

## DESCRIPTION OF REQUIREMENTS UNDER 10 CFR PART 20 AS COVERED UNDER OMB CLEARANCE 3150-0013

Section 20.1003 defines a declared pregnant woman as someone who has declared in writing that she is pregnant. Licensees are required to maintain records of doses to the embryo/fetus of the declared pregnant woman in paragraph 20.2106. Licensees are not required to maintain the declaration itself; therefore, this does not constitute a separate recordkeeping requirement.

Section 20.1101 requires licensees to develop, document and implement radiation protection programs; establish radiation protection procedures; and perform program reviews periodically. This is necessary to ensure the health and safety of the workers and the general public. The burden for recordkeeping requirements is contained in Section 20.2102.

Section 20.1202 sets limits for occupational exposures. The recordkeeping requirements for this section are contained in Section 20.2106. Dose limits are necessary to ensure the health and safety of the workers and members of the public. The reporting requirements for this section are contained in Section 20.2206. Both requirements are covered under a separate OMB clearance for NRC Forms 4 and 5.

Section 20.1203 requires licensees to determine dose from airborne radioactive material. This is necessary to ensure compliance with dose limits. The recordkeeping and reporting requirements for this section are contained in Sections 20.2106 and 20.2206 respectively and are covered under a separate OMB clearance for NRC Forms 4 and 5.

Section 20.1204 requires licensees to make measurements as needed to assess intakes of occupationally exposed individuals. The recordkeeping and reporting requirements for this section are contained in Sections 20.2106 and 20.2206 respectively and are covered under a separate OMB clearance for NRC Forms 4 and 5.

Section 20.1206 sets limits for planned special exposures. This is necessary to ensure the health and safety of workers. The recordkeeping and reporting requirements for this section are contained in Sections 20.2105 and 20.2204 respectively.

Section 20.1208 sets limits for doses to an embryo/fetus of a declared pregnant worker. This is necessary to protect the health and safety of the unborn. The recordkeeping requirement for this section is contained in Paragraph 20.2106(e).

Paragraph 20.1301(c) allows licensees to apply to the Commission to increase the dose limit for the general public from 0.1 rem/yr to up to 0.5 rem/yr. This is needed to ensure that a temporary deviation from the established dose limits adequately protects the health and safety of workers and the public.

Section 20.1302(c) allows licensees to apply to the Commission for permission to use alternate effluent release concentration limits based on actual physical and chemical characteristics of the effluent released. This is needed to ensure that if

alternate values are used by licensees, that they are adequate to protect the health and safety of the public.

Section 20.1403(a)-(c) and (e)(1) require that, if restrictions on future use of the site are proposed, the information the license must provide is, as follows: (1) further reductions in residual radioactivity necessary to release the site for unrestricted use would result in net public or environmental harm or were not being made because the residual levels associated with restricted conditions are ALARA; (2) adequate provisions for legally enforceable institutional controls provide reasonable assurance that the total effective dose equivalent (TEDE) from residual radioactivity distinguishable from background to the average member of the critical group will not exceed 25 mrem per year; (3) provisions have been made for sufficient financial assurance to enable an independent third party to assume and carry out responsibility for any necessary control and maintenance of the site; and (4) residual radioactivity at the site has been reduced so that if the institutional controls were no longer in effect, there is reasonable assurance that the TEDE from background to the average member of the critical group is as low as reasonably achievable and would not exceed 100 mrem per year. Section 1403(e)(2) requires that, as an option to the 100 mrem per year level, a level of 500 mrem/year may be allowed if the licensee demonstrates that further reductions in residual radioactivity necessary to comply with the 100 mrem/year value are not technically achievable, would be prohibitively expensive, or would result in net public or environmental harm, that provisions exist for durable institutional controls, and that there is sufficient financial assurance to enable a responsible government entity, or independent third party, both to carry out periodic rechecks of the site no less frequently than every 5 years and to assume and carry out responsibilities for any necessary control and maintenance of those controls.

Section 20.1403(d) requires that a decommissioning plan or License Termination Plan (LTP) be submitted by the licensee indicating the licensee's intent to decommission in accordance with 10 CFR Parts 30.36(d), 40.42(d), 50.82(a) and (b), 70.38(d), or 72.54, and specifying that the licensee intends to decommission by restricting use of the site, and that the decommissioning plan or LTP document how the advice of individuals or institutions in the community who may be affected by the decommissioning has been sought and incorporated, as appropriate, following analysis of that advice. In seeking advice on issues associated with restricted use, licensees are required to provide for participation by a broad cross section of community interests who may be affected by the decommissioning, provide an opportunity for comprehensive, collective discussion on the issues by the participants represented, and prepare a publicly available summary of the results of all such discussions, including a description of the individual viewpoints of the participants on the issues and the extent of agreement and disagreement among the participants on the issues.

