NAVIGATION AND VESSEL INSPECTION CIRCULAR NO.4-78 CHANGE 1 INCLUDED

Subj: Inspection and Certification of Existing Mobile Offshore Drilling Units

1. PURPOSE. The purpose of this circular is to promulgate instructions for the inspection and certification of existing mobile offshore drilling units. This NVC is also being published as appendix A of 46 CFR Sub-chapter IA.

2. BACKGROUND. Mobile Offshore Drilling Units are recognized internationally through the Intergovernmental Maritime Consultative Organization as being "special purpose ship" designed and operated to carry out an industrial function at sea. Contemporary U.S. Vessel regulations in Title 46 CFR do not adequately cover the safety considerations which are unique to the hull and structural designs, industrial equipment and operating procedures incorporated in drilling vessels. To provide appropriate and adequate standards, the Coast Guard with the assistance of the National Offshore Operations Advisory Committee, and following the provisions of the Administrative Procedures Act, developed Subchapter IA, Regulations for Mobile Offshore Drilling Units, 46 CFR Parts 107-109 and amendments to 46 CFR Subchapters "F" Marine Engineering Regulations and “J”, Electrical Engineering Regulations. These regulations, published in Federal Register (43 FR 56788 December 4, 1978) will apply to all units contracted for on or after the effective date of the regulations January 3, 1978.

3. DISCUSSION.

a. This NVC elaborates the "grandfather provisions" (46 CFR 407-211 and 107.215) in applying Subchapter IA to the approximately 150 Mobile existing ocean-going U.S. flag mobile offshore drilling units. "Existing" Mobile Offshore Drilling Units been contracted for before the effective date of the regulations, including:

(1) Units in Service

(2) Units under construction

(3) Units contracted for which are to be constructed and delivered prior to 1 January 1981.
b. Existing uncertificated mobile drilling units of which there are approximately 92 of the bottom bearing configuration, i.e., jack-up and submersible types, have not previously been required to comply with vessel inspection regulations. Some units have met the load line requirements of Subchapter "E" for International Voyages. Many of the older units are not classed by a classification society. Bottom bearing units operating on the Outer Continental Shelf of United States have been required to meet the safety requirements of 33 CFR Subchapter "W" as artificial islands. On January 3, 1979, existing bottom bearing units are subject to the "grandfather provisions" in paragraph 107.211 Cc) of Subchapter IA.

c. Existing certificated mobile offshore drilling units, for the purpose of this NVC, are column-stabilized and ship-shape types of which approximately 58 are currently certificated, or have made application for an original Certificate of Inspection or intend to make application for an original inspection for certification under 46 CFR Subchapter "I" on the basis of the unit being contracted for prior to the effective date of the new regulations. These units may continue to meet the structural, equipment, material and arrangement standards which were applicable to the hull, engineering, electrical and industrial systems when the units were contracted for. In addition they must meet the provisions, of d.(1), d.(4)(d), d.(7)(b), d.(8), d.(9), d.(10)(b), d.(11) and d.(12) of paragraph 3 of this NVC in accordance with paragraph 107.215 (c) (2) of Subchapter IA.

d. Inspection Provisions for Existing Uncertificated Units. The intent of "grandfather" provisions of this NVC for existing uncertificated units is to ascertain through inspection that the material condition of the unit and its equipment meet reasonable levels of safety. To this end, the following determination will be made; the design, construction and arrangements of the hull, machinery electrical and industrial systems do not reveal manifestly unsafe aspects, there is no excessive deterioration of the hull or structure or equipment foundations, there are no intrinsic fire or explosion hazards, there are no personnel hazards such as unguarded moving machinery, potential electrical shock conditions or lack of handrails, the unit is seaworthy and exhibits satisfactory stability.

(1) General

(a) Repairs and minor alterations to hull structure or equipment may be made to the same standards as the original installation. However, new installations or major alterations which affect vessel or personnel safety shall meet the applicable standards of Subchapter IA.

(b) Existing items of safety equipment not meeting the applicable specifications or requirements set forth in Subchapter IA may be continued in service as long as they are maintained in good working order to the satisfaction of the OCMI. Such safety equipment and installations requiring extensive repairs shall be replaced and shall meet the applicable specifications and requirements of Subchapter IA.

