

Any person who will be adversely affected by the foregoing order may at any time within 30 days from the date of its publication in the FEDERAL REGISTER file with the Hearing Clerk, Department of Health, Education, and Welfare, Room 5440, 330 Independence Avenue SW., Washington, D.C. 20201, written objections thereto, preferably in quintuplicate. Objections shall show wherein the person filing will be adversely affected by the order and specify with particularity the provisions of the order deemed objectionable and the grounds for the objections. If a hearing is requested, the objections must state the issues for the hearing. A hearing will be granted if the objections are supported by grounds legally sufficient to justify the relief sought. Objections may be accompanied by a memorandum or brief in support thereof.

Effective date. This order shall become effective on the date of its publication in the FEDERAL REGISTER.

(Sec. 409(c) (1), 72 Stat. 1786; 21 U.S.C. 348 (c) (1))

Dated: September 29, 1967.

J. K. KIRK,
Associate Commissioner
for Compliance.

[F.R. Doc. 67-11923; Filed, Oct. 9, 1967;
8:48 a.m.]

SUBCHAPTER D—HAZARDOUS SUBSTANCES

PART 191—HAZARDOUS SUBSTANCES; DEFINITIONS AND PROCEDURAL AND INTERPRETATIVE REGULATIONS

Viscous Products Containing Methyl Alcohol; Exemption From Certain Requirements

The Commissioner of Food and Drugs has received requests, submitted pursuant to section 3(c) of the Federal Hazardous Substances Act and § 191.62 of the regulations thereunder, to exempt viscous products, such as adhesives and asphalt-base roof and tank coatings, from the special labeling required because of their methyl alcohol content. These products contain, among other ingredients, more than 4 percent by weight methyl alcohol, and under § 191.7(b) (2) of the regulations, special warning labeling is required based on the history of use of methyl alcohol products as a beverage.

Based on data supplied by the petitioners and developed by independent investigations, the Commissioner concludes that no reasonably foreseeable hazard by ingestion of these products exists and, therefore, compliance with § 191.7(b) (2) is unnecessary for these products for the adequate protection of the public health and safety.

Accordingly, pursuant to the provisions of the Act (sec. 3(c), 74 Stat. 374; 15 U.S.C. 1262) and under the authority delegated to the Commissioner by the Secretary of Health, Education, and Welfare (21 CFR 2.120), § 191.63(a) is

amended by adding thereto a new subparagraph, as follows:

§ 191.63 Exemptions for small packages, minor hazards, and special circumstances.

(a) * * *

(34) Viscous products containing more than 4 percent by weight of methyl alcohol, such as adhesives, asphalt-base roof and tank coatings, and similar products, are exempt from bearing the special labeling that would otherwise be required by § 191.7(b) (2), provided that:

(i) The product contains not more than 15 percent by weight of methyl alcohol.

(ii) The methyl alcohol does not separate from the other ingredients upon standing or through any foreseeable use or manipulation.

(iii) The viscosity of the product is not less than 7,000 centipoises at 77° F.

(iv) Labeling bears the statement "Contains methyl alcohol—use only in well-ventilated area—keep out of the reach of children."

Notice and public procedure and delayed effective date are unnecessary prerequisites to the promulgation of this order, and I so find, since the Federal Hazardous Substances Act contemplates such modification of labeling requirements under certain conditions.

Effective date. This order shall be effective upon publication in the FEDERAL REGISTER.

(Sec. 3(c), 74 Stat. 374; 15 U.S.C. 1262)

Dated: October 2, 1967.

J. K. KIRK,
Associate Commissioner
for Compliance.

[F.R. Doc. 67-11925; Filed, Oct. 9, 1967;
8:49 a.m.]

Title 26—INTERNAL REVENUE

Chapter I—Internal Revenue Service, Department of the Treasury

SUBCHAPTER A—INCOME TAX

[T.D. 6931]

PART 1—INCOME TAX; TAXABLE YEARS BEGINNING AFTER DECEMBER 31, 1953

Investment Credit Provisions

On January 7, 1965, notice of proposed rule making with respect to the amendment of the Income Tax Regulations (26 CFR Part 1) under sections 38, 46, 47, and 48 of the Internal Revenue Code of 1954 to conform such regulations to certain provisions of section 2 of the Revenue Act of 1962 (76 Stat. 962), relating to credit for investment in certain depreciable property, was published in the FEDERAL REGISTER (30 F.R. 143). After consideration of all such relevant matter as was presented by interested persons regarding the rules proposed, the amendment of the regulations as proposed is hereby adopted, subject to the changes set forth below:

PARAGRAPH 1. Section 1.46-3 is amended by revising paragraph (e) (3), by revising subparagraph (2) (i) of, and adding subparagraph (2) (iii) to, paragraph (f), and by revising paragraph (h) (1).

PAR. 2. Section 1.47-1, as set forth in paragraph 4 of the notice of proposed rule making, is changed by revising paragraph (a) (1) (i) (a) and paragraph (b) (3) (ii), and by revising subparagraphs (2), (3), and (4) of, and adding subparagraph (1) (iii) to, paragraph (e).

PAR. 3. Section 1.47-2, as set forth in paragraph 4 of the notice of proposed rule making, is changed by revising Example 2 of paragraph (a) (2) (iii), by revising subparagraph (2) (iv) of paragraph (b), by revising subparagraph (1) of paragraph (c), and by revising paragraph (d).

PAR. 4. Section 1.47-3, as set forth in paragraph 4 of the notice of proposed rule making, is changed by revising subparagraphs (1) (ii), (2), and (5) of paragraph (f), by revising the introductory material preceding the examples in paragraph (f) (6), and by adding a new example (5) to paragraph (f) (6).

PAR. 5. Section 1.47-4, as set forth in paragraph 4 of the notice of proposed rule making, is changed by revising subparagraph (1) of, and adding a new subparagraph (2) (iii) to, paragraph (a), by revising paragraph (b), and by adding a new paragraph (d).

PAR. 6. Section 1.47-5, as set forth in paragraph 4 of the notice of proposed rule making, is changed by revising paragraph (a) (2).

PAR. 7. Section 1.47-6, as set forth in paragraph 4 of the notice of proposed rule making, is changed by adding a new subdivision (iii) to paragraph (a) (2).

PAR. 8. Section 1.48-3 is amended by revising paragraph (d).

[SEAL] SHELDON S. COHEN,
Commissioner of Internal Revenue.

Approved: October 2, 1967.

STANLEY S. SURREY,
Assistant Secretary
of the Treasury.

In order to conform the Income Tax Regulations (26 CFR Part 1) under sections 38, 46, 47 and 48 of the Internal Revenue Code of 1954 to certain provisions of section 2 of the Revenue Act of 1962 (76 Stat. 962), such regulations are amended as follows:

PARAGRAPH 1(a). There is inserted immediately after § 1.38 the following new section:

§ 1.38-1 Investment in certain depreciable property.

Sections 1.46-1 through 1.48-7, inclusive, are prescribed under the authority granted the Secretary or his delegate by section 38(b) of the Code to prescribe such regulations as may be necessary to carry out the purposes of section 38 and subpart B, part IV, subchapter A, chapter 1 of the Code.

(b). Section 1.46-1 is amended by revising paragraph (a) to read as follows:

§ 1.46-1 Determination of amount.

(a) *In general.* Except as otherwise provided in this section and in § 1.46-2, the amount of the credit allowed by section 38 for the taxable year is equal to 7 percent of the taxpayer's qualified investment for such year (as determined under § 1.46-3). The amount equal to 7 percent of qualified investment shall be referred to in this section and §§ 1.46-2 through 1.48-7 as the "credit earned".

PAR. 2. Section 1.46-2 is amended by revising subparagraph (1) of paragraph (a) to read as follows:

§ 1.46-2 Carryback and carryover of unused credit.

(a) *Allowance of unused credit as carryback or carryover.* (1) Section 46 (b) (1) provides for a 3-year carryback and a 5-year carryover of any unused credit. An unused credit is the excess of the credit earned for the taxable year (as defined in paragraph (a) of § 1.46-1) over the limitation, based on amount of tax for such taxable year (as determined under paragraph (b) of § 1.46-1). Subject to the limitation contained in paragraph (b) of this section, an unused credit shall be added to the amount allowable as a credit under section 38 for the years to which the unused credit can be carried. The year with respect to which an unused credit arises shall be referred to in this section as the "unused credit year". See § 1.47-1 for rules relating to reduction of an unused credit as a result of the application of section 47 (relating to certain dispositions, etc., of section 38 property).

PAR. 3. Section 1.46-3 is amended by revising paragraph (a) (2), by revising paragraph (c) (3), by revising paragraph (e) (3), by revising subparagraph (2) (i) of, and adding subparagraph (2) (ii) to, paragraph (f), and by inserting in lieu of "(h) [Reserved]", a new paragraph (h). These revised and added provisions read as follows:

§ 1.46-3 Qualified investment.

(a) *In general.* * * *

(2) The basis (or cost) of section 38 property placed in service during a taxable year shall not be taken into account in determining qualified investment for such year if such property is disposed of or otherwise ceases to be section 38 property during such year, except where § 1.47-3 applies. Thus, if individual A places in service during a taxable year section 38 property and later in the same year sells such property, the basis (or cost) of such property shall not be taken into account in determining A's qualified investment. On the other hand, if A places in service section 38 property during a taxable year and dies later in the same year, the basis (or cost) of such property would be taken into account in computing qualified investment. Similarly, if section 38 property is destroyed by fire in the same year in which it is placed in service and paragraph (h) of this section applies to reduce the basis

(or cost) of replacement property, the basis (or cost) of the destroyed property would be taken into account in computing qualified investment. In order to determine whether section 38 property is disposed of or otherwise ceases to be section 38 property see § 1.47-2.

(c) *Basis or cost.* * * *

(3) For reduction in the basis (or cost) of certain property which replaces other property which was destroyed or damaged by fire, storm, shipwreck, or other casualty, or which was stolen, see paragraph (h) of this section.

(e) *Estimated useful life.* * * *

(3) *Individual useful life system.* (i) The taxpayer may assign an individual estimated useful life to each asset falling within a guideline class which is placed in service during the taxable year. With respect to the assets falling within the guideline class which are placed in single asset accounts for purposes of computing depreciation, the estimated useful life used for each asset for that purpose shall be used in determining qualified investment. With respect to the assets falling within the guideline class which are placed in multiple asset accounts (including a guideline class account described in Revenue Procedure 62-21) for which a group, classified, or composite rate is used in computing depreciation (or in single asset accounts for which an average life rate is used), the determination of estimated useful life for each asset in the account shall be made individually on the best estimate obtainable on the basis of all the facts and circumstances. The individual estimated useful lives used for all the assets placed in a multiple asset account, when viewed together, must be consistent with the group, classified, or composite life used for the account for purposes of computing depreciation.

(ii) In determining the individual estimated useful lives of assets similar in kind contained in a multiple asset account (or in single asset accounts for which an average life rate is used), the taxpayer may (a) assign to each of such assets the average useful life of such assets used for purposes of computing depreciation, or (b) assign separate lives to such assets based on the estimated range of years taken into consideration in establishing the average useful life. Thus, for example, if a taxpayer places nine similar trucks with an average estimated useful life of 7 years, based on an estimated range of 6 to 8 years (two trucks with a useful life of 6 years, five trucks with a useful life of 7 years, and two trucks with a useful life of 8 years), in a multiple asset account for which a group rate is used in computing depreciation, he may either assign a useful life of 6 years to two of the trucks, 7 years to five of the trucks, and 8 years to two of the trucks, or he may assign the average useful life of the trucks (7 years) to each of the nine trucks. Likewise, if a taxpayer places 100 similar telephone poles with an average useful life of 28 years, based on an estimated

range of 3 to 40 years (two with a useful life of less than 4 years, three with a useful life of 4 to 6 years, four with a useful life of 6 to 8 years, and 91 with a useful life of more than 8 years), in a multiple asset account for which a group rate is used in computing depreciation, he may either assign useful lives corresponding to the estimated range of years of the poles (i.e., a useful life of less than 4 years to two of the poles, etc.), or he may assign the average useful life of the poles (28 years) to each of the poles.

(iii) In the case of "mass assets" (as defined in paragraph (e) (4) of § 1.47-1) for which the taxpayer is permitted to use an appropriate mortality dispersion table (including a standard mortality dispersion table) under paragraph (e) (2) of § 1.47-1 (determined without regard to paragraph (e) (2) (ii) thereof), the taxpayer may use such table for purposes of determining estimated useful lives by assigning, under subdivision (ii) (b) of this subparagraph, separate lives to such assets based on the estimated range of years taken into consideration in establishing the average useful life. If a taxpayer uses a standard mortality dispersion table for any taxable year, such table must be used for all subsequent taxable years unless the taxpayer obtains the consent of the Commissioner to change.

(iv) For purposes of subdivision (ii) of this subparagraph, assets (other than "mass assets") shall not be considered as "similar in kind" in respect of other assets unless all such assets are substantially of the same value, nor shall used section 38 property be considered as "similar in kind" to new section 38 property.

(f) *Partnerships.* * * *

(2) *Determination of partner's share.* (i) Each partner's share of the basis (or cost) of any section 38 property shall be determined in accordance with the ratio in which the partners divide the general profits of the partnership (that is, the taxable income of the partnership as described in section 702(a) (9)) regardless of whether the partnership has a profit or a loss for its taxable year during which the section 38 property is placed in service. However, if the ratio in which the partners divide the general profits of the partnership changes during the taxable year of the partnership, the ratio effective for the date on which the property is placed in service shall apply.

(iii) Notwithstanding subdivisions (i) and (ii) of this subparagraph, if with respect to a partnership's taxable year the conditions set forth in (a) through (c) of this subdivision are satisfied with respect to a partner, then such partner shall not take into account the basis (or cost) of any section 38 property placed in service by the partnership during such taxable year. The conditions referred to in the preceding sentence are:

(a) Such partner's interest in the general profits of the partnership during the taxable year is 5 percent or less;

(b) Under the partnership agreement, such partner will retire from the partnership during the taxable year or within 8 years after the end of such year; and

(c) The partnership agreement provides that the basis (or cost) of section 38 property placed in service by the partnership during the taxable year shall not be taken into account by a partner described in (a) and (b) of this subdivision.

Any basis (or cost) of section 38 property which is not taken into account by a partner because of the provisions of this subdivision shall be taken into account by the other partners in accordance with subdivision (i) of this subparagraph.

(h) *Certain replacement property.* (1) (i) If section 38 property is placed in service by the taxpayer to replace property (whether or not section 38 property) similar or related in service or use which was destroyed or damaged by fire, storm, shipwreck, or other casualty, or stolen, then for purposes of paragraph (a) of this section the basis (or cost) of the replacement section 38 property otherwise determined under paragraph (c) of this section shall be reduced by an amount equal to the lesser of—

(a) The amount of money, or the fair market value of other property, received as compensation, by insurance or otherwise, for the property which was destroyed, damaged, or stolen, or

(b) The adjusted basis of such destroyed, damaged, or stolen property (immediately before such destruction, damage, or theft).

(ii) For purposes of subdivision (i) of this subparagraph—

(a) Section 38 property placed in service after the due date (including extensions of time thereof) for filing the taxpayer's income tax return for the taxable year in which the other property was destroyed, damaged, or stolen shall not be considered as replacement section 38 property, and

(b) If the property which is destroyed, damaged, or stolen, is leased property, no other leased property shall be considered as replacement property with respect to the property destroyed, damaged, or stolen, in any case in which the lessor makes or made an election under section 48(d) (relating to election with respect to certain leased property) with respect to either the property destroyed, damaged, or stolen, the other leased property, or both.

(2) Subparagraph (1) of this paragraph shall not apply to replacement property if the reduction, under such subparagraph (1), in the basis (or cost) of such replacement property is less than the excess of—

(i) The qualified investment with respect to the destroyed, damaged, or stolen property, over

(ii) The recomputed qualified investment with respect to such property (determined under the principles of paragraph (a) of § 1.47-1).

(3) This paragraph may be illustrated by the following examples:

Examples (1). (1) A acquired and placed in service on January 1, 1962, machine No. 1, which qualified as section 38 property, with a basis of \$30,000 and an estimated useful life of 6 years. The amount of qualified investment with respect to such machine was \$20,000. On January 2, 1963, machine No. 1 is completely destroyed by fire. On January 1, 1963, the adjusted basis of such machine in A's hands is \$24,500. On November 1, 1963, A receives \$23,000 in insurance proceeds as compensation for the destroyed machine, and on December 15, 1963, A acquires and places in service machine No. 2, which qualifies as section 38 property, with a basis of \$41,000 and an estimated useful life of 6 years to replace machine No. 1.

(ii) Under subparagraph (1) of this paragraph, the \$41,000 basis of machine No. 2 is reduced, for purposes of paragraph (a) of this section, by \$23,000 (that is, the \$23,000 insurance proceeds since such amount is less than the \$24,500 adjusted basis of machine No. 1 immediately before it was destroyed) to \$18,000 since such reduction (that is, \$23,000) is greater than the \$20,000 reduction in qualified investment which would be made if paragraph (a) of § 1.47-1 were to apply to machine No. 1 (\$20,000 qualified investment less zero recomputed qualified investment).

Example (2). (1) The facts are the same as in example (1) except that on November 1, 1963, A receives only \$19,000 in insurance proceeds as compensation for the destroyed machine.

(ii) The \$41,000 basis of machine No. 2 is not reduced, for purposes of paragraph (a) of this section, under this paragraph since the \$19,000 reduction which would have been made under this paragraph had it applied (that is, the \$19,000 insurance proceeds since such amount is less than the \$24,500 adjusted basis of machine No. 1 immediately before it was destroyed) is less than the \$20,000 reduction in qualified investment which is made since paragraph (a) of § 1.47-1 applies to machine No. 1 (\$20,000 qualified investment less zero recomputed qualified investment).

PAR. 4. Section 1.47-1 is added to read as follows:

§ 1.47-1 *Recomputation of credit allowed by section 38.*

(a) *General rule.*—(1) *In general.* (i) If during the taxable year any section 38 property the basis (or cost) of which was taken into account, under paragraph (a) of § 1.46-3, in computing the taxpayer's qualified investment is disposed of, or otherwise ceases to be section 38 property or becomes public utility property (as defined in paragraph (g) of § 1.46-3) with respect to the taxpayer, before the close of the estimated useful life (as determined under subparagraph (2)(i) of this paragraph) which was taken into account in computing such qualified investment, then the credit earned for the credit year (as defined in subdivision (ii) (a) of this subparagraph) shall be recomputed under the principles of paragraph (a) of § 1.46-1 and paragraph (a) of § 1.46-3 substituting, in lieu of the estimated useful life of the property that was taken into account originally in computing qualified investment, the actual useful life of the property as determined under subparagraph (2)(ii) of this para-

graph. There shall also be recomputed under the principles of §§ 1.46-1 and 1.46-2 the credit allowed for the credit year and for any other taxable year affected by reason of the reduction in credit earned for the credit year, giving effect to such reduction in the computation of carryovers or carrybacks of unused credit. If the recomputation described in the preceding sentence results in the aggregate in a decrease (taking into account any recomputations under this paragraph in respect of prior recapture years, as defined in subdivision (ii) (b) of this subparagraph) in the credits allowed for the credit year and for any other taxable year affected by the reduction in credit earned for the credit year, then the income tax for the recapture year shall be increased by the amount of such decrease in credits allowed. For treatment of such increase in tax, see paragraph (b) of this section. For rules relating to "disposition" and "cessation", see § 1.47-2. For rules relating to certain exceptions to the application of this section, see § 1.47-3. For special rules in the case of an electing small business corporation (as defined in section 1371(b)), an estate or trust, or a partnership, see respectively, § 1.47-4, 1.47-5, or 1.47-6.

