consignee means the designated receiver of the shipment of low-level radioactive waste.

Decontamination facility means a facility operating under a Commission or Agreement State license whose principal purpose is decontamination of equipment or materials to accomplish recycle, reuse, or other waste management objectives, and, for purposes of this part, is not considered to be a consignee for LLW shipments.

Disposal container means a container principally used to confine low-level radioactive waste during disposal operations at a land disposal facility (also see ''high integrity container''). Note that for some shipments, the disposal container may be the transport package.

EPA identification number means the number received by a transporter following application to the Administrator of EPA as required by 40 CFR part 263.

Generator means a licensee operating under a Commission or Agreement State license who (1) is a waste generator as defined in this part, or (2) is the licensee to whom waste can be attributed within the context of the Low-Level Radioactive Waste Policy Amendments Act of 1985 (e.g., waste generated as a result of decontamination or recycle activities).

High integrity container (HIC) means a container commonly designed to meet the structural stability requirements of § 61.56 of this chapter, and to meet Department of Transportation requirements for a Type A package.

Land disposal facility has the same meaning as that given in § 61.2 of this chapter.

NRC Forms 540, 540A, 541, 541A, 542, and 542A are official NRC Forms referenced in this appendix. Licensees need not use originals of these NRC Forms as long as any substitute forms are equivalent to the original documentation in respect to content, clarity, size, and location of information. Upon agreement between the shipper and consignee, NRC Forms 541 (and 541A) and NRC Forms 542 (and 542A) may be completed, transmitted, and stored in electronic media. The electronic media must have the capability for producing legible, accurate, and complete records in the format of the uniform manifest.

Package means the assembly of components necessary to ensure compliance with the packaging requirements of DOT regulations, together with its radioactive contents, as presented for transport.

Physical description means the items called for on NRC Form 541 to describe a low-level radioactive waste.

Residual waste means low-level radioactive waste resulting from processing or decontamination activities that cannot be easily separated into distinct batches attributable to specific waste generators. This waste is attributable to the processor or decontamination facility, as applicable.

Shipper means the licensed entity (i.e., the waste generator, waste collector, or waste processor) who offers low-level radioactive waste for transportation, typically consigning this type of waste to a licensed waste collector, waste processor, or land disposal facility operator.

Shipping paper means NRC Form 540 and, if required, NRC Form 540A which includes the information required by DOT in 49 CFR part 172.

Source material has the same meaning as that given in § 40.4 of this chapter.

Special nuclear material has the same meaning as that given in § 70.4 of this chapter.

Uniform Low-Level Radioactive Waste Manifest or *uniform manifest* means the combination of NRC Forms 540, 541, and, if necessary, 542, and their respective continuation sheets as needed, or equivalent.

Waste collector means an entity, operating under a Commission or Agreement State license, whose principal purpose is to collect and consolidate waste generated by others, and to transfer this waste, without processing or repackaging the collected waste, to another licensed waste collector, licensed waste processor, or licensed land disposal facility.

Waste description means the physical, chemical and radiological description of a low-level radioactive waste as called for on NRC Form 541.

Waste generator means an entity, operating under a Commission or Agreement State license, who (1) possesses any material or component that contains radioactivity or is radioactively contaminated for which the licensee foresees no further use, and (2) transfers this material or component to a licensed land disposal facility or to a licensed waste collector or processor for handling or treatment prior to disposal. A licensee performing processing or decontamination services may be a ''waste generator'' if the transfer of low-level radioactive waste from its facility is defined as ''residual waste.''

Waste processor means an entity, operating under a Commission or Agreement State license, whose principal purpose is to process, repackage, or otherwise treat low-level radioactive material or waste generated by others prior to eventual transfer of waste to a licensed low-level radioactive waste land disposal facility.

Waste type means a waste within a disposal container having a unique physical description (i.e., a specific waste descriptor code or description; or a waste sorbed on or solidified in a specifically defined media).