(c) The OCMI has discretion to accept alternatives or equivalents which meet the established standards, and to give special consideration to departures from the regulations when it can be shown that special circumstances warrant such departures.
(2) Plan Submittal

(a) For units not classed by the American Bureau of Shipping or other recognized classification society, (see 46 CFR 108.109) the OCMI must have sufficient plans and information submitted to him which will describe such things as the unit's size, construction, configuration, arrangement of tanks, decks and spaces; and the machinery and electrical installation. In addition, the OCMI may require submittal of any additional data he considers necessary in order to proceed with the original inspections.

(b) For units classed by the American Bureau of Shipping or other recognized classification society, the plans and information described in Subchapter IA paragraphs 107.305 (a), (b), (v) and (ii) and a general description of the machinery and electrical installation shall be submitted to the OCMI for information. The OCMI may accept continued classification as proof of structural, mechanical, and electrical sufficiency. However, the OCMI may require additional plans and information if necessary.

(3) Hull Structure

(a) No Structure changes will be required unless manifestly unsafe conditions exist.

(b) Existing uncertificated units must be drydocked or have a special examination in lieu of drydocking as required by 46 CFR, Section 107-261.

(c) Achievement of one compartment subdivision is not required where extensive modification of the original design would be necessary; however, watertight integrity of the hull and structural boundaries must be maintained. Bulkheads and decks designed to be watertight must be maintained as such where they are penetrated by pipes, electrical cable, reach rods, ventilation systems, etc.

(4) Stability

(a) The stability of each existing unit will be reviewed by the Coast Guard. The plans indicated in A6 CFR Subchapter IA paragraphs 107.305(q) through (u-1) Rust be submitted to the cognizant OCMI or Merchant Marine Technical Office.

(b) Lightship data from a Coast Guard witnessed and approved stability test is required for each existing, uncertificated units. Alternatively other evidence of lightship values will be considered on a case by case basis.

(c) In general, compliance with the intact stability standards of 46 CFR Subchapter IA, Section 108.303 through 108.309 is required. Where existing units were designed to a lesser standard of stability than that specified in 108.303 through 108.309, some relaxation based on proven
past performance may be granted at the discretion of the OCMI and limiting conditions, if any, set forth in the operating manual. In no case will the minimum wind speed for adequate stability be reduced below 50 knots.

(d) An operating manual shall be prepared for each unit. Each operating manual must contain the information indicated in 46 CFR Subchapter IA, Section 109.121(d) and be submitted to the cognizant O(1 or Merchant Marine Technical Office for review.

(5) Load Line

(a) All units are required to obtain and maintain a valid Load Line Certificate. The structure and stability of the unit must be proven adequate for the voyages and areas of operation intended.

(b) The American Bureau of Shipping or other recognized classification society will issue Load Line Certificates and conduct initial and annual load line surveys. Coast Guard and the American Bureau of Shipping inspections may be conducted simultaneously, but it is the owner's responsibility to arrange coordinated inspection schedules.

(c) The structural review conducted by the American Bureau of shipping or other recognized classification society for load line assignment may be accepted by the Coast Guard as proof of structural adequacy of the hull.

(d) The stability review must be completed prior to issuance of a Load Line Certificate. The Coast Guard will inform the American Bureau of Shipping or other recognized classification society of the results of the stability review, and will indicate any stability limitation to be placed on the Load Line Certificate.

(e) Freeboard calculations for self-elevating units with barge type hulls will be made in accordance with 46 CFR, Part 42. The bow height requirements of 46 CPR 42.20-70 may be relaxed to approximately 33% of the normal requirement for barge shapes moving at speeds less than 6 knots. No relaxation of the addition to freeboard for deficiency in sheer is allowed. The freeboard for units other than self-elevating units with barge type hulls will be based upon compliance with the intact and damage stability standards applicable at the time the unit was contracted for.

(f) All units delivered after the date of this NVC regardless of contract date, must obtain a Load Line certificate as soon as operationally feasible.

(6) Route and Operating Area Limitations

(a) Units classed by the American Bureau of Shipping or other recognized classification society for ocean service generally will be certificated by the Coast Guard for ocean routes.
(b) Unclassed units which have proven structural and stability adequacy by continued safe operation in a specific geographic area, such as the Gulf of Mexico, will be limited by the certificate of Inspection and Load Line Certificate to that area. To qualify for an unlimited oceans route, such a unit must be reviewed for adequacy of the structure and stability by the Coast Guard and meet the Load Line requirements of d.(e) above.

(c) Any unit which intends to move or operate outside the geographical area indicated on the Certificate of Inspection must receive prior approval from OCMI.