(ii) For purposes of this section and §§ 1.47-2 through 1.47-6—

(a) The term "credit year" means the taxable year in which section 38 property was taken into account in computing a taxpayer's qualified investment.

(b) The term "recapture year" means the taxable year in which section 38 property the basis (or cost) of which was taken into account in computing a taxpayer's qualified investment is disposed of, or otherwise ceases to be section 38 property or becomes public utility property with respect to the taxpayer, before the close of the estimated useful life which was taken into account in computing such qualified investment.

(c) The term "recapture determination" means a recomputation made under this paragraph.

(2) *Rules for applying subparagraph (1).* For purposes of subparagraph (1) of this paragraph—

(i) In determining whether section 38 property is disposed of, or otherwise ceases to be section 38 property with respect to the taxpayer, before the close of the estimated useful life which was taken into account in computing the taxpayer's qualified investment, the term "estimated useful life" means the shortest life of the useful life category within which falls the estimated useful life which was assigned to such property under paragraph (e) of § 1.46-3. Thus, section 38 property which is assigned, under paragraph (e) of § 1.46-2, an estimated useful life of 7 years shall not be treated, for purposes of subparagraph (1) of this paragraph, as having been disposed of before the close of its estimated useful life if such property is sold 6 years (that is, the shortest life of the 6 years or more but less than 8 years useful life category) after the date on which it was placed in service. Likewise, section 38 property with an estimated useful life of 15 years

which is placed in service on January 1, 1962, shall not be treated as having been disposed of before the close of its estimated useful life if such property is sold at any time after January 1, 1970 (that is, 8 years or more after the date on which it was placed in service).

(ii) In determining the recomputed qualified investment with respect to property which is disposed of or otherwise ceases to be section 38 property the term "actual useful life" means, except as otherwise provided in this section and §§ 1.47-2 through 1.47-6, the period beginning with the date on which the property was placed in service by the taxpayer and ending with the date of such disposition or cessation. See paragraph (c) of this section.

(b) *Increase in income tax and reduction of investment credit carryover—(1) Increase in tax.* Except as provided in subparagraph (2) of this paragraph, any increase in income tax under this section shall be treated as income tax imposed on the taxpayer by chapter 1 of the Code for the recapture year notwithstanding that without regard to such increase the taxpayer has no income tax liability, has a net operating loss for such taxable year, or no income tax return was otherwise required for such taxable year.

(2) *Special rule.* Any increase in income tax under this section shall not be treated as income tax imposed on the taxpayer by chapter 1 of the Code for purposes of determining the amount of the credits allowable to such taxpayer under—

(i) Section 32 (relating to taxes of foreign countries and possessions of United States),

(ii) Section 34 (relating to dividends received by individuals before January 1, 1965),

(iii) Section 35 (relating to partially tax-exempt interest received by individuals),

(iv) Section 37 (relating to retirement income), and

(v) Section 38 (relating to investment in certain depreciable property).

(3) *Reduction in credit allowed as a result of a net operating loss carryback.*

(i) If a net operating loss carryback from the recapture year or from any taxable year subsequent to the recapture year reduces the amount allowed as a credit under section 38 for any taxable year up to and including the recapture year, then there shall be a new recapture determination under paragraph (a) of this section for each recapture year affected, taking into account the reduced amount of credit allowed after application of the net operating loss carryback.

(ii) Subdivision (i) of this subparagraph may be illustrated by the following examples:

Example (1). (a) X Corporation, which makes its return on the basis of a calendar year, acquired and placed in service on January 1, 1962, an item of section 38 property with a basis of \$10,000 and an estimated useful life of 8 years. The amount of qualified investment with respect to such asset was \$10,000. For the taxable year 1962, X Corporation's credit earned of \$700 (7 percent of \$10,000) was allowed under section 38 as a credit against its liability for tax of \$700.

In 1963 and 1964 X Corporation had no liability for tax and placed in service no section 38 property. On January 3, 1963, such item of section 38 property was sold to Y Corporation. Since the actual useful life of such item was only 1 year, there was a recapture determination under paragraph (a) of this section. The income tax imposed by chapter 1 of the Code on X Corporation for the taxable year 1963 was increased by the \$700 decrease in its credit earned for the taxable year 1962 (that is, the \$700 original credit earned minus zero recomputed credit earned).

(b) For the taxable year 1965, X Corporation has a net operating loss which is carried back to the taxable year 1962 and reduces its liability for tax, as defined in paragraph (c) of § 1.46-1, for such taxable year to \$200. As a result of such net operating loss carryback, X Corporation's credit allowed under section 38 for the taxable year 1962 is limited to \$200 and the excess of \$500 (\$700 credit earned minus \$200 limitation based on amount of tax) is an investment credit carryover to the taxable year 1963.

(c) For 1965, there is a recapture determination under subdivision (i) of this subparagraph for the 1963 recapture year. The \$700 increase in the income tax imposed on X Corporation for the taxable year 1963 is redetermined to be \$200 (that is, the \$200 credit allowed after taking into account the 1965 net operating loss minus zero credit which would have been allowed taking into account the 1963 recapture determination). In addition, X Corporation's \$500 investment credit carryover to the taxable year 1963 is reduced by \$500 (\$700 minus \$200) to zero and X Corporation is entitled to a \$500 refund of the tax paid as a result of the 1963 determination.

Example (2). (a) X Corporation, which makes its returns on the basis of a calendar year, acquired and placed in service on January 1, 1962, an item of section 38 property with a basis of \$10,000 and an estimated useful life of 8 years. The amount of qualified investment with respect to such asset was \$10,000. For the taxable year 1962, X Corporation's credit earned of \$700 (7 percent of \$10,000) was allowed under section 38 as a credit against its liability for tax of \$700. In 1963 and in 1964 X Corporation had no liability for tax and placed in service no section 38 property. On January 3, 1965, such item of section 38 property is sold to Y Corporation. For the taxable year 1965, X Corporation has a net operating loss which is carried back to the taxable year 1962 and reduces its liability for tax, as defined in paragraph (c) of § 1.46-1, for such taxable year to \$100.

(b) As a result of such net operating loss carryback, X Corporation's credit allowed under section 38 for the taxable year 1962 is limited to \$100 and the excess of \$600 (\$700 credit earned minus \$100 limitation based on amount of tax) is an investment credit carryover to the taxable year 1963.

(c) Since the actual useful life of the item of section 38 property sold to Y Corporation was only 3 years, there is a recapture determination under paragraph (a) of this section. X Corporation's \$600 investment credit carryover to 1963 is reduced by \$600 to zero. The income tax imposed by chapter 1 of the Code on X Corporation for the taxable year 1965 is increased by the \$100 reduction in credit allowed by section 38 for 1962.

(4) *Statement of recomputation.* The taxpayer shall attach to his income tax return for the recapture year a separate statement showing in detail the computation of the increase in income tax imposed on such taxpayer by chapter 1 of the Code and the reduction in any investment credit carryovers.

(c) *Date placed in service and date of disposition or cessation—(1) General rule.* For purposes of this section and §§ 1.47-2 through 1.47-6, in determining the actual useful life of section 38 property—

(i) Such property shall be treated as placed in service on the first day of the month in which such property is placed in service. The month in which property is placed in service shall be determined under the principles of paragraph (d) of § 1.46-3.

(ii) If during the taxable year such property ceases to be section 38 property with respect to the taxpayer—

(a) As a result of the occurrence of an event on a specific date (for example, a sale, transfer, retirement or other disposition), such cessation shall be treated as having occurred on the actual date of such event.

(b) For any reason other than the occurrence of an event on a specific date (for example, because such property is used predominantly in connection with the furnishing of lodging during such taxable year), such cessation shall be treated as having occurred on the first day of such taxable year.

(2) *Special rule.* Notwithstanding subparagraph (1) of this paragraph, if a taxpayer uses an averaging convention (see § 1.167 (a)-10) in computing depreciation with respect to section 38 property, then, for purposes of this section and §§ 1.47-2 through 1.47-6, he may use the assumed dates of additions and retirements in determining the actual useful life of such property provided such assumed dates are used consistently for purposes of subpart B of part IV of subchapter A of chapter 1 of the Code with respect to all section 38 property for which such convention is used for purposes of depreciation. This subparagraph shall not apply in any case where from all the facts and circumstances it appears that the use of such assumed dates results in a substantial distortion of the investment credit allowed by section 38. Thus, for example, if the taxpayer computes depreciation under a convention under which the average of the beginning and ending balances of the asset account for the taxable year are taken into account, he may use July 1 as the assumed date of all additions and retirements to such account. Similarly, if the taxpayer computes depreciation under a convention under which the average of the beginning and ending balances of the asset account for each month is taken into account, he may use the date determined by reference to the weighted average of the monthly averages as the assumed date of all additions and retirements to such account.

(3) *Example.* This paragraph may be illustrated by the following example:

Example. Assume that section 38 property is placed in service (within the meaning of paragraph (d) of § 1.46-3) on December 1, 1965 (thus, the credit is treated as being earned in 1965) but under the taxpayer's depreciation practice the period for depreciation with respect to such property

begins on January 1, 1966, and that the property is actually retired on December 2, 1970. Under the general rule of subparagraph (1) of this paragraph, the property is treated as placed in service on December 1, 1965, and as ceasing to be section 38 property with respect to the taxpayer on December 2, 1970, even though under the taxpayer's depreciation practice the period for depreciation with respect to such property begins on January 1, 1966, and terminates on January 1, 1971. However, under the special rule of subparagraph (2) of this paragraph the taxpayer may determine the actual useful life of the property by reference to the assumed dates of January 1, 1966, and January 1, 1971.

(d) *Examples.* Paragraphs (a) through (c) of this section may be illustrated by the following examples:

Example (1). (i) X Corporation, which makes its returns on the basis of the calendar year, acquired and placed in service on January 1, 1962, three items of section 38 property each with a basis of \$12,000 and an estimated useful life of 15 years. The amount of qualified investment with respect to each such asset was \$12,000. For the taxable year 1962, X Corporation's credit earned of \$2,520 was allowed under section 38 as a credit against its liability for tax of \$4,000. On December 2, 1965, one of the items of section 38 property is sold to Y Corporation.

(ii) The actual useful life of the item of property which is sold on December 2, 1965, is three years and eleven months. The recomputed qualified investment with respect to such item of property is zero (\$12,000 basis multiplied by zero applicable percentage) and X Corporation's recomputed credit earned for the taxable year 1962 is \$1,680 (7 percent of \$24,000). The income tax imposed by chapter 1 of the Code on X Corporation for the taxable year 1965 is increased by the \$840 decrease in its credit earned for the taxable year 1962 (that is, \$2,520 original credit earned minus \$1,680 recomputed credit earned).

Example (2). (i) The facts are the same as in example (1) and in addition on December 2, 1966, a second item of section 38 property placed in service in the taxable year 1962 is sold to Y Corporation.

(ii) The actual useful life of the item of property which is sold on December 2, 1966, is four years and eleven months. The recomputed qualified investment with respect to such item of property is \$4,000 (\$12,000 basis multiplied by 33 1/3 percent applicable percentage) and X Corporation's recomputed credit earned for the taxable year 1962 is \$1,120 (7 percent of \$16,000). The income tax imposed by chapter 1 of the Code on X Corporation for the taxable year 1966 is increased by \$560 (that is, \$1,400 (\$2,520 original credit earned minus \$1,120 recomputed credit earned) reduced by the \$840 increase in tax for 1965).

Example (3). (i) The facts are the same as in example (1) except that for the taxable year 1962 X Corporation's liability for tax under section 46(a) (3) is only \$1,520. Therefore, for such taxable year X Corporation's credit allowed under section 38 is limited to \$1,520 and the excess of \$1,000 (\$2,520 credit earned minus \$1,520 limitation based on amount of tax) is an unused credit. Of such \$1,000 unused credit, \$100 is allowed as a credit under section 38 for the taxable year 1963, \$100 is allowed for 1964, and \$800 is carried to the taxable year 1965.

(ii) The actual useful life of the item of property which is sold on December 2, 1965, is three years and eleven months. The recomputed qualified investment with respect to such item of property is zero (\$12,000 basis multiplied by zero applicable percentage) and X Corporation's recomputed

credit earned for the taxable year 1962 is \$1,680 (7 percent of \$24,000). If such \$1,680 recomputed credit earned had been taken into account in place of the \$2,520 original credit earned, X's credit allowed for 1962 would have been \$1,520, and of the \$160 unused credit from 1962 \$100 would have been allowed as a credit under section 38 for 1963, and \$60 would have been allowed for 1964. X Corporation's \$800 investment credit carryover to the taxable year 1965 is reduced by \$800 to zero. The income tax imposed by chapter 1 of the Code on X Corporation for the taxable year 1965 is increased by \$40 (that is, the aggregate reduction in the credits allowed by section 38 for 1962, 1963, and 1964).

Example (4). (i) X Corporation, which makes its returns on the basis of the calendar year, acquired and placed in service on November 1, 1962, an item of section 38 property with a basis of \$12,000 and an estimated useful life of 10 years. The amount of qualified investment with respect to such property was \$12,000. For the taxable year 1962, X Corporation's credit earned of \$840 was allowed under section 38 as a credit against its liability for tax of \$840. For each of the taxable years 1963 and 1964 X Corporation's liability for tax was zero and its credit earned was \$400; therefore, for each of such years its unused credit was \$400. For the taxable year 1965 its liability for tax was \$200 and its credit earned was zero; therefore, \$200 of the \$400 unused credit from 1963 was allowed as credit for 1965 and \$600 (\$200 from 1963 and \$400 from 1964) is an investment credit carryover to 1966. On February 2, 1966, such item of section 38 property is sold to Y Corporation.

(ii) The actual useful life of such item of property is three years and three months. The recomputed qualified investment with respect to such property is zero (\$12,000 basis multiplied by zero) and X Corporation's recomputed credit earned for the taxable year 1962 is zero. If such zero recomputed credit earned had been taken into account in place of the \$840 original credit earned, the entire \$400 unused credit from 1963 (including the \$200 portion which was originally allowed as a credit for 1965) and the \$400 unused credit from 1964 would have been allowed as investment credit carrybacks against X Corporation's liability for tax of \$840 for 1962. (See § 1.46-2 for rules relating to the carryback of unused credits.)

(iii) Therefore, the \$600 carryover from 1963 and 1964 to 1966 is eliminated and the income tax imposed by chapter 1 of the Code on X Corporation for the taxable year 1966 is increased by the \$240 aggregate reduction in the credits allowed by section 38 for the taxable years 1962 and 1965 (that is, \$1,040 credit allowed minus \$800 which would have been allowed).

Example (5). (i) X Corporation, which makes its returns on the basis of the calendar year, acquired and placed in service on November 1, 1962, an item of section 38 property with a basis of \$10,000 and an estimated useful life of 8 years. The amount of qualified investment with respect to such asset was \$10,000. For the taxable year 1962, X Corporation's credit earned of \$700 was allowed as a credit against its liability for tax. For each of the taxable years 1963, 1964, and 1965 X had no taxable income. On July 3, 1966, the item of section 38 property is sold to Y Corporation. For the taxable year 1966 X Corporation has a net operating loss of \$3,000.

(ii) The actual useful life of the item of property is three years and eight months. The recomputed qualified investment with respect to such item of property is zero and X Corporation's recomputed credit earned for the taxable year 1962 is zero. Notwithstanding the \$3,000 net operating loss for the taxable year 1966, the income tax imposed by

chapter 1 of the Code on X Corporation for such year is \$700 (that is, the decrease in its credit earned for the taxable year 1962).

(e) *Identification of property.*—(1) *General rule.*—(i) *Record requirements.* In general, the taxpayer must maintain records from which he can establish, with respect to each item of section 38 property, the following facts:

(a) The date the property is disposed of or otherwise ceases to be section 38 property.

(b) The estimated useful life which was assigned to the property under paragraph (e) of § 1.46-3.

(c) The month and the taxable year in which the property was placed in service, and

(d) The basis (or cost), actually or reasonably determined, of the property.

(ii) *Recapture determination.* For purposes of determining whether section 38 property is disposed of, or otherwise ceases to be section 38 property with respect to the taxpayer, before the close of its estimated useful life, and for purposes of determining recomputed qualified investment, the taxpayer must establish from his records the facts required by subdivision (i) of this subparagraph.

(iii) *Examples.* If the taxpayer fails to maintain records from which he can establish the facts required by subdivision (i) of this subparagraph, then this section shall be applied to the taxpayer in the manner indicated in the following examples:

Example (1). Corporation X, organized on January 1, 1964, files its income tax return on the basis of a calendar year. During the years 1964 and 1965, X places in service several items of machinery to which it assigns estimated useful lives of 8 years. X places the items of machinery in a composite account for purposes of computing depreciation. When X's 1966 return is being audited, X is unable to establish whether the items placed in service in 1964 and 1965 were still on hand at the end of 1966. Therefore, for purposes of paragraph (a) of this section, X is treated as having disposed of, in 1966, all of the items of machinery placed in service in 1964 and 1965.

Example (2). Corporation Y, organized on January 1, 1960, files its income tax return on the basis of a calendar year. During each of the years 1960 through 1965, Y places in service four items of machinery to each of which it assigns an estimated useful life of 8 years for depreciation purposes (and for purposes of computing qualified investment for relevant years). Y places the items of machinery in a composite account for purposes of computing depreciation (and for purposes of computing qualified investment for relevant years). When Y's 1965 return is being audited, Y can establish that it retired during 1965 only six items of this machinery. However, Y cannot establish the date on which these six items were placed in service, nor can Y establish that the items placed in service in 1963 or 1964 are still on hand as of the end of 1965. No previous recapture has taken place with respect to any of the items placed in service in 1963 or 1964. Assuming that paragraph (e) (2) and (3) of this section is not applicable, Y is treated, for purposes of paragraph (a) of this section, as having disposed of, in 1965, the four items placed in service in 1964, the most recent year before 1965 in which such property was placed in service, and two items from 1963, the next most recent year.

Example (3). The facts are the same as in example (2) except that when Y's 1966 return is being audited, Y can establish from its records that all four items placed in service in 1965 are still on hand and that only three items were retired in 1966. For purposes of paragraph (a) of this section, Y is treated as having disposed of, in 1966, the two remaining items of machinery placed in service in 1963, and one of the items placed in service in 1962.