Section 20.1404 requires that, if the licensee proposes to use alternate criteria, the information the license must provide is as follows: (1) an analysis of possible sources of exposure which provides assurance that public health and safety would continue to be protected, and that it is unlikely that the dose from all man-made sources combined, other than medical, would be more than the 1 mSv/y (100 mrem/y) limit of Subpart D of 10 CFR Part 20; (2) an indication that restrictions on site use according to the provisions of Section 20.1403 have been employed to the

extent practical to minimize exposures at the site; (3) doses have been reduced to ALARA levels; and (4) a decommissioning plan or LTP has been submitted indicating the licensee's intent to decommission in accordance with 10 CFR Parts 30.36(d), 40.42(d), 50.82(a) and (b), 70.38(d), or 72.54, and specifying that the licensee proposes to decommission by use of alternate criteria, and documenting in the decommissioning plan or LTP how the advice of individuals and institutions in the community who may be affected by the decommissioning has been sought and incorporated, as appropriate, following analysis of that advice.

Section 20.1406 requires applicants for licenses to describe in the application how facility design and procedures for operation will minimize contamination of the facility and the environment, facilitate eventual decommissioning, and minimize the generation of radioactive waste.

Section 20.1501 requires licensees to conduct surveys and to monitor radiological conditions. These are necessary to ensure that the licensee is aware of all the radiological conditions that could contribute to dose in order to comply with dose limits. The recordkeeping requirements for this section are contained in Section 20.2103.

Paragraph 20.1601(c) allows licensees to apply to the Commission for approval of alternate methods for control of access to high radiation areas. This is needed to ensure that any proposed deviation from established mechanisms adequately protects the health and safety of workers and the public.

Paragraph 20.1703(b) allows licensees to apply to the Commission for permission to use respiratory protection equipment that has not been approved for use by NIOSH/MSHA. Records of this application and its approval are required to ensure that licensee practices are in compliance with regulations.

Paragraph 20.1703(c)(2) requires licensees to perform surveys and bioassay as needed to evaluate actual intakes. The recordkeeping requirement for this paragraph is contained in Section 20.2103. These records are needed so that NRC can ensure, through inspection, that the licensee is adequately protecting the health and safety of workers.

Paragraph 20.1703(c)(4) requires licensees to have written procedures regarding the proper issue and use of respiratory protection equipment. This is needed to ensure, through inspection, that these devices are used consistent with the goal to maintain occupational doses ALARA and in a safe manner.

Paragraph 20.1705(a)&(b) allows licensees to apply to the Commission for permission to apply protection factors higher than those in Appendix A for the purpose of calculating exposures. Records of this application and its approval are required to ensure that respiratory protective equipment is being used in a manner that will protect the health and safety of workers.

Section 20.1901(b)&(c) allows licensees to label sources, source holders, or device components containing sources of licensed materials and to provide additional information, as appropriate, to make individuals aware of potential radiation exposures to minimize exposure.

Section 20.1904 requires that labels used to identify radioactive material containers use specified formats and wording. This is needed to minimize potential doses or releases of radioactive material due to worker confusion.

Paragraph 20.1905(e) requires that licensees maintain records of radioactive material containers that cannot be labeled in accordance with this Part due to special circumstances for the life of the container. This is necessary to ensure that radioactive material is properly monitored at all times.

Paragraph 20.1906(d) requires licensees to notify the carrier and the NRC regional office upon receipt of a radioactive material package which is damaged, contaminated, or where radiation levels exceed limits. This is needed so that NRC can, through inspection, ensure that shipment procedures and practices are adequate to protect the health and safety of workers and the public.

Paragraph 20.1906(e) requires licensees to develop and maintain procedures regarding radioactive material shipment. This is needed to ensure that the packages containing radioactive material will be opened in a manner consistent with the protection of the health and safety of the public and workers.

Section 20.2002 allows licensees to apply to the Commission for approval of procedures not otherwise allowed in this Part regarding the disposal of licensed material. The application must include:

(a) a description of the waste, (b) an environmental analysis, (c) the location(s) of other potentially affected facilities and (d) analyses and procedures to ensure that doses are ALARA.

This is needed to ensure that licensed material is handled in a manner that will adequately protect the health and safety of the public and workers.