Information Requirements

A. General Information

The shipper of the radioactive waste, shall provide the following information on the uniform manifest:

1. The name, facility address, and telephone number of the licensee shipping the waste;

2. An explicit declaration indicating whether the shipper is acting as a waste

generator, collector, processor, or a combination of these identifiers for purposes of the manifested shipment; and

3. The name, address, and telephone number, or the name and EPA identification number for the carrier transporting the waste.

B. Shipment Information

The shipper of the radioactive waste shall provide the following information regarding the waste shipment on the uniform manifest:

1. The date of the waste shipment;

2. The total number of packages/disposal containers;

3. The total disposal volume and disposal weight in the shipment;

4. The total radionuclide activity in the shipment;

5. The activity of each of the radionuclides H–3, C–14, Tc-99, and I–129 contained in the shipment; and

6. The total masses of U–233, U–235, and plutonium in special nuclear material, and the total mass of uranium and thorium in source material.

C. Disposal Container and Waste Information

The shipper of the radioactive waste shall provide the following information on the uniform manifest regarding the waste and each disposal container of waste in the shipment:

1. An alphabetic or numeric identification that uniquely identifies each disposal container in the shipment;

2. A physical description of the disposal container, including the manufacturer and model of any high integrity container;

3. The volume displaced by the disposal container;

4. The gross weight of the disposal container, including the waste;

5. For waste consigned to a disposal facility, the maximum radiation level at the surface of each disposal container;

6. A physical and chemical description of the waste;

7. The total weight percentage of chelating agent for any waste containing more than 0.1% chelating agent by weight, plus the identity of the principal chelating agent;

8. The approximate volume of waste within a container;

9. The sorbing or solidification media, if any, and the identity of the solidification media vendor and brand name;

10. The identities and activities of individual radionuclides contained in each container, the masses of U–233, U–235, and plutonium in special nuclear material, and the masses of uranium and thorium in source material. For discrete waste types (i.e., activated materials, contaminated equipment, mechanical filters, sealed source/devices, and wastes in solidification/stabilization media), the identities and activities of individual radionuclides associated with or contained on these waste types within a disposal container shall be reported;

11. The total radioactivity within each container; and

12. For wastes consigned to a disposal facility, the classification of the waste pursuant to § 61.55 of this chapter. Waste not meeting the structural stability requirements of § 61.56(b) of this chapter must be identified.

D. Uncontainerized Waste Information

The shipper of the radioactive waste shall provide the following information on the uniform manifest regarding a waste shipment delivered without a disposal container:

1. The approximate volume and weight of the waste;

2. A physical and chemical description of the waste;

3. The total weight percentage of chelating agent if the chelating agent exceeds 0.1% by weight, plus the identity of the principal chelating agent;

4. For waste consigned to a disposal facility, the classification of the waste pursuant to § 61.55 of this chapter. Waste not meeting the structural stability requirements of § 61.56(b) of this chapter must be identified;

5. The identities and activities of individual radionuclides contained in the waste, the masses of U–233, U–235, and plutonium in special nuclear material, and the masses of uranium and thorium in source material; and

6. For wastes consigned to a disposal facility, the maximum radiation levels at the surface of the waste.

E. Multi-Generator Disposal Container Information

This section applies to disposal containers enclosing mixtures of waste originating from different generators. (Note: The origin of the LLW resulting from a processor's activities may be attributable to one or more ''generators'' (including ''waste generators'') as defined in this part). It also applies to mixtures of wastes shipped in an uncontainerized form, for which portions of the mixture within the shipment originate from different generators.

1. For homogeneous mixtures of waste, such as incinerator ash, provide the waste description applicable to the mixture and the volume of the waste attributed to each generator.