(2) *Treatment of "mass assets".* (i) If, in the case of mass assets (as defined in subparagraph (4) of this paragraph), it is impracticable for the taxpayer to maintain records from which he can establish with respect to each item of section 38 property the facts required by subparagraph (1) of this paragraph, and if he adopts other reasonable record-keeping practices, consonant with good accounting and engineering practices, and consistent with his prior record-keeping practices, then he may substitute data from an appropriate mortality dispersion table. An appropriate mortality dispersion table must be based on an acceptable sampling of the taxpayer's actual experience or other acceptable statistical or engineering techniques. In lieu of such mortality dispersion table, the taxpayer may use a standard mortality dispersion table prescribed by the Commissioner. If the taxpayer uses such standard mortality dispersion table for any taxable year, it must be used for all subsequent taxable years unless the taxpayer obtains the consent of the Commissioner to change. If mass assets are placed in a multiple asset account and if the depreciation rate for such account is based on the maximum expected life of the longest lived asset in such account, in applying a mortality dispersion table (including a standard mortality dispersion table) the average expected useful life of the mass assets in such account must be used.

(ii) Subdivision (i) of this subparagraph shall not apply with respect to assets placed in service in taxable years ending on or after June 30, 1967, unless the estimated useful lives which were assigned to such assets for purposes of determining qualified investment—

(a) Were separate lives based on the estimated range of years taken into account in establishing the average useful life of assets similar in kind under paragraph (e) (3) (ii) (b) of § 1.46-3, and

(b) Were determined by use of a mortality dispersion table (including a standard mortality dispersion table).

(iii) Any standard mortality dispersion table prescribed by the Commissioner shall be based on average useful life categories and with respect to each category shall contain five columns, the first four of which shall state the percentage of property assumed to have a useful life of—

Column (1): Less than 4 years,
Column (2): 4 years or more but less than 6 years,
Column (3): 6 years or more but less than 8 years, and
Column (4): 8 years or more.

The fifth column shall show the total qualified investment as a percentage and

shall be used in connection with the determination to be made under § 1.46-3 (e) (3) (iii).

(iv) Whenever the standard mortality dispersion table is used for a taxable year under subdivision (i) of this subparagraph (whether or not such table was used in determining qualified investment), the percentage of property shown in column (1) of the table shall (for purposes of section 47, this section, and §§ 1.47-2 through 1.47-6) be deemed to have been disposed of on the day before the expiration of the 4-year period beginning on the date on which it was considered as placed in service under § 1.47-1 (c); the percentage of property shown in column (2) of the table shall be deemed to have been disposed of on the day before the expiration of the 6-year period beginning on the date on which it was so considered as placed in service; and the percentage of property shown in column (3) shall be deemed to have been disposed of on the day before the expiration of the 8-year period beginning on the date on which it was so considered as placed in service. In applying this subdivision for purposes of recomputing qualified investment, the proper average useful life category shall be used whether or not such category was used in determining qualified investment.

(v) In lieu of using subdivision (iv) of this subparagraph for purposes of recomputing qualified investment, a taxpayer may, for the first recapture year (as defined in paragraph (a) (1) (ii) (b) of this section) to which such subdivision (iv) would otherwise apply with respect to any mass asset account, recompute qualified investment on the basis of the difference between (a) the proper total qualified investment based on the percentage shown in column (5) of the table, and (b) the total qualified investment actually claimed by the taxpayer for the year in which the property was placed in service.

Example. Assume that the taxpayer places in service during 1963 mass assets costing him \$100,000, that he places these assets in a multiple asset account for which he properly claims a useful life of 6 years and a qualified investment of \$66,667 ($\frac{2}{3} \times \$100,000$), and that he is allowed an investment credit of \$4,667.67. When the taxpayer's 1967 return is being audited he is unable to establish that any of the mass assets placed in service in 1963 were still on hand at the end of 1967.

The taxpayer elects to use the standard mortality dispersion table prescribed by the Commissioner to determine the amount of recapture with respect to these mass assets. Assume that the table prescribed by the Commissioner shows with respect to mass assets with an average useful life of 6 years the following:

Percent of property assumed to have a useful life of—				Total qualified investment (percent)
Less than 4 years	4 years or more, but less than 6 years	6 years or more, but less than 8 years	8 years or more	
(1)	(2)	(3)	(4)	(5)
15.87	34.13	34.13	15.87	50.00

(a) Under these circumstances 15.87 percent of the mass assets placed in service in 1963 are deemed to have been disposed of during 1967. With respect to these assets, the amount of qualified investment for 1963 was \$10,580 ($\$15,870 \times \frac{2}{3}$) and the amount of credit earned was \$740.60 (7 percent of \$10,580), whereas the recomputed qualified investment is zero and the recomputed credit earned is zero. Thus, the tax imposed by chapter 1 of the Code for 1967 is increased by \$740.60.

(b) No recapture determination is required for 1968 since no assets are deemed to have been disposed of in that year. During 1969, 34.13 percent of the mass assets placed in service in 1963 are deemed to have been disposed of. With respect to these assets, the amount of qualified investment for 1963 was \$22,753.34 ($\$34,130 \times \frac{2}{3}$) and the amount of credit earned was \$1,592.73 (7 percent of \$22,753.34), whereas the recomputed qualified investment is \$11,376.67 ($\$34,130 \times \frac{2}{3}$) and the recomputed credit earned is \$796.37 (7 percent of \$11,376.67). Thus, the tax imposed by chapter 1 of the Code for 1969 is increased by \$796.36 (\$1,592.73 minus \$796.37).

(c) If the taxpayer chooses to recompute qualified investment by using the method provided in subdivision (v) of this subparagraph, the increase in tax for 1967 (the first recapture year) would be \$1,167.67, i.e., the original credit earned, \$4,667.67, minus the recomputed credit earned, \$3,500 (50 percent, the percentage shown in column (5), of \$100,000 multiplied by 7 percent). As long as the same average useful life category reflects the taxpayer's experience for subsequent years, no recapture determination will be required for any future year, except as provided by subparagraph (3) (iv) of this paragraph.

(3) *Special rules.* (i) Taxpayers who properly determine estimated useful lives under § 1.46-3 (e) (3) (ii) (b) or (iii) may treat such assets as having been disposed of or having ceased to be section 38 assets in the order of the estimated useful lives that were assigned to such assets. Thus, the asset that is first disposed of or first ceases to be section 38 property may be treated as the asset to which there was assigned the shortest estimated useful life; the next asset disposed of or ceasing to be section 38 property may be treated as the asset to which there was assigned the second shortest life, etc.

(ii) In the case of taxpayers who use the rule of subdivision (i) of this subparagraph with respect to mass assets for which the estimated useful life is determined under § 1.46-3 (e) (3) (iii), if the dispersion shown by the mortality dispersion table effective for a taxable year subsequent to the credit year is the same as the dispersion shown by the mortality table that was effective for the credit year (for example, if the same average useful life on the standard mortality dispersion table reflects the taxpayer's experience for both such years, no recapture determination is required for such subsequent taxable year).

(iii) Notwithstanding subdivision (i) of this subparagraph, taxpayers who, for purposes of determining qualified investment, do not use a mortality dispersion table with respect to certain section 38 assets similar in kind but who consistently assign under paragraph (e) (3) (ii) (b) of § 1.46-3 to such assets separate lives based on the estimated range of

years taken into consideration in establishing the average useful life of such assets, may select the order in which such assets shall be considered as having been disposed of, regardless of the taxable years in which such assets were placed in service. If a taxpayer uses the method provided in this subdivision to determine that any asset is considered as having been disposed of, then, in addition to complying with the record requirements of subparagraph (1)(i) of this paragraph, such taxpayer must maintain records from which he can establish to the satisfaction of the district director that such asset has not previously been considered as having been disposed of. In addition, if, for any taxable year, a taxpayer uses the method provided in this subdivision for any asset, he must use for such year and for each subsequent taxable year (unless he obtains the district director's consent to change) with respect to all assets similar in kind to such asset—

(a) The method of determining estimated useful lives described in paragraph (e) (3) (ii) (b) of § 1.46-3, and

(b) The method he has selected under this subdivision for determining the order in which such assets are considered as having been disposed of.

A request by a taxpayer to obtain the district director's consent to change a system or method described in this subdivision with respect to assets similar in kind must be submitted to the district director on or before the last day of the taxable year with respect to which the change is sought.

(iv) Notwithstanding subdivisions (i), (ii), and (iii) of this subparagraph, there shall be taken into account separately any abnormal retirement of section 38 property of substantial value for which the estimated useful life was determined under § 1.46-3(e) (3) (ii) (b) or (iii). For definition of abnormal retirement, see paragraph (b) of § 1.167(a)-8.

(4) Definition of "mass assets". For purposes of this paragraph and paragraph (e) (3) (iii) of § 1.46-3, the term "mass assets" means a mass or group of individual items of property (i) not necessarily homogeneous, (ii) each of which is minor in value relative to the total value of such mass or group, (iii) numerous in quantity, (iv) usually accounted for only on a total dollar or quantity basis, and (v) with respect to which separate identification is impracticable. The term includes portable air and electric tools, jigs, dies, railroad ties, overhead conductors, hardware, textile spindles, and minor items of office, plant, and store furniture and fixtures; and returnable containers and other items which are considered subsidiary assets for purposes of computing the allowance for depreciation.

(5) Example. This paragraph may be illustrated by the following example:

Example. (i) Taxpayer A uses numerous small returnable containers in his business. It is impracticable for A to keep individual detailed records with respect to such containers which are mass assets. In 1965, A places in service 10 million containers purchased for \$1 million, and reasonably deter-

mines that each of such containers has a basis of 10 cents. A places such containers in a multiple asset account to which is assigned a 5-year average useful life for purposes of computing depreciation. A has conducted an appropriate mortality study which shows that the containers have the following estimated useful lives:

Percent of assets	Useful life (years)
10	3
20	4
40	5
20	6
10	7

A assigns separate lives to such assets based on the estimated range of years taken into account in establishing the average useful life of such containers. The qualified investment with respect to such containers is \$400,000 computed as follows:

Useful life	Basis	Applicable percentage	Qualified investment
4	\$200,000	33 1/3%	\$66,666
5	400,000	33 1/3%	133,334
6	200,000	66 2/3%	133,334
7	100,000	66 2/3%	66,666
			400,000

A's credit earned for 1965 of \$28,000 (7 percent times \$400,000) is allowed as a credit under section 38 against A's liability for tax of \$2 million. (For purposes of this example the computations of investment credit and recapture with respect to containers placed in service in years other than 1965 are omitted.) The mortality studies effective for 1966 and 1967 show that none of the containers placed in service in 1965 was retired.

(ii) A's mortality study effective with respect to 1968 shows that the containers are being retired as follows:

Percent of assets	Useful life (years)
30	3
20	4
30	5
10	6
10	7

Thus, the 1968 study shows that 30 percent of the 10 million containers placed in service in 1965 were retired in 1968. Under the rule of subparagraph (3) (i) of this paragraph, the 3 million containers are treated as consisting of the 1 million containers to which was assigned a 3-year useful life and the 2 million containers to which was assigned a 4-year useful life. Taking into account only the fact that 30 percent of the containers placed in service in 1965 had an actual life of less than 4 years, A's recomputed qualified investment for 1965 is \$333,333 and his recomputed credit earned is \$23,333. A's income tax for 1968 is increased by \$4,667 (\$28,000 original credit earned minus \$23,333 recomputed credit earned).

(iii) The mortality study effective for 1969 shows the same results as the mortality study effective for 1968. Thus, it shows that 2 million containers were retired in 1969 (an actual life of 4 years). Under the rule of subparagraph (3) (i) of this paragraph such 2 million containers are treated as having been among 4 million containers to which were assigned a 5-year useful life. Therefore, no recapture determination is required for 1969.

(iv) The mortality study effective for 1970 shows the same results as the mortality study effective for 1968. Thus, it shows that 3 million containers were retired in 1970 (an actual life of 5 years). Under the rule of subparagraph (3) (i) of this paragraph, the 3 million are treated as having been assigned

useful lives as follows: 2 million as having been assigned a useful life of 5 years, and 1 million as having been assigned a useful life of 6 years. Taking into account only the fact that 10 percent of the containers placed in service in 1965 had an actual life of 5 years rather than the 6 years estimated useful life assigned to them, A's recomputed qualified investment is \$300,000 and A's credit earned for 1965 is \$21,000. Thus, taking into account the 1968 recapture determination, A's income tax for 1970 is increased by \$2,333.

(f) Public utility property.—(1) Recaptured qualified investment. In recomputing qualified investment with respect to section 38 property which becomes public utility property (as defined in paragraph (g) of § 1.46-3)—

(i) If such property becomes public utility property less than 4 years from the date on which it was placed in service, then such property shall be treated as public utility property for its entire useful life.

(ii) If such property becomes public utility property 4 years or more but less than 6 years from the date on which it was placed in service, then such property shall be treated as section 38 property which is not public utility property for the first 4 years of its estimated useful life and as public utility property for the remaining period of its estimated useful life.

(iii) If such property becomes public utility property 6 years or more but less than 8 years from the date on which it was placed in service, then such property shall be treated as section 38 property which is not public utility property for the first 6 years of its estimated useful life and as public utility property for the remaining period of its estimated useful life.

(2) Examples. Subparagraph (1) of this paragraph may be illustrated by the following examples:

Example (1). (i) X Corporation, which makes its returns on the basis of the calendar year, acquired and placed in service on January 1, 1962, an item of section 38 property with a basis of \$12,000 and an estimated useful life of 8 years. The amount of qualified investment with respect to such property was \$12,000. For the taxable year 1962, X Corporation's credit earned was \$840 (7 percent of \$12,000) and for such taxable year X Corporation was allowed under section 38 a credit of \$840 against its liability for tax. During the taxable year 1967 such property becomes public utility property (as defined in paragraph (g) of § 1.46-3) with respect to X Corporation.

(ii) Such item of section 38 property is treated as section 38 property which is not public utility property for the first four years of its eight year estimated useful life and is treated as public utility property for the remaining four years. The recomputed qualified investment with respect to such item of section 38 property is \$7,428, computed as follows:

\$12,000 basis x 33 1/3 percent applicable percentage	\$4,000
\$12,000 basis x 3/4 x 66 2/3 percent applicable percentage	3,428
Total recomputed qualified investment	7,428

X Corporation's recomputed credit earned for the taxable year 1962 is \$520 (7 percent of \$7,428). The income tax imposed by

chapter 1 of the Code on X Corporation for the taxable year 1967 is increased by the \$320 decrease in its credit earned for the taxable year 1962 (that is, \$840 original credit earned minus \$520 recomputed credit earned).

Example (2). (i) The facts are the same as in example (1) and in addition the item of section 38 property which became public utility property in 1967 is sold to Y Corporation on January 2, 1968.

(ii) The actual useful life of such item of property is six years. For the first four years of its eight year estimated useful life such item is treated as section 38 property which is not public utility property and for the remaining two years is treated as public utility property. The recomputed qualified investment with respect to such item of property is \$5,714, computed as follows:

\$12,000 basis x 33 1/3 percent applicable percentage	\$4,000
\$12,000 basis x 1/2 x 33 1/3 percent applicable percentage	1,714

Total recomputed qualified investment..... 5,714

X Corporation's recomputed credit earned for the taxable year 1962 is \$400 (7 percent of \$5,714). The income tax imposed by chapter 1 of the Code on X Corporation for the taxable year 1968 is increased by \$120 (that is, \$440 (\$840 original credit earned minus \$400 recomputed credit earned) minus \$320 increase in tax for 1967).

PAR. 5. Section 1.47-2 is added to read as follows:

§ 1.47-2 "Disposition" and "cessation".

(a) **General rule.**—(1) "Disposition". For purposes of this section and § 1.47-1 and §§ 1.47-3 through 1.47-6, the term "disposition" includes a sale in a sale-and-leaseback transaction, a transfer upon the foreclosure of a security interest and a gift, but such term does not include a mere transfer of title to a creditor upon creation of a security interest. See paragraph (g) of § 1.47-3 for treatment of certain sale-and-leaseback transactions.

(2) "Cessation". (i) A determination of whether section 38 property ceases to be section 38 property with respect to the taxpayer must be made for each taxable year subsequent to the credit year. Thus, in each such taxable year the taxpayer must determine, as if such property were placed in service in such taxable year, whether such property would qualify as section 38 property (within the meaning of § 1.48-1) in the hands of the taxpayer for such taxable year.

(ii) Section 38 property does not cease to be section 38 property with respect to the taxpayer in any taxable year subsequent to the credit year merely because under the taxpayer's depreciation practice no deduction for depreciation with respect to such property is allowable to the taxpayer for the taxable year, provided that the property continues to be used in the taxpayer's trade or business (or in the production of income) and otherwise qualifies as section 38 property with respect to the taxpayer.

(iii) This subparagraph may be illustrated by the following examples:

Example (1). A, an individual who makes his returns on the basis of the calendar year, on January 1, 1962, acquired and placed in service in his trade or business an item

of section 38 property with an estimated useful life of eight years. On January 1, 1965, A removes the item of section 38 property from use in his trade or business by converting such item to personal use. Therefore no deduction for depreciation with respect to such item of property is allowable to A for the taxable year 1965. On January 1, 1965, such item of property ceases to be section 38 property with respect to A.

Example (2). On January 1, 1965, A placed in service an item of section 38 property with a basis of \$10,000 and an estimated useful life of 4 years. A depreciates such item, which has a salvage value of \$2,000 (after taking into account section 167(f)), on the declining balance method at a rate of 50 percent (that is, twice the straight line rate of 25 percent). With respect to such item, A is allowed deductions for depreciation of \$5,000 for 1965, \$2,500 for 1966, and \$500 for 1967. A is not allowed a deduction for depreciation for 1968 although he continues to use such item in his trade or business. Such item does not cease to be section 38 property with respect to A in 1968.

(b) **Leased property.**—(1) **In general.** For purposes of paragraph (a) of § 1.47-1, generally the mere leasing of section 38 property by a lessor who took the basis of such property into account in computing his qualified investment for the credit year shall not be considered to be a disposition. However, in a case where a lease is treated as a sale for income tax purposes such transaction is considered to be a disposition. Leased section 38 property ceases to be section 38 property with respect to the lessor if, in any taxable year subsequent to the credit year, such property would not qualify as section 38 property (as defined in § 1.48-1) in the hands of the lessor, the lessee, or any sublessee. Thus, if, in a taxable year subsequent to the credit year, a lessee uses the property predominantly outside the United States, such property shall be considered to have ceased to be section 38 property with respect to the lessor.

(2) **Where lessor elects to treat lessee as purchaser.** For purposes of paragraph (a) of § 1.47-1, if, under § 1.48-4, the lessor of new section 38 property made a valid election to treat the lessee as having purchased such property for purposes of the credit allowed by section 38, the following rules apply in determining whether such property is disposed of, or otherwise ceases to be section 38 property with respect to the lessee:

(i) Generally, a mere disposition by the lessor of property subject to a lease shall not be considered to be a disposition by the lessee.

(ii) If the lessor makes a disposition of property subject to a lease to a person who may not, under § 1.48-4, make a valid election to treat the lessee as having purchased such property for purposes of the credit allowed by section 38 (such as a person described in paragraph (a) (5) of § 1.48-4), such property shall be considered to have ceased to be section 38 property with respect to the lessee on the date of such disposition.

