

This directive defines the roles and responsibilities for managing and overseeing NASA's nuclear flight safety activities. It provides the requirements to implement NASA's policy to protect the public, NASA workforce, high-value equipment and property, and the environment from potential harm as a result of NASA activities and operations, by factoring safety as an integral feature of programs, projects, technologies, operations, and facilities.

b. This directive also describes NASA's implementation of Federal requirements under National Security Presidential Memorandum (NSPM)-20, "Presidential Memorandum on Launch of Spacecraft Containing Space Nuclear Systems," dated August 20, 2019, radiological contingency planning (RCP) as a part of broader NASA emergency management activities (see NPD 8710.1 and NPR 8715.2) and other factors, as well as agency-specific activities relating to ensuring safety and mission success for NASA-sponsored payloads containing space nuclear systems (SNS) or other radioactive material (note that these terms are defined in Appendix A).

c. This directive establishes a framework where other requirements, guidance, and processes (e.g., Department of Energy (DOE) nuclear safety and security requirements, U.S. Air and Space Force range safety requirements, NASA payload safety processes) relevant to nuclear flight safety can be implemented in to the overall Safety and Mission Assurance (SMA) process.

## P.2 Applicability

a. This directive is applicable to NASA Headquarters and NASA Centers, including Component Facilities and Technical and Service Support Centers. This directive applies to the Jet Propulsion Laboratory (a Federally-Funded Research and Development Center), other contractors, recipients of grants, cooperative agreements, or other agreements only to the extent specified or referenced in the applicable contracts, grants, or agreements.

b. This directive is applicable to activities involving flight of SNS or other radioactive material for which NASA is the sponsoring agency or that involve the use of NASA personnel and assets for phases of a flight where the SNS or other radioactive material has the potential to affect Earth's biosphere. In some cases, aspects of the NASA nuclear flight safety program may fall under the auspices of another Federal agency, such as in the case of a Federal Aviation Administration (FAA)-issued license for the launch of NASA-provided radioactive material. If applicability of this directive is not clear, NASA personnel will consult with the Nuclear Flight Safety Officer (NFSO) and the Office of the General Counsel to confirm responsibilities for nuclear flight safety.