2. For heterogeneous mixtures of waste, such as the combined products from a large compactor, identify each generator contributing waste to the disposal container, and, for discrete waste types (i.e., activated materials, contaminated equipment, mechanical filters, sealed source/devices, and wastes in solidification/stabilization media), the identities and activities of individual radionuclides contained on these waste types within the disposal container. For each generator, provide the following:

(a) The volume of waste within the disposal container;

(b) A physical and chemical description of the waste, including the solidification agent, if any;

(c) The total weight percentage of chelating agents for any disposal container containing more than 0.1% chelating agent by weight, plus the identity of the principal chelating agent;

(d) The sorbing or solidification media, if any, and the identity of the solidification media vendor and brand name if the media is claimed to meet stability requirements in 10 CFR 61.56(b); and

(e) Radionuclide identities and activities contained in the waste, the masses of U–233, U–235, and plutonium in special nuclear material, and the masses of uranium and thorium in source material if contained in the waste.

II. Certification

An authorized representative of the waste generator, processor, or collector shall certify by signing and dating the shipment manifest that the transported materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation and the Commission. A collector in signing the certification is certifying that nothing has been done to the collected waste which would invalidate the waste generator's certification.

III. Control and Tracking

A. Any licensee who transfers radioactive waste to a land disposal facility or a licensed waste collector shall comply with the requirements in paragraphs A.1 through 9 of this section. Any licensee who transfers waste to a licensed waste processor for waste treatment or repackaging shall comply with the requirements of paragraphs A.4 through 9 of this section. A licensee shall:

1. Prepare all wastes so that the waste is classified according to § 61.55 and meets the waste characteristics requirements in § 61.56 of this chapter;

2. Label each disposal container (or transport package if potential radiation hazards preclude labeling of the individual disposal container) of waste to identify whether it is Class A waste, Class B waste, Class C waste, or greater then Class C waste, in accordance with § 61.55 of this chapter;

3. Conduct a quality assurance program to assure compliance with §§ 61.55 and 61.56 of this chapter (the program must include management evaluation of audits);

4. Prepare the NRC Uniform Low-Level Radioactive Waste Manifest as required by this appendix;

5. Forward a copy or electronically transfer the Uniform Low-Level Radioactive Waste Manifest to the intended consignee so that either (i) receipt of the manifest precedes the LLW shipment or (ii) the manifest is delivered to the consignee with the waste at the time the waste is transferred to the consignee. Using both (i) and (ii) is also acceptable;

6. Include NRC Form 540 (and NRC Form 540A, if required) with the shipment regardless of the option chosen in paragraph A.5 of this section;

7. Receive acknowledgement of the receipt of the shipment in the form of a signed copy of NRC Form 540;

8. Retain a copy of or electronically store the Uniform Low-Level Radioactive Waste Manifest and documentation of acknowledgement of receipt as the record of transfer of licensed material as required by 10 CFR Parts 30, 40, and 70 of this chapter; and

9. For any shipments or any part of a shipment for which acknowledgement of receipt has not been received within the times set forth in this appendix, conduct an investigation in accordance with paragraph E of this appendix.

B. Any waste collector licensee who handles only prepackaged waste shall:

1. Acknowledge receipt of the waste from the shipper within one week of receipt by returning a signed copy of NRC Form 540;

2. Prepare a new manifest to reflect consolidated shipments that meet the requirements of this appendix. The waste collector shall ensure that, for each container of waste in the shipment, the manifest identifies the generator of that container of waste;

3. Forward a copy or electronically transfer the Uniform Low-Level Radioactive Waste Manifest to the intended consignee so that either: (i) Receipt of the manifest precedes the LLW shipment or (ii) the manifest is delivered to the consignee with the waste at the time the waste is transferred to the consignee. Using both (i) and (ii) is also acceptable;

4. Include NRC Form 540 (and NRC Form 540A, if required) with the shipment regardless of the option chosen in paragraph B.3 of this section;

5. Receive acknowledgement of the receipt of the shipment in the form of a signed copy of NRC Form 540;

6. Retain a copy of or electronically store the Uniform Low-Level Radioactive Waste Manifest and documentation of acknowledgement of receipt as the record of transfer of licensed material as required by 10 CFR parts 30, 40, and 70 of this chapter;

7. For any shipments or any part of a shipment for which acknowledgement of receipt has not been received within the times set forth in this appendix, conduct an investigation in accordance with paragraph E of this appendix; and

8. Notify the shipper and the Administrator of the nearest Commission Regional Office listed in appendix D of this part when any shipment, or part of a shipment, has not arrived within 60 days after receipt of an advance manifest, unless notified by the shipper that the shipment has been cancelled.