(iii) If a lease is terminated and the property is transferred by the lessee to the lessor or to any other person, such

transfer shall be considered to be a disposition by the lessee.

(iv) If the lessee actually purchases such property in the credit year or in a taxable year subsequent to the credit year, such purchase shall not be considered to be a disposition.

(v) The property ceases to be section 38 property with respect to the lessee if in any taxable year subsequent to the credit year such property would not qualify as section 38 property (as defined in § 1.48-1) in the hands of the lessor, the lessee, or any sublessee. Thus, for example, if, in a taxable year subsequent to the credit year, a sublessee uses the property predominantly outside the United States, the property ceases to be section 38 property with respect to the lessee.

(c) **Reduction in basis of section 38 property.**—(1) **General rule.** If, in the credit year or in any taxable year subsequent to the credit year, the basis (or cost) of section 38 property is reduced, for example, as a result of a refund of part of the cost of the property, then such section 38 property shall be treated as having ceased to be section 38 property with respect to the taxpayer to the extent of the amount of such reduction in basis (or cost) on the date the refund which results in such reduction in basis (or cost) is received or accrued, except that for purposes of § 1.47-1(a) the actual useful life of the property treated as having ceased to be section 38 property shall be considered to be less than 4 years.

(2) **Example.** Subparagraph (1) of this paragraph may be illustrated by the following example:

Example. (i) On January 1, 1962, A, a cash basis taxpayer, acquired from X Cooperative an item of section 38 property with a basis of \$100 and an estimated useful life of 10 years which he placed in service on such date. The amount of qualified investment with respect to such asset was \$100. For the taxable year 1962 A was allowed under section 38 a credit of \$7 against his liability for tax. On June 1, 1963, A receives a \$10 patronage dividend from X Cooperative with respect to such asset. Under paragraph (c) (2) (i) of § 1.1385-1, the basis of the asset in A's hands is reduced by \$10.

(ii) Under subparagraph (1) of this paragraph, on June 1, 1963, the item of section 38 property ceases to be section 38 property with respect to A to the extent of \$10 of the original \$100 basis.

(d) **Retirements.** A retirement of section 38 property, including a normal retirement (as defined in paragraph (b) of § 1.167(a)-8, relating to definition of normal and abnormal retirements), whether from a single asset account or a multiple asset account, and an abandonment, are dispositions for purposes of paragraph (a) of § 1.47-1.

(e) **Conversion of section 38 property to personal use.** (1) If, for any taxable year subsequent to the credit year—

(i) A deduction for depreciation is allowable to the taxpayer with respect to only a part of section 38 property because such property is partially devoted to personal use, and

(ii) The part of the property expressed as a percentage of its total basis

(or cost)) with respect to which a deduction for depreciation is allowable for such taxable year is less than the part of the property with respect to which a deduction for depreciation was allowable in the credit year.

then such property shall be considered as having ceased to be section 38 property with respect to the taxpayer to such extent. Further, property ceases to be section 38 property with respect to the taxpayer to the extent that a deduction for depreciation thereon is disallowed under section 274 (relating to disallowance of certain entertainment, etc., expenses).

(2) *Examples.* Subparagraph (1) of this paragraph may be illustrated by the following examples:

Example (1). (1) A, a calendar-year taxpayer, acquired and placed in service on January 1, 1962, an automobile with a basis of \$2,400 and an estimated useful life of four years. In the taxable year 1962 the automobile was used by A 80 percent of the time in his trade or business and was used 20 percent of the time for personal purposes. Thus, for the taxable year 1962 only 80 percent of the basis of the automobile qualified as section 38 property since a deduction for depreciation was allowable to A only with respect to 80 percent of the basis of the automobile. In the taxable year 1963 the automobile is used by A only 60 percent of the time in his trade or business. Thus, for the taxable year 1963 a deduction for depreciation is allowable to A only with respect to 60 percent of the basis of the automobile.

(2) Under subparagraph (1) of this paragraph, on January 1, 1963, the automobile ceases to be section 38 property with respect to A to the extent of 20 percent (80 percent minus 60 percent) of the \$2,400 basis of the automobile.

Example (2). (1) The facts are the same as in example (1) and in addition for the taxable year 1964 a deduction for depreciation is allowable to A only with respect to 40 percent of the basis of the property.

(2) Under subparagraph (1) of this paragraph, on January 1, 1964, the automobile ceases to be section 38 property with respect to A to the extent of 20 percent (60 percent minus 40 percent) of the \$2,400 basis of the automobile.

Par. 6. Section 1.47-3 is added to read as follows:

§ 1.47-3 Exceptions to the application of § 1.47-1.

(a) *In general.* Notwithstanding the provisions of § 1.47-2, relating to "disposition" and "cessation," paragraph (a) of § 1.47-1 shall not apply if paragraph (b) (relating to transfers by reason of death), paragraph (c) (relating to property destroyed by casualty), paragraph (d) (relating to reselection of used section 38 property), paragraph (e) (relating to transactions to which section 381 (a) applies), paragraph (f) (relating to mere change in form of conducting a trade or business), or paragraph (g) (relating to sale-and-leaseback transactions) of this section applies with respect to such disposition or cessation.

(b) *Transfers by reason of death.*—(1) *General rule.* Notwithstanding the provisions of § 1.47-2, relating to "disposition" and "cessation," paragraph (a)

of § 1.47-1 shall not apply to a transfer of section 38 property by reason of the death of the taxpayer. Thus, for example, with respect to section 38 property held in joint tenancy, paragraph (a) of § 1.47-1 shall not apply to the transfer of the deceased taxpayer's interest to the surviving joint tenant. If, under § 1.48-4, the lessor of new section 38 property made a valid election to treat the lessee as having purchased such property for purposes of the credit allowed by section 38, paragraph (a) of § 1.47-1 does not apply if, by reason of the death of the lessee, there is a termination of the lease and transfer of the leased property to the lessor, or there is an assignment of the lease and transfer of the leased property to another person. Moreover, paragraph (a) of § 1.47-1 does not apply to the transfer of a partner's interest in a partnership, a beneficiary's interest in an estate or trust, or shares of stock of a shareholder of an electing small business corporation (as defined in section 1371(b)) by reason of the death of such partner, beneficiary, or shareholder. Paragraph (a) of § 1.47-1 applies to a gift by a taxpayer prior to his death even if the value of such gift is included in his gross estate for estate tax purposes (such as, a gift in contemplation of death under section 2035). The effect of this subparagraph is that any section 38 property held by a taxpayer at the time of his death is deemed to have been held by him for its entire estimated useful life.

(2) *Examples.* Subparagraph (1) of this paragraph may be illustrated by the following examples:

Example (1). (1) A, an individual, acquired and placed in service on January 1, 1962, an item of section 38 property with a basis of \$10,000 and an estimated useful life of eight years. On April 28, 1963, A dies and, as a result of A's death, his interest in such item of section 38 property is transferred to a testamentary trust pursuant to A's will, and on February 1, 1967, the trust is terminated and the item of section 38 property is transferred to the beneficiaries of the trust.

(2) Under subparagraph (1) of this paragraph, paragraph (a) of § 1.47-1 does not apply to the transfer, as a result of A's death, of his interest in such item of section 38 property to the testamentary trust. Moreover, paragraph (a) of § 1.47-1 does not apply to the February 1, 1967, transfer of such item of section 38 property by the trust to its beneficiaries.

Example (2). (1) X Corporation, an electing small business corporation (as defined in section 1371(b)) which makes its returns on the basis of a calendar year, acquired and placed in service during 1962 an item of section 38 property. On December 31, 1962, X Corporation had 10 shares of stock outstanding which were owned as follows: A owned eight shares and B owned two shares. On December 31, 1962, 80 percent of the basis of the item of section 38 property was apportioned to A and 20 percent to B. On June 1, 1964, A dies and, as a result of A's death, his eight shares of stock in X Corporation are transferred to his wife. On July 10, 1965, X Corporation sells the item of section 38 property to Y Corporation.

(2) Under subparagraph (1) of this paragraph, paragraph (a) of § 1.47-1 does not apply to the transfer, as a result of A's death, of his eight shares of stock in X Corporation

to his wife. Moreover, with respect to the July 10, 1965, sale paragraph (a) of § 1.47-1 applies only to the 20 percent of the basis of the item of section 38 property which was apportioned to B.

(c) *Property destroyed by casualty.*—

(1) *General rule.* Notwithstanding the provisions of § 1.47-2, relating to "disposition" and "cessation," paragraph (a) of § 1.47-1 shall not apply to property which is disposed of or otherwise ceases to be section 38 property with respect to the taxpayer on account of its destruction or damage by fire, storm, shipwreck or other casualty, or by reason of its theft if—

(i) Section 38 property is placed in service by the taxpayer to replace (within the meaning of paragraph (h) of § 1.46-3) such destroyed, damaged, or stolen property, and

(ii) The basis (or cost) of the section 38 property which is placed in service by the taxpayer to replace the destroyed, damaged, or stolen property is reduced under paragraph (h) of § 1.46-3.

(2) *Examples.* Subparagraph (1) of this paragraph may be illustrated by the following examples:

Example (1). (1) A acquired and placed in service on January 1, 1962, machine No. 1 which qualified as section 38 property with a basis of \$30,000 and an estimated useful life of 6 years. The amount of qualified investment with respect to such machine was \$20,000. For the taxable year 1962 A's credit earned of \$1,400 was allowed under section 38 as a credit against its liability for tax. On January 1, 1963, machine No. 1 is completely destroyed by fire. On January 1, 1963, the adjusted basis of machine No. 1 in A's hands is \$24,500. A receives \$23,000 in insurance proceeds as compensation for the destroyed machine, and on February 15, 1964, A acquires and places in service machine No. 2, which qualifies as section 38 property, with a basis of \$41,000 and an estimated useful life of six years to replace machine No. 1.

(2) Under subparagraph (1) of this paragraph, paragraph (a) of § 1.47-1 does not apply with respect to machine No. 1 since machine No. 2 is placed in service to replace machine No. 1 and the \$41,000 basis of machine No. 2 is reduced, under paragraph (h) of § 1.46-3, by \$23,000. (See example (1) of paragraph (h) (3) of § 1.46-3.)

Example (2). (1) The facts are the same as in example (1) except that A receives only \$19,000 in insurance proceeds as compensation for the destroyed machine.

(2) Although machine No. 2 is placed in service to replace machine No. 1, subparagraph (1) of this paragraph does not apply with respect to machine No. 1 since the basis of machine No. 2 is not reduced under paragraph (h) of § 1.46-3. Paragraph (a) of § 1.47-1 applies with respect to the January 1, 1963, destruction of machine No. 1. The actual useful life of machine No. 1 is one year. The recomputed qualified investment with respect to such machine is zero (\$30,000 basis multiplied by zero applicable percentage) and A's recomputed credit earned for the taxable year 1962 is zero. The income tax imposed by chapter 1 of the Code on A for the taxable year 1963 is increased by \$1,400.

(d) *Reselection of used section 38 property.*—(1) *Reselection.* If—

(i) Used section 38 property (as defined in § 1.48-3) the cost of which was taken into account in computing the taxpayer's qualified investment is disposed of, or otherwise ceases to be section 38 property with respect to the taxpayer,

before the close of the estimated useful life which was taken into account in computing such qualified investment, and

(ii) For the taxable year in which the property described in subdivision (i) of this subparagraph was placed in service, the sum of (a) the cost of used section 38 property placed in service by the taxpayer, and (b) the cost of used section 38 property apportioned to such taxpayer exceeded \$50,000,

then such taxpayer may treat the cost of any used section 38 property (regardless of its estimated useful life) which was not originally selected, under paragraph (c)(4) of § 1.48-3, to be taken into account in computing qualified investment for such taxable year (or previously reselected under this subparagraph) as having been selected (in accordance with the principles of paragraph (c)(4)(ii) of § 1.48-3) in place of the cost of the used section 38 property described in subdivision (i) of this subparagraph. Hereinafter such reselected property is referred to as "newly selected used section 38 property". For purposes of this subparagraph, the cost of used section 38 property apportioned to a taxpayer means the sum of the cost of used section 38 property apportioned to him by a trust, estate, or electing small business corporation (as defined in section 1371(b)), and his share of the cost of partnership used section 38 property, with respect to the taxable year of such trust, estate, corporation or partnership ending with or within such taxpayer's taxable year. In the case of a taxpayer to whom paragraph (c)(2) of § 1.48-3 applied for the taxable year in which the property described in subdivision (i) of this subparagraph was placed in service, a \$25,000 amount shall be substituted for the \$50,000 amount referred to in subdivision (ii)(b) of this subparagraph, and in the case of a member of an affiliated group (as defined in subparagraph (6) of § 1.48-3(e)) the amount apportioned to such member under paragraph (e) of § 1.48-3 shall be substituted for such \$50,000 amount.

(2) *Application of paragraph (a) of § 1.47-1.* (i) If a taxpayer treats, under subparagraph (1) of this paragraph, the cost of any used section 38 property which was not originally selected as having been selected in place of the cost of used section 38 property described in subparagraph (1)(i) of this paragraph, then, notwithstanding the provisions of § 1.47-2 (relating to "disposition" and "cessation"), paragraph (a) of § 1.47-1 shall not apply to the property described in subparagraph (1)(i) of this paragraph to the extent of the cost of the newly selected used section 38 property.

(ii) If the cost of the used section 38 property described in subparagraph (1)(i) of this paragraph exceeds the cost of the newly selected used section 38 property, then the property described in subparagraph (1)(i) of this paragraph shall cease to be section 38 property with respect to the taxpayer to the extent of such excess.

(iii) If the newly selected used section 38 property is disposed of, or otherwise

ceases to be section 38 property with respect to the taxpayer, before the close of the estimated useful life of the property described in subparagraph (1)(i) of this paragraph, then, unless he reselects other used section 38 property, paragraph (a) of § 1.47-1 shall apply with respect to such newly selected used section 38 property. For purposes of recomputing qualified investment with respect to such newly selected used section 38 property the actual useful life shall be deemed to be the period beginning with the date on which the property described in subparagraph (1)(i) of this paragraph was placed in service by the taxpayer and ending with the date of the disposition or cessation with respect to such newly selected used section 38 property. See paragraph (c) of § 1.47-1, relating to date placed in service and date of disposition or cessation.

(3) *Information requirement.* (i) If in any taxable year this paragraph applies to a taxpayer, such taxpayer shall attach to his income tax return for such taxable year a statement containing the information required by subdivision (ii) of this subparagraph.

(ii) The statement referred to in subdivision (i) of this subparagraph shall contain the following information:

(a) The taxpayer's name, address and taxpayer account number; and

(b) With respect to the originally selected used section 38 property and the newly selected used section 38 property, the month and year placed in service, cost, and estimated useful life.

(4) *Examples.* This paragraph may be illustrated by the following examples:

Example (1). (i) X Corporation purchased and placed in service on January 1, 1962, machines No. 1 and No. 2, which qualified as used section 38 property, each with a cost of \$50,000 and an estimated useful life of eight years. The aggregate cost of used section 38 property taken into account by X Corporation in computing its qualified investment for the taxable year 1962 could not exceed \$50,000; therefore, under paragraph (c)(4) of § 1.48-3, X selected the \$50,000 cost of machine No. 1 to be taken into account in computing its qualified investment for the taxable year 1962. The qualified investment with respect to machine No. 1 was \$50,000. For the taxable year 1962 X's credit earned of \$3,500 was allowed under section 38 as a credit against its liability for tax. On January 2, 1965, X Corporation sells machine No. 1 to Y Corporation.

(ii) Under subparagraph (1) of this paragraph, X Corporation treats the \$50,000 cost of machine No. 2 as having been selected to be taken into account in computing its qualified investment for the taxable year 1962 in place of the \$50,000 cost of machine No. 1. Therefore, under subparagraph (2)(i) of this paragraph, paragraph (a) of § 1.47-1 does not apply to the January 2, 1965, disposition of machine No. 1.

Example (2). (i) The facts are the same as in example (1) and in addition X Corporation, on December 2, 1966, sells machine No. 2 to Z Corporation.

(ii) Under subparagraph (2)(iii) of this paragraph, paragraph (a) of § 1.47-1 applies with respect to the December 2, 1966, disposition of machine No. 2. The actual useful life of machine No. 2 is four years and eleven months (that is, the period beginning on January 1, 1962, and ending on December 2, 1966). The recomputed qualified invest-

ment with respect to machine No. 2 is \$16,667 (\$50,000 cost multiplied by 33 1/3 percent applicable percentage) and X Corporation's recomputed credit earned for the taxable year 1962 is \$1,167. The income tax imposed by chapter 1 of the Code on X Corporation for the taxable year 1966 is increased by the \$2,333 decrease in its credit earned for the taxable year 1962 (that is, \$3,500 original credit earned minus \$1,167 recomputed credit earned).

Example (3). (i) The facts are the same as in example (1) except that machine No. 2 had a cost of \$30,000.

(ii) Under subparagraph (1) of this paragraph, X Corporation treats the \$30,000 cost of machine No. 2 as having been selected to be taken into account in computing its qualified investment for the taxable year 1962 in place of the \$50,000 cost of machine No. 1. Therefore, under subparagraph (2)(i) of this paragraph, paragraph (a) of § 1.47-1 does not apply to the January 2, 1965, disposition of machine No. 1 to the extent of \$30,000 of the \$50,000 cost of machine No. 1. However, under subparagraph (2)(ii) of this paragraph, paragraph (a) of § 1.47-1 applies to the January 2, 1965, disposition of machine No. 1 to the extent of \$20,000 (that is, \$50,000 cost of machine No. 1 minus \$30,000 cost of machine No. 2). The actual useful life of such \$20,000 portion of machine No. 1 is three years (that is, the period beginning on January 1, 1962, and ending on January 2, 1965). The recomputed qualified investment with respect to the \$20,000 portion of the cost of machine No. 1 is zero (\$20,000 portion of the cost multiplied by zero applicable percentage) and X Corporation's recomputed credit earned for the taxable year 1962 is \$2,100 (7 percent of \$30,000). The income tax imposed by chapter 1 of the Code on X Corporation for the taxable year 1965 is increased by the \$1,400 decrease in its credit earned for the taxable year 1962 (that is, \$3,500 original credit earned minus \$2,100 recomputed credit earned).

(e) *Transactions to which section 381(a) applies.*—(1) *General rule.* Notwithstanding the provisions of § 1.47-2, relating to "disposition" and "cessation", paragraph (a) of § 1.47-1 shall not apply to a disposition of section 38 property in a transaction to which section 381(a) (relating to carryovers in certain corporate acquisitions) applies. If the section 38 property described in the preceding sentence is disposed of, or otherwise ceases to be section 38 property with respect to the acquiring corporation, before the close of the estimated useful life which was taken into account in computing the transferor corporation's qualified investment, then paragraph (a) of § 1.47-1 shall apply to the acquiring corporation with respect to such section 38 property. For purposes of recomputing qualified investment with respect to such property its actual useful life shall be the period beginning with the date on which it was placed in service by the transferor corporation and ending with the date of the disposition by, or cessation with respect to, the acquiring corporation.

