safety to protect the public health," and what process the Administrator should follow in making that determination in a rulemaking proceeding under Section 112(d)(9). The Conference Report states that the "ample margin of safety" finding under Section 112(d)(9) is the same "ample margin of safety" that governed the development of standards promulgated under Section 112 prior to the 1990 amendments. The conferees also made it clear that the process the Administrator is expected to follow in making any such determination under Section 112(d)(9) is the process "required under the decision of the U.S. Court of Appeals in NRDC v. EPA, 824 F.2d 1146 (D.C. Cir 1987)(Vinyl Chloride)." H.R. Rep. 952, 101st Cong. 2d Sess. 339 (1990).

#### C. 1992 Proposal to Rescind Subpart I for Licensees Other Than Nuclear Power Reactors

After the adoption of Section 112(d)(9), EPA reviewed the information available to the Agency, including the information provided during the Agency's reconsideration of subpart I, to decide whether it could determine for particular categories of licensees that the NRC regulatory program protects public health with an ample margin of safety. EPA's initial analysis focused on two general issues: (1) Whether the NRC regulatory program in practice results in sufficiently low doses to protect the public health with an ample margin of safety; and (2) whether the NRC program is sufficiently comprehensive and thorough and administered in a manner which will continue to protect public health in the future.

After reviewing the available information for licensees other than nuclear power reactors, EPA concluded that it lacked sufficient information concerning actual emissions from these facilities to make the substantive determination contemplated by Section 112(d)(9). Accordingly, EPA undertook an extensive study in order to determine the doses resulting from radionuclide emissions at these facilities. EPA surveyed a randomly selected subset of all licensed facilities, as well as a group of "targeted" facilities chosen because of an expectation that they would have higher emissions. See Background Information Document, "NESHAPs Rulemaking on Nuclear Regulatory Commission and Agreement State Licensees Other Than Nuclear Power Reactors" EPA430-R-92-011 (November 1992), included in the docket for this rulemaking.

EPA evaluated the results of its study of NRC and Agreement State licensees other than nuclear power reactors using the COMPLY computer program. None of the facilities evaluated appeared to cause a dose exceeding the 10 mrem/year level established by subpart I. When the results of the survey were statistically extrapolated to the entire population of NRC and Agreement State licensees, EPA concluded that virtually all of the facilities would cause doses to members of the public which are below 10 mrem/year.

After reviewing the then current NRC regulatory program, and considering the likely effect of revisions of the NRC program which were pending at that time and of additional measures which NRC had agreed to adopt pursuant to a Memorandum of Understanding with EPA, EPA proposed to rescind subpart I for NRC and Agreement State licensees other than nuclear power reactors on December 1, 1992. See 57 FR 56877 (December 1, 1992). It is that pending rulemaking proposal which is the subject of today's notice inviting supplementary comment.

# II. Events Subsequent to the 1992 Proposal

### A. Changes to NRC Regulatory Program After the 1992 Proposal

After the Agency published its 1992 proposal to rescind subpart I, major revisions to NRC's regulations at 10 CFR Part 20 became effective. The revised rule (effective January 1994) implements 1987 Presidential guidance on occupational radiation protection and the recommendations of scientific organizations to establish risk-based limits and a system of dose limitation in accordance with the guidance published by the International Commission on Radiation Protection (ICRP). In adopting the risk-based methodology, the NRC reduced the allowable dose limit for members of the public from 500 mrem/ yr ede to 100 mrem/yr ede from all pathways. Of the 100 mrem/yr ede, NRC allows only 50 mrem/yr ede by the air pathway, according to their Derived Air Concentration tables, which is then subject to further reduction under the As Low As Reasonably Achievable (ALARA) provisions.

Another significant revision of Part 20 codified the ALARA principle, which previously was only general guidance for NRC licensees other than nuclear power reactors. All licensees must now conduct operations in a manner that keeps doses to both workers and members of the public "As Low as Reasonably Achievable" (ALARA). This is defined to mean:

Making every reasonable effort to maintain exposures to radiation as far below the dose limits in this part as is practical consistent with the purpose for which the licensed activity is undertaken, taking into account the state of technology, the economics of improvements in relation to state of technology, the economics of improvements in relation to benefits to the public health and safety, and other societal and socioeconomic considerations, and in relation to utilization of nuclear energy and licensed materials in the public interest.

10 CFR 20.1003, 56 FR 23360, 23392 (May 21, 1991).

# B. Memorandum of Understanding (MOU) Between EPA and NRC

In addition to promulgating the proposed changes to 10 CFR Part 20, NRC committed in a Memorandum of Understanding (MOU) executed on September 4, 1992 to take several additional actions to implement ALARA requirements for NRC licensees other than nuclear power reactors. This MOU was published on December 22, 1992, at 57 FR 60778.

Although the NRC regulatory program contained dose limits that were higher than those established by subpart I, the actual operation of the existing NRC program had resulted in lower doses to the public than those which would be allowed under subpart I. The steps established by the MOU reflected an expectation by EPA that new mandatory ALARA requirements would operate to constrain future increases in radionuclide emissions by NRC licensees which might otherwise be permissible under the NRC program. Under the provisions of the MOU, NRC agreed to develop and issue a regulatory guide on the design and implementation of a radiation protection program to ensure that doses resulting from effluents from licensed facilities would remain ALARA. NRC agreed that the guide would describe the types of administrative programs and objectives which would be considered acceptable in satisfying the requirements of 10 CFR 20.1101(b), and establish a specific design goal of 10 mrem/y ede to the maximally exposed individual for radionuclide air emissions from affected NRC and Agreement State licensees. NRC finalized Regulatory Guide 8.37. "ALARA Levels for Effluents from Materials Facilities," in July 1993.

# C. EPA Concerns Regarding Basis for Required Statutory Finding Under Section 112(d)(9)

Based on the record compiled as part of its proposal to rescind subpart I for NRC licensees other than nuclear power reactors, EPA was able to conclude that the vast majority of NRC and Agreement State licensees were in compliance with the 10 mrem/yr standard established by