(7) Fire Protection

(a) Structural fire protection: All units must meet the provisions of Section 108.123, Insulation of Combustible Materials and Section 108.127, Storage Lockers for Combustibles. All existing interior stairways which are open at each end must be enclosed at one level. OII units where wood was utilized in the construction of accommodation spaces, each space must be equipped with a smoke or heat detector either battery powered or operating on the AC power supply. All detectors must have the Underwriters Laboritories (FM) label.

(b) Fire Extinguishing Systems: Systems and equipment must be provided which will meet or be equivalent to the applicable specifications and provisions required by Subchapter IA. Installed fire extinguishing Systems, which provide equivalent or greater protection than system required by Subpart E, Subchapter IA may be continued in use as long as they are in good material condition and will function as designed. Where practical, existing washdown Systems may be utilized as the firemain. Where wood was utilized in the construction of accommodation spaces, the applicable requirements of 46 CFR Subchapter IA, Table 108.495(a) should be doubled.

(8) Lifesaving Equipment

(a) Each units must have lifesaving equipment (lifeboats and davit) launched liferafts ) for 200 percent of the total persons allowed on board. Except for submersible type units, the installation of lifeboats for 100 percent of the persons (on board) is required in accordance with 46 CFR Section 108.503 of Subchapter IA. Consideration will be given to those units where existing arrangement and structure do not provide sufficient roam for installation of the lifeboats or where the added weight of the lifeboats, davits and "inches will materially reduce the variable load capacity of the unit. In such cases, davit launched inflatable life crafts with a combined personnel capacity of the required lifeboats, and a rescue boat approved by the OCMI may be accept-able equivalents. Submersible type units may substitute Coast Guard approved throw over type inflatable liferafts and an approved rescue boat for the required lifeboats.
(b) For the second part of the total 200 percent primary lifesaving requirement, lifeboats- installed in accordance with 33 CFR, Subchapter "N" Part 144 or Coast Guard, approved life floats may be retained as provided for in 3.d(1)(b) of this Circular. They will be considered collectively with the Coast Guard approved liferafts for calculating the amount of equipment to provide for 100 percent of personnel on board.

(c) Adequate access to all lifesaving equipment must be provided.

(9) Cranes

(a) Plan approval will not normally be required of any crane which conforms to the specifications of the manufacturer as originally installed. A rated load test as described in Section 107.260 of Subchapter IA will be required unless the crane has been load tested while under certification by an approved certifying authority as provided for in 46 CPR 107.258. Prior to the rated load test, the crane should be identified by manufacturer and model number to determine that the correct load rating chart is being used. The owner must submit to the OCMI details and calculations of any alterations to a crane which were accomplished without manufacturer’s documentation in order to verify the rated load of the crane.

(10) Electrical

(a) Multiple power sources do not require an emergency generator; however, storage batteries or approved relay-controlled battery operated lanterns are required to be installed for the emergency lighting system and provide 12 hours of lighting.

(b) Electrical equipment installed in Class I, division 1 and 2 locations, as defined in Subchapter IA, Section 108.170 must be of a suitable type and in good material condition.

(11) Unfired Pressure Vessels

(a) Unfired pressure vessels built and stamped in accordance with Section VIII of the ASME Code may be continued in service as long as they remain in satisfactory condition. At the original and subsequent inspections for certification, ASME Code pressure vessels must be tested and examined in accordance with the requirements in 46 CFR 61.10-5.

(b) Unfired pressure vessels which cannot be identified as being constructed to any recognized standard may be continued in service provided that no obvious defects are noted. These pressure vessels shall be hydrostatically tested to one and one half times the working pressure. For pressure vessels that can not be reasonably hydrostatically tested, nondestructive testing may be used to verify the pressure vessels condition for continued serviceability. These pressure vessels will then be stamped with a Coast Guard identification number and periodically tested and examined in accordance with the requirements in 46 CFR 61.10-5.
(12) **Marine Sanitation Devices**

(a) All units must meet the provisions of 33 CFR 159, Coast Guard Marine Sanitation Devices Regulations. The discharge requirements are compatible with the OCS Orders of the U. S. Geological Survey.