(2) *Examples.* This paragraph may be illustrated by the following examples:

Example (1). (i) X Corporation, a wholly owned subsidiary of Y Corporation, acquired and placed in service on January 1, 1962, an item of section 38 property with a basis of \$12,000 and an estimated useful life of eight years. Both X and Y make their returns on the basis of a calendar year. The qualified

investment with respect to such item was \$12,000. For the taxable year 1962 X Corporation's credit earned of \$840 was allowed under section 38 as a credit against its liability for tax. On January 15, 1967, X Corporation is liquidated under section 332 and all of its properties, including the item of section 38 property, are transferred to Y Corporation. The bases of the properties in the hands of Y Corporation are determined under section 334(b)(1).

(ii) Under subparagraph (1) of this paragraph, paragraph (a) of § 1.47-1 does not apply to the January 15, 1967, transfer to Y Corporation.

Example (2). (i) The facts are the same as in example (1) and in addition on February 2, 1968, Y Corporation sells the item of section 38 property to Z Corporation.

(ii) Under subparagraph (1) of this paragraph, paragraph (a) of § 1.47-1 does not apply to the January 15, 1967, transfer to Y Corporation. However, paragraph (a) of § 1.47 applies to the February 2, 1968, sale of the property by Y Corporation. The actual useful life of the property is six years and one month (that is, the period beginning on January 1, 1962, and ending on February 2, 1968).

(f) **Mere change in form of conducting a trade or business.**—(1) **General rule.** (i) Notwithstanding the provisions of § 1.47-2, relating to "disposition" and "cessation", paragraph (a) of § 1.47-1 shall not apply to section 38 property which is disposed of, or otherwise ceases to be section 38 property with respect to the taxpayer, before the close of the estimated useful life which was taken into account in computing the taxpayer's qualified investment by reason of a mere change in the form of conducting the trade or business in which such section 38 property is used provided that the conditions set forth in subdivision (ii) of this subparagraph are satisfied.

(ii) The conditions referred to in subdivision (i) of this subparagraph are as follows:

(a) The section 38 property described in subdivision (i) of this subparagraph is retained as section 38 property in the same trade or business.

(b) The transferor (or in a case where the transferor is a partnership, estate, trust, or electing small business corporation, the partner, beneficiary, or shareholder) of such section 38 property retains a substantial interest in such trade or business.

(c) Substantially all the assets (whether or not section 38 property) necessary to operate such trade or business are transferred to the transferee to whom such section 38 property is transferred, and

(d) The basis of such section 38 property in the hands of the transferee is determined in whole or in part by reference to the basis of such section 38 property in the hands of the transferor. This subparagraph shall not apply to the transfer of section 38 property if paragraph (e) of this section, relating to transactions to which section 381 applies, applies with respect to such transfer.

(2) **Substantial interest.** For purposes of this paragraph, a transferor (or in a case where the transferor is a partnership, estate, trust, or electing small business corporation, the partner, benefici-

ary, or shareholder) shall be considered as having retained a substantial interest in the trade or business only if, after the change in form, his interest in such trade or business—

(i) Is substantial in relation to the total interest of all persons, or

(ii) Is equal to or greater than his interest prior to the change in form.

Thus, where a taxpayer owns a 5-percent interest in a partnership, and, after the incorporation of that partnership, the taxpayer retains at least a 5-percent interest in the corporation, the taxpayer will be considered as having retained a substantial interest in the trade or business as of the date of the change in form.

(3) **Property held for the production of income.** Subparagraph (1)(i) of this paragraph applies to section 38 property held for the production of income (within the meaning of section 167(a)(2)) as well as to section 38 property used in a trade or business.

(4) **Leased property.** In a case where a lessor of new section 38 property made a valid election, under § 1.48-4, to treat the lessee as having purchased such property for purposes of the credit allowed by section 38, in determining whether subparagraph (1)(i) of this paragraph applies to an assignment of the lease and transfer of possession of such property, the condition contained in subparagraph (1)(ii)(d) of this paragraph is not applicable.

(5) **Disposition or cessation.** (i) If section 38 property described in subparagraph (1)(i) of this paragraph is disposed of by the transferee, or otherwise ceases to be section 38 property with respect to the transferee, before the close of the estimated useful life which was taken into account in computing the qualified investment of the transferor (or in a case where the transferor is a partnership, estate, trust, or electing small business corporation, the qualified investment of the partners, beneficiaries, or shareholders) then under paragraph (a) of § 1.47-1 such property ceases to be section 38 property with respect to the transferor (or such partners, beneficiaries, or shareholders), and a recapture determination shall be made with respect to such property. For purposes of recomputing qualified investment with respect to such property, the actual useful life shall be the period beginning with the date on which it was placed in service by the transferor and ending with the date of the disposition by, or cessation with respect to, the transferee.

(ii) If in any taxable year the transferor (or in a case where the transferor is a partnership, estate, trust, or electing small business corporation, the partner, beneficiary, or shareholder) of the section 38 property described in subparagraph (1)(i) of this paragraph does not retain a substantial interest in the trade or business directly or indirectly (through ownership in other entities provided that such other entities' bases in such interest are determined in whole or in part by reference to the basis of such interest in the hands of the transferor) then, under paragraph (a) of § 1.47-1,

such property ceases to be section 38 property with respect to the transferor and he (or the partner, beneficiary, or shareholder) shall make a recapture determination. For purposes of recomputing qualified investment with respect to property described in this subdivision, its actual useful life shall be the period beginning with the date on which it was placed in service by the transferor and ending with the first date on which the transferor (or the partner, beneficiary, or shareholder) does not retain a substantial interest in the trade or business. Any taxpayer who seeks to establish his interest in a trade or business under the rule of this subdivision shall maintain adequate records to demonstrate his indirect interest in such trade or business after any such transfer or transfers.

(iii) In making a recapture determination under this subparagraph there shall be taken into account any prior recapture determinations with respect to the transferor in connection with the same property.

(iv) Notwithstanding subparagraph (1) of this paragraph and subdivision (ii) of this subparagraph in the case of a mere change in the form of a trade or business, if the interest of a taxpayer in the trade or business is reduced but such taxpayer has retained a substantial interest in such trade or business, paragraph (a)(2) of § 1.47-4 (relating to electing small business corporations), paragraph (a)(2) of § 1.47-5 (relating to estates or trusts) or paragraph (a)(2) of § 1.47-6 (relating to partnerships) shall apply, as the case may be.

(6) **Examples.** This paragraph may be illustrated by the following examples in each of which it is assumed that the transfer satisfies the conditions of subparagraph (1)(ii)(a), (c), and (d) of this paragraph.

Example (1). (i) On January 1, 1962, A, an individual, acquired and placed in service in his sole proprietorship an item of section 38 property with a basis of \$12,000 and an estimated useful life of eight years. The qualified investment with respect to such item was \$12,000. For the taxable year 1962 A's credit earned of \$840 was allowed under section 38 as a credit against his liability for tax. On March 15, 1963, A transfers all of the assets used in his sole proprietorship to X Corporation, a newly formed corporation, in exchange for 45 percent of the stock of X Corporation.

(ii) Under subparagraph (1)(i) of this paragraph, paragraph (a) of § 1.47-1 does not apply to the March 15, 1963, transfer to X Corporation.

Example (2). (i) The facts are the same as in example (1) and in addition on February 2, 1964, X Corporation sells the item of section 38 property to Y Corporation.

(ii) Under subparagraph (1)(i) of this paragraph, paragraph (a) of § 1.47-1 does not apply to the March 15, 1963, transfer to X Corporation. However, under subparagraph (5)(i) of this paragraph, paragraph (a) of § 1.47-1 applies to the February 2, 1964, sale of the item of section 38 property by X Corporation to Y Corporation. The actual useful life of the property is two years and one month (that is, the period beginning on January 1, 1962, and ending on February 2, 1964). The recomputed qualified investment with respect to such property is zero (\$12,000 basis multiplied by zero applicable percentage) and A's recomputed

credit earned for the taxable year 1962 is zero. The income tax imposed by chapter 1 of the Code on A for 1964 is increased by the \$840 decrease in his credit earned for the taxable year 1962 (that is, \$840 credit earned minus zero recomputed credit earned).

Example (3). (i) On January 1, 1962, partnership ABC, which makes its returns on the basis of a calendar year, acquired and placed in service on item of section 38 property with a basis of \$20,000 and an estimated useful life of eight years. Partnership ABC has 10 partners who make their returns on the basis of a calendar year and share partnership profits equally. Each partner's share of the basis of such item of section 38 property is 10 percent, that is, \$2,000. On March 15, 1963, partnership ABC transfers all of the assets used in its trade or business to the X Corporation, a newly formed corporation, in exchange for all of the stock of X Corporation and immediately thereafter transfers 10 percent of such stock to each of the 10 partners.

(ii) Under subparagraph (1)(i) of this paragraph, paragraph (a) of § 1.47-1 does not apply to the March 15, 1963 transfer by the ABC Partnership to X Corporation.

Example (4). (i) The facts are the same as in example (3) except that partnership ABC transfers 10 percent of the stock in X Corporation to each of 8 partners, 20 percent to partner A, and cash to partner B.

(ii) Under subparagraph (1)(i) of this paragraph, with respect to all of the partners (including partner A) except partner B, paragraph (a) of § 1.47-1 does not apply to the March 15, 1963, transfer by the ABC Partnership to X Corporation. Paragraph (a) of § 1.47-1 applies with respect to partner B's \$2,000 share of the item of section 38 property. See paragraph (a)(1) of § 1.47-6.

Example (5). (i) X Corporation operates a manufacturing business and a separate personal service business. On January 1, 1962, X acquired and placed in service a truck, which qualified as section 38 property, in its manufacturing business. The truck had a basis of \$10,000 and an estimated useful life of 8 years. On February 10, 1965, X transfers all the assets used in its manufacturing business to Partnership XY in exchange for a 50-percent interest in such partnership.

(ii) Under subparagraph (1)(i) of this paragraph, paragraph (a) of § 1.47-1 does not apply to the February 10, 1965, transfer to Partnership XY.

(g) **Sale-and-leaseback transactions.** Notwithstanding the provisions of § 1.47-2, relating to "disposition" and "cessation", paragraph (a) of § 1.47-1 shall not apply where section 38 property is disposed of and as part of the same transaction is leased back to the vendor even though gain or loss is recognized to the vendor-lessee and the property ceases to be subject to depreciation in his hands. If paragraph (a) of § 1.47-1 applies with respect to such property subsequent to the transaction, the actual useful life shall begin with the date on which such property was first placed in service by the vendor-lessee as owner.

PAR. 7. Section 1.47-4 is added to read as follows:

§ 1.47-4 Electing small business corporation.

(a) **In general.**—(1) **Disposition or cessation in hands of corporation.** If an electing small business corporation (as defined in section 1371(b)) or a former electing small business corporation disposes of any section 38 property (or if

any section 38 property otherwise ceases to be section 38 property in the hands of the corporation) before the close of the estimated useful life which was taken into account in computing qualified investment with respect to such property, a recapture determination shall be made with respect to each shareholder who is treated, under § 1.48-5, as a taxpayer with respect to such property. Each such recapture determination shall be made with respect to the pro rata share of the basis (or cost) of such property taken into account by such shareholder in computing his qualified investment. For purposes of each such recapture determination the actual useful life of such property shall be the period beginning with the date on which it was placed in service by the electing small business corporation and ending with the date of the disposition or cessation. In making a recapture determination under this subparagraph there shall be taken into account any prior recapture determinations made with respect to the shareholder in connection with the same property. For definition of "recapture determination" see paragraph (a)(1) of § 1.47-1.

(2) **Disposition of shareholder's interest.**—(i) If—

(a) The basis (or cost) of section 38 property is apportioned, under § 1.48-5, to a shareholder of an electing small business corporation who takes such basis (or cost) into account in computing his qualified investment, and

(b) After the end of the shareholder's taxable year in which such apportionment was taken into account and before the close of the estimated useful life of the property, such shareholder's proportionate stock interest in such corporation is reduced (for example, by a sale or redemption, or by the issuance of additional shares) below the percentage specified in subdivision (ii) of this subparagraph,

then, on the date of such reduction such section 38 property ceases to be section 38 property with respect to such shareholder to the extent of the actual reduction in such shareholder's proportionate stock interest. (For example, if \$100 of the basis of section 38 property was apportioned to a shareholder and if his proportionate stock interest is reduced from 60 percent to 30 percent (that is, 50 percent of his original interest), then such property shall be treated as having ceased to be section 38 property to the extent of \$50.) Accordingly, a recapture determination shall be made with respect to such shareholder. For purposes of such recapture determination the actual useful life of such property shall be the period beginning with the date on which it was placed in service by the electing small business corporation and ending with the date on which it is treated as having ceased to be section 38 property with respect to the shareholder. In making a recapture determination under this subparagraph there shall be taken into account any prior recapture determination made with respect to the

shareholder in connection with the same property.

(ii) The percentage referred to in subdivision (i)(b) of this subparagraph is 66⅔ percent of the shareholder's proportionate stock interest in the corporation on the date of the apportionment under § 1.48-5. However, once property has been treated under this subparagraph as having ceased to be section 38 property to any extent the percentage referred to shall be 33⅓ percent of the shareholder's proportionate stock interest in the corporation on the date of the apportionment under § 1.48-5.

(iii) In determining a shareholder's proportionate stock interest in a former electing small business corporation for purposes of this subparagraph, the shareholder shall be considered to own stock in such corporation which he owns directly or indirectly (through ownership in other entities provided such other entities' bases in such stock are determined in whole or in part by reference to the basis of such stock in the hands of the transferor. For example, if A, who owns all of the 100 shares of the outstanding stock of corporation X, a corporation which was formerly an electing small business corporation, transfers on November 1, 1966, 70 shares of X stock to corporation Y in exchange for 90 percent of the stock of Y in a transaction to which section 351 applies, then, for purposes of subdivision (i) of this subparagraph, A shall be considered to own 93 percent of the stock of X, 30 percent directly and 63 percent indirectly (i.e., 90 percent of 70). Any taxpayer who seeks to establish his interest in the stock of a former electing small business corporation under the rule of this subdivision shall maintain adequate records to demonstrate his indirect interest in the corporation after any such transfer or transfers.

(b) **Election of a small business corporation under section 1372.**—(1) **General rule.** If a corporation makes a valid election under section 1372 to be an electing small business corporation (as defined in section 1371(b)), then on the last day of the taxable year immediately preceding the first taxable year for which such election is effective, any section 38 property the basis (or cost) of which was taken into account in computing the corporation's qualified investment in taxable years prior to the first taxable year for which the election is effective (and which has not been disposed of or otherwise ceased to be section 38 property with respect to the corporation prior to such last day) shall be considered as having ceased to be section 38 property with respect to such corporation and § 1.47-1 shall apply. However, if the corporation and each of the persons who are shareholders of the corporation on the first day of the first taxable year for which the election under section 1372 is to be effective, or on the date of such election, whichever is later, execute the agreement specified in subparagraph (2) of this paragraph, § 1.47-1 shall not apply to any such section 38

property by reason of the election by the corporation under section 1372.

(2) *Agreement of shareholders and corporation.* (i) The agreement referred to in subparagraph (1) of this paragraph shall be signed by the shareholders and the corporation, and shall recite that, in the event the section 38 property described in subparagraph (1) of this paragraph is later disposed of by, or ceases to be section 38 property with respect to, the corporation during a taxable year of the corporation for which the election under section 1372 is effective, each such signer agrees (a) to notify the district director of such disposition or cessation, and (b) to be jointly and severally liable to pay to the district director an amount equal to the increase in tax provided by section 47. The amount of such increase shall be determined as if such property had ceased to be section 38 property as of the last day of the taxable year immediately preceding the first taxable year for which the election under section 1372 is effective, except that the actual useful life (within the meaning of paragraph (a) of § 1.47-1) of the property shall be considered to have ended on the date of the actual disposition by, or cessation in the hands of, the electing small business corporation.

(ii) The agreement shall set forth the name, address, and taxpayer account number of each party and the internal revenue district in which each such party files his or its income tax return for the taxable year which includes the last day of the corporation's taxable year immediately preceding the first taxable year for which the election under section 1372 is effective. The agreement may be signed on behalf of the corporation by any person who is duly authorized. The agreement shall be filed with the district director with whom the corporation files its income tax return for its taxable year immediately preceding the first taxable year for which the election under section 1372 is effective and shall be filed on or before the due date (including extensions of time) of such return. However, if the due date (including extensions of time) of such income tax return is on or before September 1, 1967, the agreement may be filed on or before December 31, 1967. For purposes of the two preceding sentences, the district director may, if good cause is shown, permit the agreement to be filed on a later date.

(c) *Examples.* This section may be illustrated by the following examples in each of which it is assumed that X Corporation, an electing small business corporation which makes its returns on the basis of the calendar year, acquired and placed in service on June 1, 1962, three items of section 38 property. The basis and estimated useful life of each item of section 38 property are as follows:

Asset No.	Basis	Estimated useful life
1	\$30,000	Years 4
2	30,000	6
3	30,000	8

On December 31, 1962, X Corporation had 20 shares of stock outstanding which were owned equally by A and B who make their returns on the basis of a calendar year. Under § 1.48-5, the total bases of section 38 properties was apportioned to the shareholders of X Corporation as follows:

	Useful life category		
	4 to 6 years	6 to 8 years	8 years or more
Total bases.....	\$30,000	\$30,000	\$30,000
Shareholder A (10/20)....	15,000	15,000	15,000
Shareholder B (10/20)....	15,000	15,000	15,000

Assuming that during 1962 shareholders A and B did not place in service any section 38 property and that they did not own any interests in other electing small business corporations, partnerships, estates, or trusts, the qualified investment of each shareholder is \$30,000, computed as follows:

Basis	Applicable percentage	Qualified investment
\$15,000.....	33 1/4	\$5,000
\$15,000.....	66 2/3	10,000
\$15,000.....	100	15,000
		\$30,000

For the taxable year 1962, each shareholder's credit earned of \$2,100 (7 percent of \$30,000) was allowed under section 38 as a credit against his liability for tax.

Example (1). (i) On December 2, 1965, X Corporation sells asset No. 3 to Y Corporation.

(ii) The actual useful life of asset No. 3 is three years and six months. The recomputed qualified investment with respect to each shareholder's share of the basis of asset No. 3 is zero (\$15,000 share of basis multiplied by zero applicable percentage) and for the taxable year 1962 each shareholder's recomputed credit earned is \$1,050 (7 percent of \$15,000). The income tax imposed by chapter 1 of the Code on each of the shareholders for the taxable year 1965 is increased by the \$1,050 decrease in his credit earned for the taxable year 1962 (that is, \$2,100 original credit earned minus \$1,050 recomputed credit earned).

Example (2). (i) On December 3, 1964, shareholder A sells 5 of his 10 shares of stock in X Corporation to C, and on December 3, 1965, A sells his remaining 5 shares of stock to D. In addition, on January 2, 1966, X Corporation sells asset No. 3 to Y Corporation.

