cable laying, and scientific research. The Administrator will consider the provisions in §970.503 in establishing these restrictions.

### § 970.521 Safety at sea requirements.

The Secretary of the department in which the Coast Guard is operating, in consultation with the Administrator, will require in any license issued under this part, in conformity with principles of international law, that vessels documented under the laws of the United States and used in activities authorized under the license comply with conditions regarding the design, construction, alteration, repair, equipment, operation, manning and maintenance relating to vessel and crew safety and the promotion of safety of life and property at sea. These requirements will be established with reference to subpart H of this part.

# § 970.522 Monitoring requirements.

Each exploration license must require the licensee:

- (a) To allow the Administrator to place appropriate Federal officers or employees as observers aboard vessels used by the licensee in exploration activities to:
- (1) Monitor such activities at such time, and to such extent, as the Administrator deems reasonable and necessary to assess the effectiveness of the terms, conditions, and restrictions of the license; and
- (2) Report to the Administrator whenever such officers or employees have reason to believe there is a failure to comply with such terms, conditions, and restrictions;
- (b) To cooperate with such officers and employees in the performance of monitoring functions; and
- (c) To monitor the environmental effects of the exploration activities in accordance with a monitoring plan approved and issued by the Administrator as license terms, conditions and restrictions, and to submit such information as the Administrator finds to be necessary and appropriate to assess environmental impacts and to develop and evaluate possible methods of mitigating adverse environmental effects. This environmental monitoring plan and reporting will respond to the con-

cerns and procedures discussed in Subpart G of this part.

# § 970.523 Special terms, conditions, and restrictions.

Although the general criteria and standards to be used in establishing terms, conditions, and restrictions for a license are set forth in this part, as referenced in §§ 970.517 through 970.522, the Administrator may impose special terms, conditions, and restrictions for the conservation of natural resources, protection of the environment, or the safety of life and property at sea when required by differing physical and environmental conditions.

### § 970.524 Other Federal requirements.

Pursuant to §970.211, another Federal agency, upon review of an exploration license application submitted under this part, may indicate how terms, conditions, and restrictions might be added to the license, to assure compliance with any law or regulation within that agency's area of responsibility. In response to the intent, reflected in section 103(e) of the Act, to reduce the number of separate actions to satisfy the statutory responsibilities of these agencies, the Administrator may include such terms, conditions, and restrictions in a license.

# Subpart F—Resource Development Concepts

Source: 46 FR 45907, Sept. 15, 1981, unless otherwise noted.

### § 970.600 General.

Several provisions in the Act relate to appropriate mining techniques or mining efficiency. These raise what could be characterized as resource development issues. In particular, under section 103(a)(2)(D) of the Act, the applicant will select the size and location of the area of an exploration plan, which will be approved unless the Administrator finds that the area is not a "logical mining unit." Also, pursuant to section 108 of the Act the applicant's exploration plan and the terms, conditions and restrictions of each license must be designed to ensure diligent development. In addition, for the purpose of conservation of natural resources,

### § 970.601

section 110 of the Act provides that each license is to contain, but only as needed, terms, conditions, and restrictions which have due regard for the prevention of waste and the future opportunity for the commercial recovery of the unrecovered balance of the resources.

### § 970.601 Logical mining unit.

(a) In the case of an exploration license, a logical mining unit is an area of the deep seabed which can be explored under the license, and within the 10-year license period, in an efficient, economical and orderly manner with due regard for conservation and protection of the environment, taking into consideration the resource data, other relevant physical and environmental characteristics, and the state of the technology of the applicant as set forth in the exploration plan. In addition, it must be of sufficient size to allow for intensive exploration.

(b) Approval by the Administrator of a proposed exploration logical mining unit will be based on a case-by-case review of each application. In order to provide a proper basis for this evaluation, the applicant's exploration plan should describe the seabed topography, the location of mineral deposits and the nature of planned equipment and operations. Also, the exploration plan must show the relationship between the area to be explored and the applicant's plans for commercial recovery volume, to the extent projected in the exploration plan.

(c) In delineating an exploration area, the applicant need not include unmineable areas. Thus, the area need not consist of contiguous segments, as long as each segment would be efficiently mineable and the total proposed area constitutes a logical mining unit. In describing the area, the applicant must present the geodetic coordinates of the points defining the boundaries, referred to the World Geodetic System (WGS) Datum. A boundary between points must be a geodesic. If grid coordinates are desired, the Universal Transverse Mercator Grid System must be used.

(d) At the applicant's option, for the purpose of satisfying a possible obligation under a future Law of the Sea Treaty, the applicant may propose an exploration area which includes two exploration logical mining units. The applicant should specify in the application if this "banking" option is chosen, and any applicant choosing this option and filing an application based on pre-enactment exploration under §970.301 shall so notify the Administrator in accordance with \$970.301(g).

(e) Applicants are advised that NOAA will not accept an application or issue a license for an exploration area larger than 150,000 square kilometers unless the applicant can demonstrate the necessity of a larger area based on factors such as topography, nodule abundance, distribution and ore grade. If the applicant elects to pursue the "banking" option described in paragraph (d) of this section, and wishes to apply for an exploration area larger than 150,000 square kilometers, the applicant must file a second application with respect to at least the area in excess of 150,000 square kilometers, unless the applicant justifies such excess area as part of a single application under the preceding sentence.

 $[46\ {\rm FR}\ 45907,\ {\rm Sept.}\ 15,\ 1981,\ {\rm as\ amended}\ {\rm at}\ 47\ {\rm FR}\ 5968,\ {\rm Feb.}\ 9,\ 1982]$ 

# § 970.602 Diligent exploration.

(a) Each licensee must pursue diligently the activities described in his approved exploration plan. This requirement applies to the full scope of the plan, including environmental safeguards and monitoring systems. To help assure this diligence, terms, conditions and restrictions which the Administrator issues with a license will require such periodic reasonable expenditures for exploration by the licensee as the Administrator may establish, taking into account the size of the area of the deep seabed to which the exploration plan applies and the amount of funds which is estimated by the Administrator to be required during exploration for commercial recovery of hard mineral resources to begin within the time limit established by the Administrator. However, such required expenditures will not be established at a level which would discourage exploration by persons with less costly technology than is prevalently in use.