Section 20.2004 requires Part 50 licensees who incinerate waste oils onsite to report any changes or additions to the information supplied under Sections 50.34 and 50.34a, and to follow the procedures of Section 50.59 with respect to such changes. This is needed so that NRC can assure that radioactive effluents associated with incineration of waste oils conform to the requirements of Appendix I to 10 CFR Part 50.

Paragraph 20.2005(c) requires licensees to maintain records of waste disposal. The recordkeeping requirement for this section is contained in Section 20.2108. This is needed to allow NRC to ensure, through inspection, that waste disposal is in accordance with NRC regulations.

Paragraph 20.2006(a) requires that licensees establish a manifest tracking system to control transfers of low-level radioactive waste intended for disposal at a land disposal facility so that NRC can inspect to ensure that adequate control of this material exists as specified in

Appendix G to §§ 20.1001-20.2402. Paragraph 20.2006(b) requires that licensees use NRC's Uniform Low-level Radioactive Waste Manifest and transfer this

information to the intended consignee, as specified in Section I of Appendix G to §§ 20.1001-20.2402. Paragraph 20.2006 (c) requires a certification by the waste generator, processor, or collector as specified in Section II of Appendix G to §§ 20.1001-20.2402.

The information in Paragraphs 20.2006 (a)-(c) is needed to control shipments and disposal of Low Level Waste (LLW) to insure public health and safety and to protect the environment. The specific requirements are discussed in more detail in Appendix G.

Paragraph 20.2102(a) requires licensees to maintain records of the radiation protection program, including ALARA provisions and program reviews. This is needed so that NRC can ensure, through inspection, that the health and safety of workers and the public is adequately protected.

Paragraph 20.2102(b) requires licensees to retain records of radiation protection programs until the Commission terminates the license. This is needed so that workers will have ready access to radiation protection programs and procedures as long as the facility is in operation. This paragraph further requires that licensees retain records of radiation protection program reviews for 3 years. This is needed so that adequate records will exist at the time of inspection to determine if the radiation protection program adequately protects the health and safety of workers and the public.

Paragraph 20.2103(a) requires licensees to maintain records showing the results of surveys and calibrations required by this Part. This is needed to ensure, through inspection, that surveys required for adequate radiation protection have been made.

Paragraph 20.2103(b) requires licensees to maintain records required by Paragraph 20.2103(a) for 3 years, unless they form the basis of dose estimates in which case they must be maintained for as long as the facility is licensed by NRC. This is needed to ensure that adequate records exist at the time of routine inspection to support an assertion that adequate radiation surveys have been performed and to ensure that adequate records exist to reconstruct a worker's dose estimate at any time during the period in which the facility is licensed by NRC.

Section 20.2104 requires licensees to attempt to obtain records of prior occupational exposures prior to authorizing entry into restricted or controlled areas by individuals for whom personnel radiation monitoring is required. This recordkeeping requirement is covered in a separate OMB clearance for NRC Form 4 (OMB clearance number 3150-0005).

Section 20.2105 requires that records of planned special exposures be maintained until the Commission terminates the license since they form the basis for assessing dose to an individual.

Section 20.2106 requires that results of individual monitoring be recorded and maintained until the Commission terminates the license. This recordkeeping requirement is covered in a separate OMB clearance for NRC Form 5 (OMB clearance number 3150-0006).

Paragraph 20.2107(a) requires information on the identity and quantity of radionuclides released by a licensee in effluents to unrestricted areas. This is needed to permit assessment of the dose to the public that might result from these radionuclide releases in order to confirm compliance with dose limits. Paragraph 20.2107(b) requires that these records be maintained until the license is terminated by the Commission as they form the basis for estimating dose.

Paragraph 20.2108(a) requires records of waste disposal to permit (1) routine inspection for compliance with the provisions of the sections in Part 20 related to waste disposal, (2) inspection against constraints on the kinds and quantities of licensed material in the possession of the licensee at any given time, and (3) assessment of the kinds and quantities of radioactive material disposed of by various methods and the potential dose to the public. Paragraph 20.2108(b) requires that these records be retained until the termination of the license by the Commission.

Section 20.2110 establishes the quality, format and retention of records required by this Part. There are no additional recordkeeping or reporting requirements associated with this section. This only establishes a common format to minimize confusion for workers moving from licensee to licensee in the course of their employment and to facilitate inspection.

Paragraph 20.2201(a) requires licensees to report any theft or loss of licensed material by telephone immediately or in writing within 30 days, dependent upon the potential risk to the health and safety of the public associated with the missing radioactive material. This is needed so that prompt corrective action can be taken.