(ii) Under paragraph (a)(2) of this section, on December 3, 1964, 50 percent of the share of the basis of each of the three items of section 38 property ceases to be section 38 property with respect to shareholder A since immediately after the December 3, 1964, sale A's proportionate stock interest in X Corporation is reduced to 50 percent of the proportionate stock interest in X Corporation which he held on December 31, 1962. The actual useful life of the share of the bases of the section 38 properties which cease to be section 38 property with respect to A is two years and six months (that is, the period beginning with June 1, 1962, and ending with December 3, 1964). A's recomputed qualified investment with respect to such properties is \$15,000, computed as follows:

Basis	Applicable percentage	Recomputed qualified investment
\$7,500.....	33 1/4	\$2,500
\$7,500.....	66 2/3	5,000
\$7,500.....	100	7,500
		\$15,000

For the taxable year 1962 shareholder A's recomputed credit earned is \$1,050 (7 percent of \$15,000). The income tax imposed by chapter 1 of the Code on shareholder A for the taxable year 1964 is increased by the \$1,050 decrease in his credit earned for the taxable year 1962 (that is, \$2,100 original credit earned minus \$1,050 recomputed credit earned).

(iii) Under paragraph (a)(2) of this section, on December 3, 1965, the remaining 50 percent of the share of the basis of each of the three items of section 38 property ceases to be section 38 property with respect to shareholder A since immediately after the December 3, 1965, sale A's proportionate stock interest in X Corporation is reduced to zero. The actual useful life of the share of the bases of the section 38 properties which cease to be section 38 property with respect to A is three years and six months (that is, the period beginning with June 1, 1962, and ending with December 3, 1965). A's recomputed qualified investment with respect to such properties is zero. For the taxable year 1962 shareholder A's recomputed credit earned is zero. The income tax imposed by chapter 1 of the Code on shareholder A for the taxable year 1965 is increased by \$1,050 (that is, \$2,100 original credit earned minus zero recomputed credit earned) reduced by the \$1,050 increase in tax for 1964).

(iv) The actual useful life of asset No. 3 which was sold on January 2, 1966, is three years and seven months. The recomputed qualified investment with respect to B's share of the basis of asset No. 3 is zero (\$15,000 share of basis multiplied by zero applicable percentage) and for the taxable year 1962, B's recomputed credit earned is \$1,050 (7 percent of \$15,000). The income tax imposed by chapter 1 of the Code on shareholder B for the taxable year 1966 is increased by the \$1,050 decrease in his credit earned for the taxable year 1962 (\$2,100 original credit earned minus \$1,050 recomputed credit earned). The sale of asset No. 3 on January 2, 1966, by X Corporation has no effect on A.

(d) *Termination or revocation of an election under section 1372.* Section 38 property shall not be considered to be disposed of or to have ceased to be section 38 property solely by reason of a termination or revocation of a corporation's election under section 1372.

PAR. 8. Section 1.47-5 is added to read as follows:

§ 1.47-5 Estates and trusts.

(a) *In general.*—(1) *Disposition or cessation in hands of estate or trust.* If an estate or trust disposes of any section 38 property (or if any section 38 property otherwise ceases to be section 38 property in the hands of the estate or trust) before the close of the estimated useful life which was taken into account in computing qualified investment with respect to such property, a recapture determination shall be made with respect to the estate or trust, and each beneficiary who is treated, under § 1.48-6, as

a taxpayer with respect to such property. Each such recapture determination shall be made with respect to the share of the basis (or cost) of such property taken into account by such estate or trust and such beneficiary in computing its or his qualified investment. For purposes of each such recapture determination the actual useful life of such property shall be the period beginning with the date on which it was placed in service by the estate or trust and ending with the date of the disposition or cessation. In making a recapture determination under this subparagraph with respect to a taxpayer there shall be taken into account any prior recapture determinations made with respect to such taxpayer in connection with the same property. For definition of "recapture determination" see paragraph (a) (1) of § 1.47-1.

(2) *Disposition of interest.* (i) If—

(a) The basis (or cost) of section 38 property is apportioned, under § 1.48-6, to an estate or trust which, or to a beneficiary of an estate or trust who, takes such basis (or cost) into account in computing his qualified investment, and

(b) After the date on which such section 38 property was placed in service by the estate or trust and before the close of the estimated useful life of the property, such estate's, trust's, or such beneficiary's proportionate interest in the income of the estate or trust is reduced (for example, by a sale, or by the terms of the estate or trust instrument) below the percentage specified in subdivision (ii) of this subparagraph,

then, on the date of such reduction, such section 38 property ceases to be section 38 property with respect to such estate, trust, or beneficiary to the extent of the actual reduction in such estate's, trust's, or beneficiary's proportionate interest in the income of the estate or trust. (For example, if \$100 of the basis of section 38 property was apportioned to a beneficiary and if his proportionate interest in the income of the estate or trust is reduced from 60 percent to 30 percent (that is, 50 percent of his original interest), then such property shall be treated as having ceased to be section 38 property to the extent of \$50). Accordingly, a recapture determination shall be made with respect to such estate, trust, or beneficiary. For purposes of such recapture determination the actual useful life of such property shall be the period beginning with the date on which it was placed in service by the estate or trust and ending with the date on which it is treated as having ceased to be section 38 property with respect to the estate, trust, or beneficiary. In making a recapture determination under this subparagraph there shall be taken into account any prior recapture determination made with respect to the estate, trust, or beneficiary in connection with the same property.

(ii) The percentage referred to in subdivision (i) (b) of this subparagraph is 66⅔ percent of the estate's, trust's, or beneficiary's proportionate interest in the income of the estate or trust for the taxable year of the apportionment under § 1.48-6. However, once property has

been treated under this subparagraph as having ceased to be section 38 property to any extent the percentage referred to shall be 33⅓ percent of the estate's, trust's, or beneficiary's proportionate interest in the income of the estate or trust for the taxable year of the apportionment under § 1.48-6.

(iii) In determining a beneficiary's proportionate interest in the income of an estate or trust for purposes of this subparagraph, the beneficiary shall be considered to own any interest in such an estate or trust which he owns directly or indirectly (through ownership in other entities provided such other entities' bases in such interest are determined in whole or in part by reference to the basis of such interest in the hands of the beneficiary). For example, if A, whose proportionate interest in the income of trust X is 30 percent, transfers all of such interest to corporation Y in exchange for all of the stock of Y in a transaction to which section 351 applies, then, for purposes of subdivision (i) of this subparagraph, A shall be considered to own a 30-percent interest in trust X. Any taxpayer who seeks to establish his interest in an estate or trust under the rule of this subdivision shall maintain adequate records to demonstrate his indirect interest in the estate or trust after any such transfer or transfers.

(b) *Examples.* Paragraph (a) of this section may be illustrated by the following examples in each of which it is assumed that XYZ Trust, which makes its returns on the basis of the calendar year, acquired and placed in service on June 1, 1962, three items of section 38 property. The basis and estimated useful life of each item of section 38 property are as follows:

Asset No.	Basis	Estimated useful life
		Years
1.....	\$30,000	4
2.....	30,000	6
3.....	30,000	8

For the taxable year 1962 the income of XYZ Trust is \$20,000, which is allocable equally to XYZ Trust and beneficiary A. Beneficiary A makes his returns on the basis of a calendar year. Under § 1.48-6, the total bases of the section 38 properties was apportioned to XYZ Trust and beneficiary A as follows:

	Useful life category		
	4 to 6 years	6 to 8 years	8 years or more
Total bases.....	\$30,000	\$30,000	\$30,000
((\$10,000))	15,000	15,000	15,000
XYZ Trust.....	(\$20,000)		
Beneficiary A.....	(\$10,000)		
(\$30,000)	15,000	15,000	15,000

Assuming that during 1962 beneficiary A did not place in service any section 38 property and that he did not own any interests in other estates, trusts, electing small business corporations, or partnerships, the qualified investment of XYZ Trust and of beneficiary A is \$30,000 each, computed as follows:

Basis	Applicable percentage	Qualified investment
\$15,000.....	33⅓	\$5,000
\$15,000.....	66⅔	10,000
\$15,000.....	100	15,000
		30,000

For the taxable year 1962, XYZ Trust and beneficiary A each had a credit earned of \$2,100 (7 percent of \$30,000). Each such credit earned was allowed under section 38 as a credit against the liability for tax.

Example (1). (i) On December 2, 1965, XYZ Trust sells asset No. 3 to X Corporation.

(ii) The actual useful life of asset No. 3 is three years and six months. The recomputed qualified investment with respect to XYZ Trust's and beneficiary A's share of the basis of asset No. 3 is zero (\$15,000 share of basis multiplied by zero applicable percentage) and for the taxable year 1962, XYZ Trust's and beneficiary A's recomputed credit earned is \$1,050 (7 percent of \$15,000). The income tax imposed by chapter 1 of the Code on XYZ Trust and on beneficiary A for the taxable year 1965 is increased by the \$1,050 decrease in his credit earned for the taxable year 1962 (that is, \$2,100 original credit earned minus \$1,050 recomputed credit earned).

Example (2). (i) On December 3, 1964, beneficiary A sells 50 percent of his interest in the income of XYZ Trust to B, and on December 3, 1965, A sells his remaining 50 percent interest to C. In addition, on January 2, 1966, XYZ Trust sells asset No. 3 to Y Corporation.

(ii) Under paragraph (a) (2) of this section, on December 3, 1964, 50 percent of the basis of each of the three items of section 38 property ceases to be section 38 property with respect to beneficiary A since immediately after the December 3, 1964, sale A's proportionate interest in the income of XYZ Trust is reduced to 50 percent of his proportionate interest in the income of XYZ Trust for the taxable year 1962. The actual useful life of the share of the bases of the section 38 properties which cease to be section 38 property with respect to A is two years and six months (that is, the period beginning with June 1, 1962, and ending with December 3, 1964). Beneficiary A's recomputed qualified investment with respect to such properties is \$15,000, computed as follows:

Basis	Applicable percentage	Qualified investment
\$7,500.....	33⅓	\$2,500
\$7,500.....	66⅔	5,000
\$7,500.....	100	7,500
		15,000

For the taxable year 1962 beneficiary A's recomputed credit earned is \$1,050 (7 percent of \$15,000). The income tax imposed by chapter 1 of the Code on beneficiary A for the taxable year 1964 is increased by the \$1,050 decrease in his credit earned for the taxable year 1962 (that is, \$2,100 original credit earned minus \$1,050 recomputed credit earned).

(iii) Under paragraph (a) (2) of this section, on December 3, 1965, the remaining 50 percent of the share of the basis of each of the three items of section 38 property ceases to be section 38 property with respect to beneficiary A since immediately after the December 3, 1965, sale A's proportionate interest in the income of XYZ Trust is reduced to zero. The actual useful life of the share of the basis of the section 38 properties which cease to be section 38 property

with respect to A is three years and six months (that is, the period beginning with June 1, 1962, and ending with December 3, 1965). A's recomputed qualified investment with respect to such properties is zero. For the taxable year 1962 beneficiary A's recomputed credit earned is zero. The income tax imposed by chapter 1 of the Code on beneficiary A for the taxable year 1965 is increased by \$1,050 (that is, \$2,100 (\$2,100 original credit earned minus zero recomputed credit earned) reduced by the \$1,050 increase in tax for 1964).

(iv) The actual useful life of asset No. 3 which was sold on January 2, 1966, is three years and seven months. The recomputed qualified investment with respect to XYZ Trust's share of the basis of asset No. 3 is zero (\$15,000 share of basis multiplied by zero applicable percentage) and for the taxable year 1962, XYZ Trust's recomputed credit earned is \$1,050 (7 percent of \$15,000). The income tax imposed by chapter 1 of the Code on XYZ Trust for the taxable year 1966 is increased by the \$1,050 decrease in its credit earned for the taxable year 1962 (\$2,100 original credit earned minus \$1,050 recomputed credit earned). The sale of asset No. 3 on January 2, 1966, has no effect on A.

PAR. 9. Section 1.47-6 is added to read as follows:

§ 1.47-6 Partnerships.

(a) In general.—(1) *Disposition or cessation in hands of partnership.* If a partnership disposes of any partnership section 38 property (or if any partnership section 38 property otherwise ceases to be section 38 property in the hands of the partnership) before the close of the estimated useful life which was taken into account in computing qualified investment with respect to such property, a recapture determination shall be made with respect to each partner who is treated, under paragraph (f) of § 1.46-3, as a taxpayer with respect to such property. Each such recapture determination shall be made with respect to the share of the basis (or cost) of such property taken into account by such partner in computing his qualified investment. For purposes of each such recapture determination the actual useful life of such property shall be the period beginning with the date on which it was placed in service by the partnership and ending with the date of the disposition or cessation. In making a recapture determination under this subparagraph there shall be taken into account any prior recapture determinations made with respect to the partner in connection with the same property. For definition of "recapture determination" see paragraph (a) (1) of § 1.47-1.

(2) *Disposition of partner's interest.*

(i) If—
(a) The basis (or cost) of partnership section 38 property is taken into account by a partner in computing his qualified investment, and

(b) After the date on which such partnership section 38 property was placed in service by the partnership and before the close of the estimated useful life of the property, such partner's proportionate interest in the general profits of the partnership (or in the particular item of property) is reduced (for example, by a sale, by a change in the partnership

agreement, or by the admission of a new partner) below the percentage specified in subdivision (ii) of this subparagraph, then, on the date of such reduction such partnership section 38 property ceases to be section 38 property with respect to such partner to the extent of the actual reduction in such partner's proportionate interest in the general profits of the partnership (or in the particular item of property). (For example, if \$100 of the basis of section 38 property was taken into account by a partner and if his proportionate interest in the general profits of the partnership is reduced from 60 percent to 30 percent (that is, 50 percent of his original interest), then such property shall be treated as having ceased to be section 38 property to the extent of \$50.) Accordingly, a recapture determination shall be made with respect to such partner. For purposes of such recapture determination the actual useful life of such property shall be the period beginning with the date on which it was placed in service by the partnership and ending with the date on which it is treated as having ceased to be section 38 property with respect to the partner. In making a recapture determination under this subparagraph there shall be taken into account any prior recapture determination made with respect to the partner in connection with the same property.

(ii) The percentage referred to in subdivision (i) (b) of this subparagraph is 66⅔ percent of the partner's proportionate interest in the general profits of the partnership (or in the particular item of property) for the year in which such property was placed in service. However, once property has been treated under this subparagraph as having ceased to be section 38 property to any extent the percentage referred to shall be 33⅓ percent of the partner's proportionate interest in the general profits of the partnership (or in the particular item of property) for the year in which such property was placed in service.

(iii) In determining a partner's proportionate interest in the general profits of a partnership for purposes of this subparagraph, the partner shall be considered to own any interest in such a partnership which he owns directly or indirectly (through ownership in other entities provided the other entities' bases in such interest are determined in whole or in part by reference to the basis of such interest in the hands of the partner). For example, if A, whose proportionate interest in the general profits of partnership X is 20 percent, transfers all of such interest to corporation Y in exchange for all of the stock of Y in a transaction to which section 351 applies, then, for purposes of subdivision (i) of this subparagraph, A shall be considered to own a 20-percent interest in partnership X. Any taxpayer who seeks to establish his interest in a partnership under the rule of this subdivision shall maintain adequate records to demonstrate his indirect interest in the partnership after any such transfer or transfers.

(b) *Examples.* Paragraph (a) of this section may be illustrated by the following examples in each of which it is as-

sumed that ABC Partnership, which makes its returns on the basis of the calendar year, acquired and placed in service on June 1, 1962, three items of section 38 property. The basis and estimated useful life of each item of section 38 property are as follows:

Asset No.	Basis	Estimated useful life
		Years
1.....	\$30,000	4
2.....	30,000	6
3.....	30,000	8

Partners A and B, who make their returns on the basis of a calendar year, share the profits and losses of ABC Partnership equally. Under paragraph (f) (2) of § 1.46-3, each partner's share of the basis of the partnership section 38 property is as follows:

Asset No.	Estimated useful life	Basis	Partners share of basis	
			A 50 percent	B 50 percent
	Years			
1.....	4	\$30,000	\$15,000	\$15,000
2.....	6	30,000	15,000	15,000
3.....	8	30,000	15,000	15,000

Assuming that during 1962 partners A and B did not place in service any section 38 property and that they did not own any interests in other partnerships, electing small business corporations, estates, or trusts, the qualified investment of each partner is \$30,000, computed as follows:

Partnership asset number	Share of basis	Applicable percentage	Qualified investment
1.....	\$15,000	33⅓	\$5,000
2.....	15,000	66⅔	10,000
3.....	15,000	100	15,000
			30,000

For the taxable year 1962, each partner's credit earned of \$2,100 (7 percent of \$30,000) was allowed under section 38 as a credit against his liability for tax.

Example (1). (i) On December 2, 1965, ABC Partnership sells asset No. 3 to X Corporation.

(ii) The actual useful life of asset No. 3 is three years and six months. The recomputed qualified investment with respect to each partner's share of the basis of asset No. 3 is zero (\$15,000 share of basis multiplied by zero applicable percentage) and for the taxable year 1962, each partner's recomputed credit earned is \$1,050 (7 percent of \$15,000). The income tax imposed by chapter 1 of the Code on each of the partners for the taxable year 1965 is increased by the \$1,050 decrease in his credit earned for the taxable year 1962 (that is, \$2,100 original credit earned minus \$1,050 recomputed credit earned).

Example (2). (i) On December 3, 1964, partner A sells one-half of his 50 percent interest in ABC Partnership to C, and on December 3, 1965, A sells the remaining one-half of his interest to D. In addition, on January 2, 1966, ABC Partnership sells asset No. 3 to X Corporation.

(ii) Under paragraph (a) (2) of this section, on December 3, 1964, 50 percent of the basis of each of the three items of section 38 property ceases to be section 38 property with respect to partner A since immediately after the December 3, 1964, sale A's proportionate

interest in the general profits of ABC Partnership is reduced to 50 percent of his proportionate interest in the general profits of ABC Partnership for 1962. The actual useful life of the share of the basis of each of the section 38 properties which cease to be section 38 property with respect to A is two years and six months (that is, the period beginning with June 1, 1962, and ending with December 3, 1964). Partner A's recomputed qualified investment with respect to such properties is \$15,000, computed as follows:

Partnership asset No.	Share of basis	Applicable percentage	Qualified investment
1.	\$7,500	33 1/3%	\$2,500
2.	7,500	66 2/3%	5,000
3.	7,500	100	7,500
			15,000

For the taxable year 1962 partner A's recomputed credit earned is \$1,050 (7 percent of \$15,000). The income tax imposed by chapter 1 of the Code on partner A for the taxable year 1964 is increased by the \$1,050 decrease in his credit earned for the taxable year 1962 (that is, \$2,100 original credit earned minus \$1,050 recomputed credit earned).