4. **ACTION**

a. The owner of each existing certificated unit must provide the cognizant OCMI a proposed plan to accomplish the requirements in paragraph 3.c. of this NVC within 60 days from the effective date of the regulations. Most items should be approved at the unit's next inspection for certification; however, where major equipment installations are concerned, the owner may be allowed up to two years to comply with the requirements from the time the OCMI completes his assessment of the proposals.

b. **Application for Original Inspection for Certification.** Not later than sixty days from January 3, 1979, application for original inspection for certification of all existing uncertificated units, shall be submitted to the appropriate OCMI. The plans or descriptive data specified in paragraph 3.d(b) of this NVC along with a proposed plan to bring the unit into compliance should, if possible, be submitted with the application for inspection. If not feasible to assemble all required information in this time frame, an estimated date of submittal shall be indicated on the application. Arrangements should be made to commence the original inspection for certification with due consideration for the unit's operating situation.

c. To the extent possible the same inspection team will conduct the inspection of all existing uncertificated units in a geographical area. It may be advantageous to conduct the original inspection in conjunction with an impending special or periodic survey, drydocking or availability period. Units under construction will receive primary consideration by the OCMI for the allocation of time and personnel so that any problems can be identified while the unit is in the most advantageous situation to apply corrections.

d. The variety of designs and arrangements presented by existing uninspected MODU’s makes it impractical to prescribe detailed standards for all existing units. The procedures followed to implement this NVC must provide the necessary flexibility. Items which must be taken into consideration in applying this NVC are listed below. Categorizing units into groups to which the same items apply will be of value during the inspection process. These items are:

(1) **Type**

(2) **Builder**

(3) **Model**

(4) **Date Built**

(5) **Classed by ABS or other classification society**
(6) Load Line assignment

(7) Operating history (including geographical areas)

(8) Present location

e. Issuance of the Original Certificate of Inspection. The intent of the original inspection of existing uncertificated units is to identify and commence correction of any unsafe conditions and/or equipment deficiencies and to issue the unit an original Certificate of Inspection. A reasonable period of time will be permitted to correct minor deficiencies. Those items directly affecting personnel safety and health will require immediate attention to correct the unsafe conditions. Extensive deficiencies, such as those involving structural aspects or equipment may require up to two years to remedy. Additional times may be allowed if repair facilities are not available to coastal areas adjacent to the unit’s area of operation. Where manifestly unsafe conditions are found, the OCMI may require that the unit discontinue operations until such conditions are corrected. If the owner or operator feels aggrieved by the decision of the OCMI, the appeals procedures of 46 CFR 2.01-70 are applicable.

f. Questions concerning this NVC should be referred to the Commandant (G-MVI).
SUPPLEMENT TO NAVIGATION AND VESSEL INSPECTION CIRCULAR NO.4-78

PART 107 - INSPECTION AND CERTIFICATION

Subpart A: Applies with the following interpretation: 107.111 "Non-self propelled unit" - Units with propulsion machinery must be endorsed "Non-Self Propelled" on the Certificate of Inspection (COI) if it is requested by the owner or the OCMI determines that the unit does not meet the requirements applicable to a self-propelled vessel. The COI must be endorsed to require towing assistance with adequate power when underway.

Subpart B

107.201-.227 Applies.

107.231 Applies except as noted below:

107.231(a)(1) Applies as specified within part 108 of this supplement.

107.231(a)(2) Apply NVC 3.d(1) and 3.d(10).

107.231(a)(3) Apply NVC 3.d(1) and 3.d(11).

107.231(a)(4) Apply NVC 3.d(5) and 3.d.(6)(b). Owners of Unclassed units requesting coastwise loadlines for continued service in areas of proven operating experience, may receive consideration under 3d.(6)(b) by ABS or Coast Guard depending on either of the two situations outlined in a. and b. below. In either-case the owner’s request must include a statement of previous experience supported by operating records which include geographic areas worked and a statement which indicates future operations will continue in the areas of previous experience.

a. Unclassed units which have as built drawings that include the hull arrangements, structural details and scantlings will be reviewed and the hull surveyed by ABS. Assignment of the load line will include determinations based on the following factors:

(1) The existing structure is adequate for future service of the same type provided the vessel receives a thorough internal and external inspection which proves the unit to be free of serious deterioration or evidence of structural problem areas.

(2) Results of CG stability review as per Section 108, Subpart C - Stability, of this supplement.

b. Unclassed units built prior to 1969 will not be assigned a load line but will be reviewed by the appropriate Coast Guard technical field office for freeboard determinations within the following guidelines:

(1) As built arrangement and structural drawings of the main hull with as much detail as is available will be required.

(2) Existing structure will be acceptable for future service of the same type provided a thorough internal and external inspection of the unit proves the vessel to be free of serious deterioration or evidence of structural problem areas.
(3) Stability will be reviewed as per Section 108, Subpart C - Stability, of this supplement.

(4) Allowable freeboard will be indicated in the unit's operating manual and stability letter by the maximum mean draft allowed.