Paragraph 20.2201(b) requires licensees to follow up telephone reports with written reports of the incident within 30 days of the telephone report. This is needed to ensure that proper follow-up actions were taken by the licensee.

Paragraph 20.2201(d) requires that any additional information relevant to the loss of radioactive material, discovered subsequent to the written report, be submitted within 30 days of discovery. This is needed to ensure that NRC actions taken to protect the health and safety of workers and the public are based on complete information regarding the event.

Paragraph 20.2202(a) requires that the licensee immediately notify NRC upon becoming aware of specific incidents causing substantial exposures to or release of licensed material. This is needed so that NRC can identify possible generic problems and notify other licensees.

Paragraph 20.2202(b) requires that the licensee notify NRC within 24 hours upon becoming aware of specific incidents involving licensed material. This is needed to allow early evaluation of the incident by NRC to ensure that appropriate action can be taken to protect against further hazard to life or property.

Paragraph 20.2203(a) establishes that, in addition to the notification required by Section 20.2202, each licensee shall submit a written report within 30 days after learning of specific incidents involving doses or concentrations of radioactive materials in excess of limits. This is needed to ensure that there are appropriate follow-up actions to avoid a recurrence.

Paragraph 20.2203(b) contains the requirements for the content of reports required by Paragraph 20.2203(a).

Section 20.2204 requires a report to the NRC within 30 days after a planned special exposure. This is needed to ensure that the use of planned special exposures is in accordance with requirements.

Section 20.2205 establishes that when a licensee is required, pursuant to Sections 20.2203, 20.2204, or 20.2206 to report to the Commission any exposure of an identified occupational exposed individual, the licensee must also provide a copy of the report submitted to the Commission to the individual at the same time.

Paragraphs 20.2206(b)&(c) require licensees to report the results of individual monitoring annually to NRC on NRC Form 5 or equivalent electronic media. These requirements are covered under a separate OMB clearance for NRC Form 5 (OMB clearance number 3150-0006).

Section 20.2301 allows licensees to apply to the Commission for exemption from this rule.

Appendix G, Section I requires that waste generators, collectors, and processors of LLW intended for ultimate disposal at a licensed low-level radioactive waste facility must prepare a manifest on NRC Forms 540, 541, and 542 as appropriate. The justification for the information collection requirements in these forms are covered in a separate OMB clearance for NRC Forms 540, 541, and 542 (OMB clearance numbers 3150-0164, 3150-0166, 3150-0165).

This section specifies the specific data to meet NRC manifest requirements (i.e., shipper, date, total radioactivity, container identification and description, physical and chemical description of the waste, chelating agents, classification of the waste, radiation levels, etc). This information, and its electronic submittal to the NRC (discussed in Section 61.80(l)), will enhance the ability of NRC and State regulatory agencies to control and safely regulate disposal of LLW. Without this information the ability for the licensee and the regulatory agencies to assess the site's performance would be severely impacted and thus our responsibility to protect public health and safety and the environment could not be adequately accomplished.

Appendix G, Section II requires that all generators, processors, and collectors certify, by signing and dating the shipment manifest, that the shipment is properly classified, described, packaged, marked and labeled to meet Department of Transportation, NRC, and State requirements. This is necessary to insure that the proper company official verifies that appropriate requirements have been met prior to shipment.

Appendix G, Section III, Paragraphs (A)-(D) provides the specific manifesting procedures for generators, processors, collectors, and the land disposal facility operators during shipment and receipt of the LLW. This includes classification of and labeling the LLW, conducting a quality assurance program to assure compliance with §§ 61.55 and 61.56, the requirement to use the NRC Uniform Low-Level Radioactive Waste Manifest, requirements to provide the intended consignee the manifest information and acknowledgment of its receipt and procedures in the event

acknowledgment is not received, and storage of manifest data. These procedures are necessary to insure that LLW is tracked from generator shipment to ultimate disposal and that no LLW is unaccounted for. A quality assurance program is necessary to ensure companies are properly following the procedures. Acknowledgment of receipt is necessary to ensure investigations are undertaken when LLW is not where it is supposed to be. Storage of manifest information is necessary to conduct audits and in the event that any discrepancies or other problems needed to be investigated.

Sections A.5 (generators), B.3 (collectors), and C.6 (processors) authorize that manifest data may be transmitted electronically instead of by hard copy. This is a voluntary option designed to allow the manifest system to work more effectively and efficiently.

Appendix G, Section III, Paragraph (E) requires investigations and reporting to NRC when LLW has not been accounted for. This information is needed to identify and locate missing LLW and to identify improper procedures.