C. Any licensed waste processor who treats or repackages waste shall:

1. Acknowledge receipt of the waste from the shipper within one week of receipt by returning a signed copy of NRC Form 540;

2. Prepare a new manifest that meets the requirements of this appendix. Preparation of the new manifest reflects that the processor is responsible for meeting these requirements. For each container of waste in the shipment, the manifest shall identify the waste generators, the preprocessed waste volume, and the other information as required in paragraph I.E. of this appendix;

3. Prepare all wastes so that the waste is classified according to § 61.55 of this chapter and meets the waste characteristics requirements in § 61.56 of this chapter;

4. Label each package of waste to identify whether it is Class A waste, Class B waste, or Class C waste, in accordance with §§ 61.55 and 61.57 of this chapter;

5. Conduct a quality assurance program to assure compliance with §§ 61.55 and 61.56 of this chapter (the program shall include management evaluation of audits);

6. Forward a copy or electronically transfer the Uniform Low-Level Radioactive Waste Manifest to the intended consignee so that either: (i) Receipt of the manifest precedes the LLW shipment or (ii) the manifest is delivered to the consignee with the waste at the time the waste is transferred to the consignee. Using both (i) and (ii) is also acceptable;

7. Include NRC Form 540 (and NRC Form 540A, if required) with the shipment regardless of the option chosen in paragraph C.6 of this section;

8. Receive acknowledgement of the receipt of the shipment in the form of a signed copy of NRC Form 540;

9. Retain a copy of or electronically store the Uniform Low-Level Radioactive Waste Manifest and documentation of acknowledgement of receipt as the record of transfer of licensed material as required by 10 CFR parts 30, 40, and 70 of this chapter;

10. For any shipment or any part of a shipment for which acknowledgement of receipt has not been received within the times set forth in this appendix, conduct an investigation in accordance with paragraph E of this appendix; and

11. Notify the shipper and the Administrator of the nearest Commission Regional Office listed in appendix D of this part when any shipment, or part of a shipment, has not arrived within 60 days after receipt of an advance manifest, unless notified by the shipper that the shipment has been cancelled.

D. The land disposal facility operator shall:

1. Acknowledge receipt of the waste within one week of receipt by returning, as a minimum, a signed copy of NRC Form 540 to the shipper. The shipper to be notified is the licensee who last possessed the waste and transferred the waste to the operator. If any discrepancy exists between materials listed on the Uniform Low-Level Radioactive Waste Manifest and materials received, copies or electronic transfer of the affected forms must be returned indicating the discrepancy;

2. Maintain copies of all completed manifests and electronically store the information required by 10 CFR 61.80(l) until the Commission terminates the license; and

3. Notify the shipper and the Administrator of the nearest Commission Regional Office listed in appendix D of this part when any shipment, or part of a shipment, has not arrived within 60 days after receipt of an advance manifest, unless notified by the shipper that the shipment has been cancelled.

PART 61—LICENSING REQUIREMENTS FOR LAND DISPOSAL OF RADIOACTIVE WASTE

6. The authority citation for part 61 continues to read as follows:

Authority: Secs. 53, 57, 62, 63, 65, 81, 161, 182, 183, 68 Stat. 930, 932, 933, 935, 948, 953, 954, as amended (42 U.S.C. 2073, 2077, 2092, 2093, 2095, 2111, 2201, 2232, 2233); secs. 202, 206, 88 Stat. 1244, 1246 (42 U.S.C. 5842, 5846); secs. 10 and 14, Pub. L. 95–601, 92 Stat. 2951 (42 U.S.C. 2021a and 5851) and Pub. L. 102–486, sec. 2902, 106 Stat. 3123 (42 U.S.C. 5851).