(5) The standards for watertight integrity contained in the Load Line Regulations will still apply.

107.231(a)(5) Applies as provided in 109.557 of this supplement.

107.231(n) Apply NVC 3.d(l) and 3.d(9).

107.231(o) Apply NVC 3.d(l) and 3.d(9).

107.235-.257 Applies.

107.258 Apply NVC 3.d(9)

107.259 Applies.

107.260 Apply NVC 3.d(9).

107.261-.275 Applies. 107.265 also applies to submersible units.

107.279(a) Apply NVC 4(e).

107.279(b) - .279(j) Applies.

Subpart C

107.301 Apply NVC.


107.309 Apply NVC 3.d(9).

107.317 Applies.

Subpart D Applies.

Subpart A

108.103 Applies - Any additional equipment must meet the same requirements as the required equipment.

108.105 Applies to - equipment which is required, NVC 3.d(l)(b) modifies.
108.109 Applies.

Subpart B

108.113 Apply NVC 3.d(l) and 3.d(3).

108.114 Apply NVC 3.d(3)(c) and 3.d(5).

108.115 Apply NVC 3.d(3)(c). Present sliding watertight doors are acceptable.

108.123 and .127 Applies.

108.131 143 Apply NVC 3.d(3) and 3.d(7). The battery powered smoke or heat detectors provided for in 3.d(7)(a) may be of the household type.

108.145 - .147 Applies.


108.157 Applies.

108.159 - .161 Apply NVC 3.d, 3.d(1) and 3.d(3).

108.165 Apply NVC 3.d(8)(c).

108.167 Apply. NVC 3.d(3). Existing weather deck ladders and arrangements are acceptable.

108.170 Applies except the reference 46 CFR 111.92-5 through 111.92-11 is applied the same as provided for in 46 CFR 108.171 through 108.177.

108.171 - .177 For existing certificated units, NVC 3.c. allows Subchapter J as applied by the Coast Guard when certificated to remain in effect. NVC 3.d. applies to existing uncertificated units, NVC 3.b. allows the API RP 500 B standards which were applied by USGS OCS Orders. The wiring methods and materials must be appropriate for the location considering any USCG or USGS regulations which applied at the time the unit was contracted. Explosion roof equipment shall be UL, FM, CSA approved or may be certified by the manufacturer for the classified area installed.

108.181 - .187 Apply NVC 3.b., 3.c. and 3.d(l0). Note: Present installations complying with the classifications determined for subparts 10.8.171 - .177 as interpreted by the supplement in good material condition will be acceptable.

108.193 - .215 Apply NVC section 3.c. and 3.d.

108.217 - .223 Applies as well as NVC 3.d. where existing rails installed in accordance with 33 CFR-143.15 may be accepted.

108.231 - .235 Apply NVC 3. and 3.d(l) - Reasonable compliance with 108.235(d) and (e) are required where personnel safety is involved
108.237(a), (b) Apply NVC 3.d.

108.237(c) Apply NCY 3.d. and 3.d(l) if tank permanently installed.

108.237(d) Applies.

108.239(a) Applies.

108.239(b) Applies although NVC 3.d(l)(c) has application with respect to alternate hose stowage that protects hose from kinking or other damage.

108.239(c), (d) Applies.

108.239(e)-Apply NVC 3. - one shut off operable from the helo deck or access should be acceptable.

108.239(f) Applies.

108.239(g) Applies, units in overseas locations may apply NVC 3.d(l).

108.241 Applies. A wind sock is -an acceptable wind direction indicator.

Subpart C -

108.301 - .343. Apply 3.d(4). Where KG data doesn’t exist, assume a KG for the worst case condition. Upon acceptance of suitable KG data without an inclining test, the U.S. -Coast Guard will then request the American Bureau of Shipping (ABS) to assign a loadline based on this stability data and ABS structural review. -

A suitable deadweight survey can be accomplished by jack leg pressures. Past operational data and available supporting data will be examined. Owners and the USCG will work on watertight integrity within the loadline regulations to maintain watertightness where needed. Only intact stability requirements apply to existing units.

Subpart D

108.401 - .499 Applies. Note NVC 3.d(7) and the following:

108.403(a)(3), (4) and (5) Apply to propulsion systems only.

108.404 - .413 Alternate fire detection devices provided for by 3.d(7)(a) may be used in lieu of.

108.415 Apply NVC 3.d. The 40 psi pilot tube pressure, provided for in the 1973 ABS rules for Offshore Mobile Drilling Units, is the minimum acceptable pressure.