(iii) Under paragraph (a)(2) of this section, on December 3, 1965, the remaining 50 percent of the share of the basis of each of the three items of section 38 property ceases to be section 38 property with respect to partner A since immediately after the December 3, 1965, sale A's proportionate interest in the general profits of ABC Partnership is reduced to zero. The actual useful life of the share of the bases of the section 38 properties which cease to be section 38 property with respect to A is three years and six months (that is, the period beginning with June 1, 1962, and ending with December 3, 1965). A's recomputed qualified investment with respect to such properties is zero. For the taxable year 1962 partner A's recomputed credit earned is zero. The income tax imposed by chapter 1 of the Code on partner A for the taxable year 1965 is increased by \$1,050 (that is, \$2,100 (\$2,100 original credit earned minus zero recomputed credit earned) reduced by the \$1,050 increase in tax for 1964).

(iv) The actual useful life of asset No. 3 which was sold on January 2, 1966, is three years and seven months. The recomputed qualified investment with respect to partner B's share of the basis of asset No. 3 is zero (\$15,000 share of basis multiplied by zero applicable percentage) and for the taxable year 1962, partner B's recomputed credit earned is \$1,050 (7 percent of \$15,000). The income tax imposed by chapter 1 of the Code on partner B for the taxable year 1966 is increased by the \$1,050 decrease in his credit earned for the taxable year 1962 (\$2,100 original credit earned minus \$1,050 recomputed credit earned). The sale of asset No. 3 on January 2, 1966, has no effect on A.

PAR. 10. Section 1.48-3 is amended by revising paragraph (d) to read as follows:

§ 1.48-3 Used section 38 property.

(d) The next paragraph is (e).

PAR. 11. Section 1.48-5 is amended by revising subparagraph (3) of paragraph (a) to read as follows:

§ 1.48-5 Electing small business corporations.

(a) In general. . . .

(3) A shareholder to whom the basis (or cost) of section 38 property is apportioned shall, for purposes of the credit allowed by section 38, be treated as the taxpayer with respect to such property. Thus, the total cost of used section 38 property apportioned to him by the electing small business corporation must be taken into account as cost of used section 38 property in determining whether the \$50,000 limitation on the cost of used section 38 property which may be taken into account by the shareholder in computing qualified investment for any taxable year is exceeded. If a shareholder takes into account in determining his qualified investment any portion of the basis (or cost) of section 38 property placed in service by an electing small business corporation and if such property subsequently is disposed of or otherwise ceases to be section 38 property in the hands of the corporation, such shareholder shall be subject to the provisions of section 47. See § 1.47-4.

PAR. 12. Section 1.48-6 is amended by revising subparagraph (3) of paragraph (a) and by adding a new subparagraph (5) at the end thereof. These revised and added provisions read as follows:

§ 1.48-6 Estates and trusts.

(a) In general. . . .

(3) A beneficiary to whom the basis (or cost) of section 38 property is apportioned shall, for purposes of the credit allowed by section 38, be treated as the taxpayer with respect to such property. Thus, the total cost of used section 38 property apportioned to him by the estate or trust must be taken into account as cost of used section 38 property in determining whether the \$50,000 limitation on the cost of used property which may be taken into account by the beneficiary in computing qualified investment for any taxable year is exceeded. If a beneficiary takes into account in determining his qualified investment any portion of the basis (or cost) of section 38 property placed in service by an estate or trust and if such property subsequently is disposed of or otherwise ceases to be section 38 property in the hands of estate or trust, such beneficiary shall be subject to the provisions of section 47. See § 1.47-5.

(5) If during the taxable year of an estate or trust a beneficiary's interest in the income of such estate or trust terminates, the basis (or cost) of section 38 property placed in service by such estate or trust after such termination shall not be apportioned to such beneficiary.

PAR. 13. Section 1.48-7 is amended by revising subparagraph (2)(iv) of paragraph (a) to read as follows:

§ 1.48-7 Adjustment to basis.

(a) Reduction of basis; general. . . .

(2) Special rules. . . .

(iv) The basis of section 38 property, which is disposed of or otherwise ceases to be section 38 property in the taxable year in which it is placed in service (except where § 1.47-3 applies), shall not be reduced. See paragraph (a)(2) of § 1.46-3.

PAR. 14. There is inserted immediately after § 1.1372-5 the following new section:

§ 1.1372-6 Treatment of section 38 property of a corporation electing to be a small business corporation.

See paragraph (b) of § 1.47-4 for rules relating to the treatment of section 38 property of a corporation which makes an election under section 1372 to be an electing small business corporation.

(Secs. 38(b) (76 Stat. 963; 26 U.S.C. 38) and 7805 (68A Stat. 917; 26 U.S.C. 7805) of the Internal Revenue Code of 1954)

[P.R. Doc. 67-11818; Filed, Oct. 9, 1967; 8:45 a.m.]

Title 29—LABOR

Chapter XIII—Bureau of Labor Standards, Department of Labor

SHIP REPAIRING, SHIPBUILDING, AND SHIPBREAKING

Safety and Health Regulations; Miscellaneous Amendments

On May 30, 1967, a proposal to amend the Safety and Health Regulations for Ship Repairing, Shipbuilding, and Shipbreaking, under section 41 of the Longshoremen's and Harbor Workers' Compensation Act (33 U.S.C. 941) was published in the FEDERAL REGISTER (32 F.R. 7859). Interested persons were provided opportunity to submit data, views, or argument both orally and in writing in regard to the proposals.

After consideration of all relevant matter presented by interested persons, I have decided to and do hereby adopt the proposed amendments, with certain changes, as follows:

In Part 1501—Safety and Health Regulations for Ship Repairing:

1. In § 1501.5 the address for the American Society of Mechanical Engineers is changed to "345 East 47th Street, New York, N.Y. 10017." In addition, the reference "§ 1501.11(a)(6)" in Threshold Limit Values is changed to "§ 1501.11(a)(3) and (b)(3)."

2. Paragraph (a)(1) of § 1501.10 is changed by adding the reference "and 1501.25a(5)," after "§ 1501.24(b)(8)."

3. In paragraph (a)(2) of § 1501.10, the abbreviation "N.F.P.A." is changed by spelling it out as "National Fire Protection Association."

4. In paragraph (b)(1) of § 1501.10, the abbreviation "N.F.P.A." is changed by spelling it out as "National Fire Protection Association." In addition, the sentence is terminated after the number § 1501.13.

5. Paragraph (b)(3) of § 1501.10 is changed by omitting the word "and" before the letter "D" and adding the phrase ", and H" after the letter "D."

6. Paragraph (b)(5) of § 1501.10 is changed by omitting the word "and" before the letter "D" and adding the phrase ", and H" after the letter "D."

7. Paragraph (c)(1) of § 1501.10 is changed by adding the reference "and 1501.25(a)(5)," after "§ 1501.24(b)(8)."

8. In paragraph (c)(3) of § 1501.10, the reference "§ 1501.11(a)(3)(H)" is changed to "§ 1501.11(b)(1)(H)."

9. Section 1501.11 is changed in its entirety.

10. In paragraph (a) of § 1501.12, the reference "§ 1501.11(a)(1)(i) through (iv)" is changed to "§ 1501.11(a)(1)(i) and (ii), and (b)(1)(i) through (iii)."

11. Paragraph (d) of § 1501.12 is changed by adding the word "and" before the word "jet-type," and the word "all" before the word "duct."

12. Paragraph (e) of § 1501.12 is changed by adding the word "Portable" before the word "air" and the word "also" before the word "be" in the third sentence.

13. Paragraph (a)(4) of § 1501.24 is changed by adding the word "and" before the word "jet-type" and the word "all" before the word "duct."

14. Paragraph (b)(5) of § 1501.24 is changed by adding the word "Portable" before the word "air" in the third sentence.

15. Paragraph (a)(1)(vi) of § 1501.31 is changed by omitting the words "or for" before the word "blowing" and adding the phrase ", or for cleaning the work area," at the end of the sentence.

16. Paragraph (b) of § 1501.47 is changed by adding the phrase ", except for the initial and final welding or burning operation to start or complete a job, such as the erection and dismantling of hung scaffolding, or other similar, non-repetitive jobs of brief duration," at the end of the last sentence.

17. In paragraph (c) of § 1501.76, the phrase "100 parts per million (0.01%)" is changed to the phrase "50 parts per million (0.005%)."

In Part 1502—Safety and Health Regulations for Shipbuilding:

1. In § 1502.5 the address for the American Society of Mechanical Engineers is changed to "345 East 47th Street, New York, N.Y. 10017."

2. Paragraph (a)(1) of § 1502.10 is changed by adding the reference "and 1502.25(a)(5)," after "§ 1502.24(b)(8)."

3. In paragraph (a)(2) of § 1502.10, the abbreviation "N.F.P.A." is changed by spelling it out as "National Fire Protection Association."

4. In paragraph (b)(1) of § 1502.10, the abbreviation "N.F.P.A." is changed by spelling it out as "National Fire Protection Association."

5. Paragraph (b)(3) of § 1502.10 is changed by omitting the word "and" before the letter "D" and adding the phrase ", and H" after the letter "D."

6. Paragraph (b)(5) of § 1502.10 is changed by omitting the word "and" before the letter "D" and adding the phrase ", and H" after the letter "D."

7. Paragraph (c)(1) of § 1502.10 is changed by adding the reference "and 1502.25(a)(5)," after "§ 1502.24(b)(8)."

8. Paragraph (a)(4) of § 1502.24 is changed by adding the word "and" before the word "jet-type" and the word "all" before the word "duct."

9. Paragraph (b)(5) of § 1502.24 is changed by adding the word "Portable" before the word "air" in the third sentence.

10. Paragraph (a)(1)(vi) of § 1502.31 is changed by omitting the words "or for" before the word "blowing" and adding the phrase ", or for cleaning the work area," at the end of the sentence.

11. Paragraph (b) of § 1502.47 is changed by adding the phrase ", except for the initial and final welding or burning operation to start or complete a job, such as the erection and dismantling of hung scaffolding, or other similar, non-repetitive jobs of brief duration," at the end of the last sentence.

12. In paragraph (c) of § 1502.76, the phrase "100 parts per million (0.01%)" is changed to the phrase "50 parts per million (0.005%)."

In Part 1503—Safety and Health Regulations for Shipbreaking:

1. In § 1503.5, the reference "§ 1503.11(a)(6)" in Threshold Limit Values is changed to "§ 1503.11(a)(3) and (b)(3)."

2. Paragraph (a)(1) of § 1503.10 is changed by omitting the word "and" before the letter "D" in two places and adding the phrase ", and H" before the letter "D" in the same places.

3. In paragraph (a)(2) of § 1503.10, the abbreviation "N.F.P.A." is changed by spelling it out as "National Fire Protection Association."

4. In paragraph (b)(1) of § 1503.10, the abbreviation "N.F.P.A." is changed by spelling it out as "National Fire Protection Association."

5. Paragraph (b)(3) of § 1503.10 is changed by omitting the word "and" before the letter "D" and adding the phrase ", and H" after the letter "D."

6. Paragraph (b)(5) of § 1503.10 is changed by omitting the word "and" before the letter "D" and adding the phrase ", and H" after the letter "D."

7. Paragraph (c)(1) of § 1503.10 is changed by omitting the word "and" before the letter "D" and adding the phrase ", and H" after the letter "D."

8. Section 1503.11 is changed in its entirety.

9. In paragraph (a) of § 1503.12, the reference "§ 1503.11(a)(1)(i) through (iii)" is changed to "§ 1503.11(a)(1)(i) and (ii), and (b)(1)(i) and (ii)."

10. Paragraph (d) of § 1503.12 is changed by adding the word "and" before the word "jet-type," and the word "all" before the word "duct."

11. Paragraph (e) of § 1503.12 is changed by adding the word "Portable" before the word "air," and the word "also" before the word "be" in the third sentence.

12. Paragraph (a)(1)(vi) of § 1503.31 is changed by omitting the words "or for" before the word "blowing" and adding the phrase ", or for cleaning the work area," at the end of the sentence.

13. In paragraph (c) of § 1503.76, the phrase "100 parts per million (0.01%)" is changed to the phrase "50 parts per million (0.005%)."

These amendments shall become effective on November 9, 1967.

Signed at Washington, D.C., this 26th day of September 1967.

NELSON M. BORTZ,
Director,
Bureau of Labor Standards.

PART 1501—SAFETY AND HEALTH REGULATIONS FOR SHIP REPAIRING

Subpart A—General Provisions

1. Section 1501.5 is amended to read as follows:

§ 1501.5 Reference specifications, standards, and codes.

Specifications, standards, and codes of agencies of the U.S. Government, to the extent specified in the text, form a part of the regulations of this part. In addition, under the authority vested in the Secretary under the Act, the specifications, standards, and codes of organizations which are not agencies of the U.S. Government, in effect on the date of the promulgation of the regulations of this part as listed below, to the extent specified in the text, form a part of the regulations of this part:

National Fire Protection Association, 60 Batterymarch Street, Boston, Mass. 02110, Subpart B § 1501.13(a).

Underwriters' Laboratories, Inc., 207 East Ohio Street, Chicago, Ill. 60611, Subpart B, § 1501.12 (b) and (f); Subpart C, § 1501.24(b)(7), 1501.25(a)(4); Subpart H, § 1501.72(a).

United States of America Standard Safety Code for Portable Wood Ladders, A14.1-1959, United States of America Standards Institute, Inc., 10 East 40th Street, New York, N.Y. 10016, Subpart E, § 1501.42(a)(6).

United States of America Standard Safety Code for Portable Metal Ladders, A14.2-1956, United States of America Standards Institute, Inc., 10 East 40th Street, New York, N.Y. 10016, Subpart E, § 1501.42(a)(4).

United States of America Standard Safety Code for Head, Eye, and Respiratory Protection, Z2.1-1959, United States of America Standards Institute, Inc., 10 East 40th Street, New York, N.Y. 10016, Subpart I, § 1501.81(a)(1), 1501.83(b).

American Society of Mechanical Engineers, Boiler and Pressure Vessel Code, Section VIII, Rules for Construction of Unfired Pressure Vessels, American Society of Mechanical Engineers, 345 East 47th Street, New York, N.Y. 10017, Subpart K, § 1501.101(a).

Threshold Limit Values, American Conference of Governmental Industrial Hygienists, 1014 Broadway, Cincinnati, Ohio 45202, Subpart B, § 1501.11 (a)(3) and (b)(3); Subpart C, § 1501.21(b).

United States of America Standards Safety Code for the Use, Care, and Protection of Abrasive Wheels, B7.1-1964, United States of America Standards Institute, Inc., 10 East 40th Street, New York, N.Y. 10016, Subpart H, § 1501.74(c).

2. The title to Subpart B is amended to read as follows:

Subpart B—Explosive and Other Dangerous Atmospheres

3. In § 1501.10 paragraphs (a) (1) and (2), (b) (1), (3), and (5), and (c) (1) and (3) are amended to read as follows:

§ 1501.10 Competent person.

(a) *Designation.* (1) For the purposes of Subparts B, C, D, and H of this part, except for §§ 1501.24 (b) (8) and 1501.25 (a) (5), one or more competent persons shall be designated by the employer in accordance with the applicable requirements of this section unless the requirements of Subparts B, C, D, and H of this part are always carried out by a National Fire Protection Association Certified Marine Chemist.

(2) The employer shall indicate on U.S. Department of Labor Form MAR-8, "Designation of Competent Person" either those employees designated as competent persons or that the prescribed functions of such persons are always carried out by a National Fire Protection Association Certified Marine Chemist in addition to his professional duties. When additions or changes are made in the personnel so designated, a new Form MAR-8 shall be executed. A copy of this executed form shall be forwarded to the nearest office of the Bureau of Labor Standards.

(b) *Criteria.* The following criteria shall guide the employer in designating employees as competent persons:

(1) Ability to understand the meaning of designations on certificates and of any qualifications relating thereto and to carry out any instructions, either written or oral, left by the National Fire Protection Association Certified Marine Chemist or person authorized by the U.S. Coast Guard referred to in § 1501.13.

(3) Familiarity with and understanding of Subparts B, C, D, and H of this part.

(5) Capability to perform the tests and inspections required by Subparts B, C, D, and H of this part and to write the required logs.

(c) *Logging of inspections and tests.* (1) When tests and inspections required to be performed by a competent person by any provisions of Subparts B, C, D, and H of this part, except those referred to in §§ 1501.24 (b) (8) and 1501.25 (a) (5), are made, a record of the locations, operations performed and date, time, and results of the tests and any instructions resulting therefrom shall be recorded on U.S. Department of Labor Form MAR-9, "Log of Inspections and Tests by Competent Person." A separate form shall be used for each vessel on which tests and inspections are made.

(3) A copy of any certificate issued in accordance with § 1501.13 and of any instructions issued by the National Fire Protection Association Certified Marine Chemist shall be kept on file with the log for a period of at least 3 months from the date of the completion of the job. The certificate and instructions issued by the person doing the fumigation referred to

in § 1501.11 (b) (1) (ii) shall also be kept on file for a period of at least 3 months from the date of the completion of the job.

4. Section 1501.11 is amended to read as follows:

§ 1501.11 Precautions before entering.

(a) *Flammable atmospheres and residues.* (1) Before employees are initially permitted to enter any of the ship's spaces designated in subdivisions (i) and (ii) of this subparagraph, the atmosphere within the space to be entered shall be tested by a competent person to determine the concentration of flammable vapors or gases within the space.

(i) Cargo spaces or other spaces containing or having last contained combustible or flammable liquids or gases in bulk.

(ii) Spaces immediately adjacent to those described in subdivision (i) of this subparagraph.

(2) If the tests indicate that the atmosphere in the space to be entered contains a concentration of flammable vapor or gas greater than 10 percent of the lower explosive limit, the space shall be ventilated to reduce the concentration below 10 percent of the lower explosive limit before men are permitted to enter.

(3) If the atmosphere in the space to be entered is found to contain a concentration of flammable vapor or gas below the level immediately dangerous to life as defined in § 1501.82 (b) (1), but above the threshold limit value, employees shall be protected in accordance with the requirements of § 1501.82 (a), and (c), (d), or (e), whichever is applicable.

(b) *Toxic atmospheres and residues.* (1) Before employees are initially permitted to enter any of the ship's spaces designated in subdivisions (i), (ii), and (iii) of this subparagraph, the atmosphere in the space to be entered shall be tested for toxic atmospheric contaminants, and the space inspected for the presence of toxic or corrosive residues by a Marine Chemist, Industrial Hygienist or other person qualified to make these tests and inspections.

(i) Cargo spaces or other spaces containing or having last contained bulk liquids, gases, or solids of a toxic, corrosive, or irritant nature.

(ii) Spaces which have been fumigated.

(iii) Spaces immediately adjacent to those described in subdivisions (i) and (ii) of this subparagraph.

(2) If the tests indicate that the atmosphere in the space to be entered contains a concentration of toxic contaminants above the level which is immediately dangerous to life, the space shall be ventilated to reduce the concentration below the level immediately dangerous to life as defined in § 1501.82 (b) (1).

(3) If the atmosphere in the space to be entered is found to contain a concentration of toxic contaminants below the level immediately dangerous to life as defined in § 1501.82 (b) (1), but above the threshold limit value, employees shall be protected in accordance with the re-

quirements of § 1501.82 (a), and (c), (d), or (e), whichever is applicable.