7. Section 61.12 is amended by adding paragraph (n) to read as follows:

§ 61.12 Specific technical information.

* * * * *

(n) A description of the facility electronic recordkeeping system as required in § 61.80.

8. Section 61.80 is amended by revising paragraph (f) and (i)(1), and adding paragraph (l) to read as follows:

§ 61.80 Maintenance of records, reports, and transfers.

* * * * *

(f) Following receipt and acceptance of a shipment of radioactive waste, the licensee shall record the date that the shipment is received at the disposal facility, the date of disposal of the waste, a traceable shipment manifest number, a description of any engineered barrier or structural overpack provided for disposal of the waste, the location of disposal at the disposal site, the containment integrity of the waste disposal containers as received, any discrepancies between materials listed on the manifest and those received, the volume of any pallets, bracing, or other shipping or onsite generated materials that are contaminated, and are disposed of as contaminated or suspect materials, and any evidence of leaking or damaged disposal containers or radiation or contamination levels in excess of limits specified in Department of Transportation and Commission regulations. The licensee shall briefly describe any repackaging operations of any of the disposal containers included in the shipment, plus any other information required by the Commission as a license condition. The licensee shall retain these records until the Commission transfers or terminates the license that authorizes the activities described in this section.

* * * * *

(i)(1) Each licensee authorized to dispose of waste materials received from other persons, pursuant to this part, shall submit annual reports to the appropriate Commission regional office shown in Appendix D to 10 CFR part 20, with copies to the Director, Division of Waste Management, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555. Reports must be submitted by the end of the first calendar quarter of each year for the preceding year.

* * * * *

(l) In addition to the other requirements of this section, the licensee shall store, or have stored, manifest and other information pertaining to receipt and disposal of

radioactive waste in an electronic recordkeeping system.

(1) The manifest information that must be electronically stored is—

(i) That required in 10 CFR part 20, appendix G, with the exception of shipper and carrier telephone numbers and shipper and consignee certifications; and

(ii) That information required in paragraph (f) of this section.

(2) As specified in facility license conditions, the licensee shall report the stored information, or subsets of this information, on a computer-readable medium.

Dated at Rockville, MD this 20th day of March 1995.

For the Nuclear Regulatory Commission.

John C. Hoyle,

Secretary of the Commission.

[FR Doc. 95–7302 Filed 3–24–95; 8:45 am]

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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 93–CE–35–AD; Amendment 39–9180; AD 93–15–02 R1]

Airworthiness Directives; Fairchild Aircraft SA226 and SA227 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule; request for comments.

SUMMARY: This amendment revises Airworthiness Directive (AD) 93–15–02, which requires the following on Fairchild Aircraft SA226 and SA227 series airplanes that are equipped with a certain Simmonds-Precision pitch trim actuator: repetitively measuring the freeplay of the pitch trim actuator and repetitively inspecting the actuator for rod slippage; immediately replacing any actuator if certain freeplay limitations are not met or rod slippage is evident; and eventually replacing the actuator regardless of the inspection results. This action maintains these requirements, but reduces the hours time-in-service (TIS) before the initial inspection is required, and shortens both the time period between repetitive inspections and the actuator replacement compliance time (unless the replacement actuator is new or if the nut tube assemblies have been replaced during overhaul). An in-flight incident where the referenced actuator on one of the affected airplanes failed after accomplishment of the 5,000-hour initial inspection (with satisfactory results) prompted this action. The actions specified by this AD are intended to prevent the horizontal stabilizer from going nose-down or jamming because of pitch trim actuator failure, which could result in loss of control of the airplane.

DATES: Effective April 17, 1995.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of April 17, 1995.