108.421 Apply NVC 3.d.

108.425 Existing lined fire hoses in good condition are "existing equipment" under NVC 3.d(l)(b) and are acceptable provided they have NSFC threads. Hose lengths other than Soft. are acceptable at discretion of the OC MI. However, 108.423(a) must be based on 50 ft. fire hose lengths. Existing all metal nozzles
which can be shown generally equivalent to USCG approved type, and which have spray, straight steam and shutoff capabilities, are acceptable.

108.487 If only one access to deck then only require one foam hose and one B -.Y extinguisher.

108.495(a) (Table) - 3.d(7)(b) doubles requirements for A-II extinguishers in corridors where wood is used in construction.

Subpart E

108.501 -.509. Applies NVC 3.d(8) - Allows alternatives. The following options will also meet the requirements or alternatives:

(a) 200% in lifeboats.

(b) A percentage between 100% and 200% in two or more lifeboats with remaining percentage up to 200% in inflatable liferafts, (davit launched where required) i.e., On a 70 person unit, two 50 person lifeboats and two 20 person inflatable liferafts would provide 200% capacity.

(c) 100% in lifeboats and 100% in inflatable rafts (davit launched where required) meets requirements.

(d) 200% in davit rafts plus rescue boat (approved by the OGMI) will be given consideration in accordance with NVC 3.d(8).

(e) Submersibles may use throw over type inflatable life rafts and rescue boat in accordance with NVC 3.d(8)(a).

108.510 -.523 Applies. 108.-515(d)(2) If unit is non-self-propelled; the two ring buoys may be capable of local manual release or casting by hand.

108.525 Applies with modification. On units where chain suspension ladders cannot be supported against a flat surface, at least two fixed ladders must be installed. Fixed ladders installed in-the lattice type legs of jackup units need not be fitted with a cage arrangement.

108.527 Applies.

Subpart F

108.601(a) Apply NVC 3.d(9).

108.601(b) Applies, except that 108.601(b)(2) instruments with built-in lighting not required.

108.61f Applies.

108.613(a)-(c) NVC 3.d(l)(a) Applies. Also, see Section 109.529 of this Supplement.

108.613(d),(e) Applies.
108.615 Applies.

Subpart G

108.621 - .659 Applies.

108.661 Applies - reasonable exceptions are acceptable; some units may require marks only in the operating range. -

108.66a - .665 Applies.

Subpart H

108.697 - .703 Applies.

108.705 Applies. Non-self propelled units. may, as an alternative, use a minimum of two tugs' in lieu of anchors when under tow. The Certificate of Inspection will be endorsed to' indicate this stipulation.

108.707 - .717 Applies.

Part 109 - Operations

Subpart A


109.107 Applies. One individual must be the- designated master or person in change at all times. The company’s directive should be available and should clearly explain who the individual is with respect to job classification and the MODU’s operating situation.

109.109 Applies.

109.121 Applies. For 109.121(d)(7) see comments for 108.0l-343.

Subpart B - Applies.

Subpart C - Applies.

Subpart D

109.411 - .419- Applies.

109.421 Does not preclude making emergency repairs.

109.423 - .439 Applies.

Subpart E - Applies.

Subpart F
109.521 - .527 Applies. For .527, trainee under the direct supervision of designated operator may operate cranes.

169.529 Apply NVC 3.d and 3.d(l). Existing diesel forklift trucks with spark arresting mufflers in good condition may be allowed in Class 1 Div. 2 spaces. In Class 1 Div. 1 locations only “EX” type may be used.

109.531 - .539 Applies.

Subpart G

109.555 Applies.

109.557(a) Applies only if flammable and combustible liquids are carried as cargo.

109.557(b) Applies only if the MPT or PT is carrying products as cargo. If MPT or PT is part of helo refueling system or carrying products for consumption aboard the unit, ship’s stores regulations in 46 CFR 147 apply. Since ship’s stores regulations are presently inadequate, 46-CFR 98.30-5 and 98.30.9 will be imposed to govern basic handling and stowage of MPTs.

109.557(c) Applies only to liquids carried as cargo. Liquids carried as ship’s stores or for special purposes such as well testing will be governed by 46 CFR 147; or if not mentioned in Part 147, a special consideration by the OCMI will be taken on a case by case basis. OGMI may be advised by the District Commander or the Commandant as necessary.

109.558 - 169.559 Applies.

109.563 Documents may be posted under transparent material at a location mutually agreeable to the inspector and person in charge.

109.564 - .585 Applies.