they are not unusable during a controllable emergency; and
(2) Fuel supply must be protected from hazards.

Subpart F—Operations

SOURCE: Amdt. 193–2, 45 FR 70405, Oct. 23, 1980, unless otherwise noted.

§ 193.2501 Scope.
This subpart prescribes requirements for the operation of LNG facilities.

§ 193.2503 Operating procedures.
Each operator shall follow one or more manuals of written procedures to provide safety in normal operation and in responding to an abnormal operation that would affect safety. The procedures must include provisions for:
(a) Monitoring components or buildings according to the requirements of §193.2507.
(b) Startup and shutdown, including for initial startup, performance testing to demonstrate that components will operate satisfactorily in service.
(c) Recognizing abnormal operating conditions.
(d) Purging and inerting components according to the requirements of §193.2517.
(e) In the case of vaporization, maintaining the vaporization rate, temperature and pressure so that the resultant gas is within limits established for the vaporizer and the downstream piping.
(f) In the case of liquefaction, maintaining temperatures, pressures, pressure differentials and flow rates, as applicable, within their design limits for:
   (1) Boilers;
   (2) Turbines and other prime movers;
   (3) Pumps, compressors, and expanders;
   (4) Purification and regeneration equipment; and
   (5) Equipment within cold boxes.
(g) Cooldown of components according to the requirements of §193.2505.

§ 193.2507 Monitoring operations.
Each component in operation or building in which a hazard to persons or property could exist must be monitored to detect fire or any malfunction or flammable fluid that could cause a hazardous condition. Monitoring must be accomplished by watching or listening from an attended control center for warning alarms, such as gas, temperature, pressure, vacuum, and flow alarms, or by conducting an inspection or test at intervals specified in the operating procedures.

§ 193.2509 Emergency procedures.
(a) Each operator shall determine the types and places of emergencies other than fires that may reasonably be expected to occur at an LNG plant due to operating malfunctions, structural collapse, personnel error, forces of nature, and activities adjacent to the plant.
(b) To adequately handle each type of emergency identified under paragraph (a) of this section and each fire emergency, each operator must follow one or more manuals of written procedures. The procedures must provide for the following:
   (1) Responding to controllable emergencies, including notifying personnel and using equipment appropriate for handling the emergency.
   (2) Recognizing an uncontrollable emergency and taking action to minimize harm to the public and personnel, including prompt notification of appropriate local officials of the emergency and possible need for evacuation of the public in the vicinity of the LNG plant.
   (3) Coordinating with appropriate local officials in preparation of an emergency evacuation plan, which sets...