Comments for inclusion in the Rules Docket must be received on or before June 5, 1995.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Central Region, Office of the Assistant Chief Counsel, Attention: Rules Docket 93–CE–35–AD, Room 1558, 601 E. 12th Street, Kansas City, Missouri 64106.

Service information that applies to this AD may be obtained from Field Support Engineering, Fairchild Aircraft, P.O. Box 790490, San Antonio, Texas 78279–0490; telephone (210) 824–9421; facsimile (210) 820–8609. This information may also be examined at the FAA, Room 1558, 601 E. 12th Street, Kansas City, Missouri 64106.

FOR FURTHER INFORMATION CONTACT: Mr. Werner Koch, Aerospace Engineer, FAA, Airplane Certification Office, 2601 Meacham Boulevard, Fort Worth, Texas 76193–0150; telephone (817) 222–5150; facsimile (817) 222–5959.

SUPPLEMENTARY INFORMATION: AD 93–15–02, Amendment 39–8648 (59 FR 40734, July 30, 1993), currently requires the following on Fairchild Aircraft SA226 and SA227 series airplanes that are equipped with a Simmonds-Precision pitch trim actuator, part number (P/N) DL5040M5: repetitively measuring the freeplay of the pitch trim actuator and repetitively inspecting the actuator for rod slippage; and, if certain freeplay limitations are not met or rod slippage is evident, replacing any actuator with a new actuator of the same part number or with a part of improved design, P/N 27–19008–01 or 27–19008–02. The requirements of the AD will no longer apply when an actuator of improved design is installed. Accomplishment of the freeplay measurements and inspections is in accordance with the instructions in Fairchild Aircraft SA226 Series Service Letter (SL) 226–SL–005, and Fairchild Aircraft SA227 Series SL 227–SL–011, both Issued: April 8, 1993, Revised: April 28, 1993, as applicable. Accomplishment of the pitch trim actuator replacement is in accordance with the applicable maintenance manual.

AD 93–15–02 was issued based on reports of two in-flight incidents where the above-referenced pitch trim actuator failed on Fairchild Aircraft SA226 and SA227 series airplanes. In one case, the horizontal stabilizer went full-nose down, and in the other instance, the horizontal stabilizer jammed. Fortunately, the pilots were able to safely land in both of these instances. Upon removal and inspection of each of these pitch trim actuators, fatigued barrel nuts were found and the actuator usage time was well over 5,000 hours TIS.

Since AD 93–15–02 became effective, the FAA received a report of an in-flight incident where the referenced actuator on one of the affected airplanes failed. The airplane operator had accomplished the 5,000-hour TIS initial inspection (with satisfactory results), but had not reached the 6,500-hour TIS mandatory replacement threshold.

Fairchild Aircraft has revised SA226 Series SL 226–SL–005 and SA227 Series SL 227–SL–011 to reflect the revised compliance times and a change to the inspection procedure. The revision date of this service information is March 2, 1995.

After examining the circumstances and reviewing all available information related to the incident described above, the FAA has determined that AD 93–15–02 should be revised by (1) reducing the number of hours TIS before the initial inspection is required; and (2) shortening both the time period between repetitive inspections and the actuator replacement compliance time, unless the replacement actuator is new or if the tube nut assemblies have been replaced during overhaul.

Since an unsafe condition has been identified that is likely to exist or develop in other Fairchild Aircraft SA226 and SA227 series airplanes of the same type design that are equipped with a Simmonds-Precision pitch trim actuator, P/N DL5040M5, this AD requires the same repetitive inspections and actuator replacement as AD 93–15–02, but revises the compliance times as previously specified. The inspections will be accomplished in accordance with the instructions in Fairchild Aircraft SA226 Series Service Letter (SL) 226–SL–005, and Fairchild Aircraft SA227 Series SL 227–SL–011, both Issued: April 8, 1993, Revised: March 2, 1995, as applicable.

Since a situation exists that requires the immediate adoption of this regulation, it is found that notice and opportunity for public prior comment