(4) The person qualified to make the tests and inspections referred to in subparagraph (1) of this paragraph shall make a record of the tests, inspections and instructions pertaining to subparagraph (3) of paragraph (a) of this section and subparagraphs (2) and (3) of this paragraph on U.S. Department of Labor Form MAR-9, which shall be available for inspection and kept on file in accordance with § 1501.10 (c) (2).

(c) *Oxygen deficient atmospheres.* (1) Before employees are initially permitted to enter any of the ship's spaces designated in subdivisions (i) through (v) of this subparagraph, the atmosphere in the spaces to be entered shall be tested by a competent person with an oxygen indicator or other suitable device to ensure that it contains at least 16.5 percent oxygen.

(i) Spaces in which the tests required by paragraphs (a) and (b) of this section indicate that no flammable or toxic contaminants are present in the atmosphere.

(ii) Compartments which have been sealed.

(iii) Spaces which have been coated and closed up.

(iv) Nonventilated compartments which have been freshly painted.

(v) Cargo spaces containing cargoes or residues of cargoes which absorb oxygen, such as scrap iron, fresh fruit and molasses, and various vegetable drying oils in bulk.

(2) If the tests indicate that the atmosphere in the space to be entered contains less than 16.5 percent oxygen, the space shall be ventilated until tests indicate an oxygen content above this level.

(d) *Exceptions.* In emergencies and in cases of work of brief duration necessary to accomplish the ventilation required or to start operations, work may be performed in atmospheres containing concentrations of flammable contaminants above the upper explosive limit or otherwise immediately dangerous to life, provided employees are protected in accordance with the requirements of § 1501.82 (a) and (b).

5. In § 1501.12 the introductory text of paragraph (a) and paragraphs (b) and (d) are amended, and paragraphs (e), (f), and (g) are added to read as follows:

§ 1501.12 Cleaning and other cold work.

(a) Employees shall be permitted to perform manual cleaning to remove residue materials, scale, and debris or to perform other cold work in spaces described in § 1501.11 (a) (1) (i) and (ii) and (b) (1) (i) through (iii) before they have been certified as gas free only under the following conditions:

(b) Only approved explosion-proof, self-contained, battery-fed, portable lamps shall be used in spaces described in paragraph (a) of § 1501.13 before the spaces have been certified as "Safe for Men." Battery-fed, portable lamps bearing the approval of the Underwriters' Laboratories for use in Class I, Group D

atmospheres, or approved as permissible by the U.S. Bureau of Mines, and such lamps listed by the U.S. Coast Guard as approved for such use are deemed to meet the requirements of this paragraph.

(d) The metallic parts of air moving devices, including fans, blowers, and jet-type air movers, and all duct work shall be electrically bonded to the vessel's structure.

(e) All motors and control equipment shall be of the explosion-proof type. Fans shall have nonferrous blades. Portable air ducts shall also be of nonferrous materials. All motors and associated control equipment shall be properly maintained and grounded.

(f) In spaces described in paragraph (a) of § 1501.13 which have been certified "Safe for Men," either battery lamps or explosion-proof lights, approved by the Underwriters' Laboratories for use in Class I, Group D atmospheres, or approved as permissible by the U.S. Bureau of Mines or the U.S. Coast Guard, shall be used, provided the lights are mounted to the space openings from the exterior, or suspended within the space with the cables so led as to protect them from injury.

(g) In spaces certified "Safe for Fire" nonexplosion proof lights may be used.

6. In § 1501.13 paragraphs (b) and (c) are amended to read as follows:

§ 1501.13 Certification before hot work is begun.

(b) In dry cargo holds for which a Marine Chemist's certificate is not required by paragraph (a) (2) (ii) of this section, hot work may be performed only after a competent person has carefully examined the hold and found it to be free of flammable liquids, gases, and vapors. If flammable liquids, gases, or vapors are found, hot work shall not be performed within the space until the flammable liquids, gases, or vapors have been removed and a test indicates that the space is safe for fire.

(c) Before hot work is performed in engine room and boiler room spaces of any vessel for which a Marine Chemist's certificate is not required by the provision of paragraph (a) of this section or in fuel tank and engine compartments of boats, the bilges shall be inspected and tested by a competent person to ensure that they are free of flammable liquids, gases, and vapors. If flammable liquids, gases, or vapors are found, hot work shall not be performed within the space until the flammable liquids, gases, or vapors have been removed and a test indicates that the space is safe for fire.

7. In § 1501.14 paragraphs (c) and (d) are amended to read as follows:

§ 1501.14 Maintaining gas free conditions.

(c) The employer shall inform masters and chief engineers of vessels of the provisions of this section and shall confirm that they are aware of their responsibilities for seeing that their crews

understand and obey all warning signs, tags, and the limitations stated on the marine chemist's certificates.

(d) When conditions in a tank are such that there is a possibility of hazardous vapor being released from residues or other sources after a marine chemist's certificate has been issued, a competent person shall make tests to insure that the gas-free condition is maintained irrespective of whether hot work is being performed in the tank. When the competent person finds that atmospheric conditions have altered, work shall be stopped and a new marine chemist's certificate in accordance with the requirements of § 1501.13(a) shall be obtained before work is resumed.

Subpart C—Surface Preparation and Preservation

8. Section 1501.21 is amended to read as follows:

§ 1501.21 Toxic cleaning solvents.

(a) When toxic solvents are used, the employer shall employ one or more of the following measures to safeguard the health of employees exposed to these solvents.

(1) The cleaning operation shall be completely enclosed to prevent the escape of vapor into the working space.

(2) Either natural ventilation or mechanical exhaust ventilation shall be used to remove the vapor at the source and to dilute the concentration of vapors in the working space to a concentration which is safe for the entire work period.

(3) Employees shall be protected against toxic vapors by suitable respiratory protective equipment in accordance with the requirements of § 1501.82 (a) and (c), and, where necessary, against exposure of skin and eyes to contact with toxic solvents and their vapors by suitable clothing and equipment.

(b) The principles in the threshold limit values to which attention is directed in § 1501.5 will be used by the Department of Labor in enforcement proceedings in defining a safe concentration of air contaminants.

(c) When flammable solvents are used, precautions shall be taken in accordance with the requirements of § 1501.25.

9. In § 1501.23 paragraph (c) (1) (iv) is added to read as follows:

§ 1501.23 Mechanical paint removers.

(c) Abrasive blasting—(1) Equipment.

(iv) Dead man control. A dead man control device shall be provided at the nozzle end of the blasting hose either to provide direct cutoff or to signal the pot tender by means of a visual and audible signal to cut off the flow, in the event the blaster loses control of the hose. The pot tender shall be available at all times to respond immediately to the signal.

10. In § 1501.24 paragraphs (a) (4), (b) (5), (13), and (14) are amended to read as follows:

§ 1501.24 Painting.

(a) Paints mixed with toxic vehicles or solvents. * * *

(4) The metallic parts of air moving devices, including fans, blowers, and jet-type air movers, and all duct work shall be electrically bonded to the vessel's structure.

(b) Paints and tank coatings dissolved in highly volatile, toxic, and flammable solvents. * * *

(5) All motors and control equipment shall be of the explosion-proof type. Fans shall have nonferrous blades. Portable air ducts shall also be of nonferrous materials. All motors and associated control equipment shall be properly maintained and grounded.

(13) All employees continuously in a compartment in which such painting is being performed, shall be protected by air line respirators in accordance with the requirements of § 1501.82(a) and by suitable protective clothing. Employees entering such compartments for a limited time shall be protected by filter cartridge type respirators in accordance with the requirements of § 1501.82 (a) and (e).

(14) All employees doing exterior paint spraying with such paints shall be protected by suitable filter cartridge type respirators in accordance with the requirements of § 1501.82 (a) and (e) and by suitable protective clothing.

Subpart D—Welding, Cutting, and Heating

11. In § 1501.31 paragraph (a) (1) (vi) is amended to read as follows:

§ 1501.31 Ventilation and protection in welding, cutting, and heating.

(a) Mechanical ventilation; requirements. (1) * * *

(vi) Oxygen shall not be used for ventilation purposes, comfort cooling, blowing dust or dirt from clothing, or for cleaning the work area.

12. In § 1501.32 paragraph (e) is amended and paragraphs (h) and (i) are added to read as follows:

§ 1501.32 Fire prevention.

(e) When the welding, cutting, or heating operation is such that normal fire prevention precautions are not sufficient, additional personnel shall be assigned to guard against fire while the actual welding, cutting, or heating operation is being performed and for a sufficient period of time after completion of the work to insure that no possibility of fire exists. Such personnel shall be instructed as to the specific anticipated fire hazards and how the fire fighting equipment provided is to be used.

(h) Vaporizing liquid extinguishers shall not be used in enclosed spaces.

(i) Except when the contents are being removed or transferred, drums, pails, and other containers which contain or have contained flammable liquids shall be

kept closed. Empty containers shall be removed to a safe area apart from hot work operations, or open flames.

13. In § 1501.35 paragraph (a) (9), titles to paragraphs (e) and (g), and paragraphs (e) (1), (2), and (3) are amended, and paragraphs (e) (4) and (5) and (g) (2) and (3) are added to read as follows:

§ 1501.35 Gas welding and cutting.

(a) *Transporting, moving, and storing compressed gas cylinders.* . . .

(9) Acetylene cylinders shall be secured in an upright position at all times except, if necessary, for short periods of time while cylinders are actually being hoisted or carried.

(c) *Fuel gas and oxygen manifolds.*
(1) Fuel gas and oxygen manifolds shall bear the name of the substance they contain in letters at least one (1) inch high which shall be either painted on the manifold or on a sign permanently attached to it.

(2) Fuel gas and oxygen manifolds shall be placed in safe and accessible locations in the open air. They shall not be located within enclosed spaces.

(3) Manifold hose connections, including both ends of the supply hose that lead to the manifold, shall be such that the hose cannot be interchanged between fuel gas and oxygen manifolds and supply header connections. Adapters shall not be used to permit the interchange of hose. Hose connections shall be kept free of grease and oil.

(4) When not in use, manifold and header hose connections shall be capped.

(5) Nothing shall be placed on top of a manifold, when in use, which will damage the manifold or interfere with the quick closing of the valves.

(g) *Torches.* . . .

(2) Torches shall be inspected at the beginning of each shift for leaking shut-off valves, hose couplings, and tip connections. Defective torches shall not be used.

(3) Torches shall be lighted by friction lighters or other approved devices, and not by matches or from hot work.

14. In § 1501.36 paragraph (a) (2) is amended to read as follows:

§ 1501.36 Arc welding and cutting.

(a) *Manual electrode holders.* . . .

(2) Any current carrying parts passing through the portion of the holder which the arc welder or cutter grips in his hand, and the outer surfaces of the jaws of the holder, shall be fully insulated against the maximum voltage encountered against ground.

Subpart E—Scaffolds, Ladders, and Other Working Surfaces

15. In § 1501.41 paragraphs (a) (6), (1) (2) and (3) are amended to read as follows:

§ 1501.41 Scaffolds or staging.

(a) *General requirements.* . . .

(6) Barrels, boxes, cans, loose bricks, or other unstable objects shall not be used as working platforms or for the support of planking intended as scaffolds or working platforms.

(1) *Backrails and toeboards.* . . .

(2) Rails shall be of 2 x 4 inch lumber, flat bar or pipe. When used with rigid supports, taut wire or fiber rope of adequate strength may be used. If the distance between supports is more than 8 feet, rails shall be equivalent in strength to 2 x 4 inch lumber. Rails shall be firmly secured. Where exposed to hot work or chemicals, fiber rope rails shall not be used.

(3) Rails may be omitted where the structure of the vessel prevents their use. When rails are omitted employees working more than 5 feet above solid surfaces shall be protected by safety belts and life lines meeting the requirements of § 1501.84(b), and employees working over water shall be protected by buoyant work vests meeting the requirements of § 1501.84(a).

16. In § 1501.42 paragraphs (a) (4) and (6) are amended to read as follows:

§ 1501.42 Ladders.

(a) *General requirements.* . . .

(4) Portable metal ladders shall be of strength equivalent to that of wood ladders. Manufactured portable metal ladders provided by the employer shall be in accordance with the provisions of the United States of America Standard Safety Code for Portable Metal Ladders, A14.2.

(6) Manufactured portable wood ladders provided by the employer shall be in accordance with the provisions of the United States of America Standard Safety Code for Portable Wood Ladders, A14.1.

17. In § 1501.43 title to section is amended and paragraphs (c), (d), (e), and (f) are added to read as follows:

§ 1501.43 Guarding of deck openings and edges.

(c) When employees are exposed to unguarded edges of decks, platforms, flats, and similar flat surfaces, more than 5 feet above a solid surface, the edges shall be guarded by adequate guardrails meeting the requirements of § 1501.41 (1) and (2), unless the nature of the work in progress or the physical conditions prohibit the use or installation of such guardrails.

(d) When employees are working near the unguarded edges of decks of vessels afloat, they shall be protected by buoyant work vests, meeting the requirements of § 1501.84(a).

(e) Sections of bilges from which floor plates or gratings have been removed shall be guarded by guardrails except where they would interfere with work in progress. If these open sections are in a

walkway at least two 10-inch planks placed side by side, or equivalent, shall be laid across the opening to provide a safe walking surface.

(f) Gratings, walkways, and catwalks, from which sections or ladders have been removed, shall be barricaded with adequate guardrails.

18. In § 1501.45 title to section is amended and paragraph (g) is added to read as follows:

§ 1501.45 Access to and guarding of dry-docks and marine railways.

(g) Catwalks on stiles of marine railways shall be no less than 20 inches wide and shall have on at least one side a guardrail and midrail meeting the requirements of § 1501.41 (1) and (2).

19. In § 1501.47 the paragraph designation (a) is assigned to the first paragraph and paragraphs (b), (c), and (d) are added to read as follows:

§ 1501.47 Working surfaces.

(a) When firebox floors present tripping hazards of exposed tubing or of missing or removed refractory, sufficient planking to afford safe footing shall be laid while work is being carried on within the boiler.

(b) When employees are working aloft, or elsewhere at elevations more than 5 feet above a solid surface, either scaffolds or a sloping ladder, meeting the requirements of this subpart, shall be used to afford safe footing, or the employees shall be protected by safety belts and lifelines meeting the requirements of § 1501.84(b). Employees visually restricted by blasting hoods, welding helmets, and burning goggles shall work from scaffolds, not from ladders, except for the initial and final welding or burning operation to start or complete a job, such as the erection and dismantling of hung scaffolding, or other similar, non-repetitive jobs of brief duration.

(c) For work performed in restricted quarters, such as behind boilers and in between congested machinery units and piping, work platforms at least 20 inches wide meeting the requirements of § 1501.41(h) (1) shall be used. Backrails may be omitted if bulkheading, boilers, machinery units, or piping afford proper protection against falling.

(d) When employees are boarding, leaving, or working from small boats or floats, they shall be protected by buoyant work vests meeting the requirements of § 1501.84(a).

Subpart F—General Working Conditions

20. In § 1501.51 paragraph (a) is amended to read as follows:

§ 1501.51 Housekeeping.

(a) Good housekeeping conditions shall be maintained at all times. Adequate aisles and passageways shall be maintained in all work areas. All staging platforms, ramps, stairways, walkways, aisles, and passageways on vessels or dry docks shall be kept clear of all tools, materials, and equipment

except that which is in use, and all debris such as welding rod tips, bolts, nuts, and similar material. Hose and electric conductors shall be elevated over or placed under the walkway or working surfaces or covered by adequate crossover planks.

21. In § 1501.52 paragraph (b)(2) is amended to read as follows:

§ 1501.52 Illumination.

(b) * * *

(2) Temporary lights shall be equipped with heavy duty electric cords with connections and insulation maintained in safe condition. Temporary lights shall not be suspended by their electric cords unless cords and lights are designed for this means of suspension. Splices which have insulation equal to that of the cable are permitted.

22. In § 1501.53 paragraph (c)(1) is added to read as follows:

§ 1501.53 Utilities.

(c) *Infrared electrical heat lamps.* (1) All infrared electrical heat lamps shall be equipped with guards that surround the lamps with the exception of the face, to minimize accidental contact with the lamps.

23. In § 1501.57 paragraphs (a), (b), and (c) are changed to (e), (f), and (g), and new paragraphs (a), (b), (c), and (d) are added to read as follows:

§ 1501.57 Health and sanitation.

(a) No chemical product, such as a solvent or preservative; structural material, such as cadmium or zinc coated steel or plastic materials; or process material, such as welding filler metals, shall be used until the employer ascertains the potential fire and toxic hazards which may be encountered in the handling, application, or utilization of these materials.

(b) The employer shall instruct employees who will be exposed to the hazardous materials as to the nature of the hazards and the means of avoiding them.

(c) The employer shall provide all necessary controls, and the employees shall be protected against the hazards referred to in paragraph (a) of this section and those hazards for which specific precautions are required in Subparts B, C, and D of this part, by suitable personal protective equipment.

(d) Paragraphs (a), (b), and (c) of this section shall take effect 180 days after the effective date of this amendment.

(e) The employer shall provide adequate washing facilities for employees engaged in the application of paints or coatings or in other operations where contaminants can, by ingestion or absorption, be detrimental to the health of the employee. The employer shall encourage good personal hygiene practices by informing the employees of the need for removing surface contaminants by thorough washing of hands and face prior to eating or smoking.

(f) The employer shall not permit eating or smoking in areas undergoing surface preparation or preservation.

(g) The employer shall not permit employees to work in the immediate vicinity of uncovered garbage and shall ensure that employees working beneath or on the outboard side of a vessel are not subject to contamination by drainage or waste from overboard discharges.

24. In § 1501.58 paragraph (d) is amended to read as follows:

§ 1501.58 First aid.

(d) There shall be available for each vessel on which ten (10) or more employees are working one Stokes basket stretcher, or equivalent, permanently equipped with bridles for attaching to the hoisting gear, except that no more than two stretchers are required on each job location. A blanket or other liner suitable for transferring the patient to and from the stretcher shall be provided. Stretchers shall be kept close to the vessels. This paragraph does not apply where ambulance services which are available are known to carry such stretchers.

Subpart G—Gear and Equipment for Rigging and Materials Handling

25. In § 1501.64 paragraph (d) is added to read as follows:

§ 1501.64 Chain falls and pull-lifts.

(d) Scaffolding shall not be used as a point of attachment for lifting devices, such as tackles, chain falls, and pull-lifts unless the scaffolding is specifically designed for that purpose.

26. In § 1501.65 paragraphs (a) and (c) are changed to (b) and (e), paragraphs (b) (1) and (2) are changed to (c) (1) and (2), paragraph (b) (3) is amended and changed to paragraph (d), and new paragraph (a) is added to read as follows:

§ 1501.65 Hoisting and hauling equipment.

(a) Derrick and crane certification: (1) Derricks and cranes which are part of, or regularly placed aboard barges, other vessels, or on wingwalls of floating drydocks, and are used to transfer materials or equipment from or to a vessel or drydock, shall be tested and certificated in accordance with the standards provided in Part 1505 of this chapter by persons accredited for that purpose.

(2) Subparagraph (1) of this paragraph shall take effect 180 days after the effective date of this amendment.

(b) The moving parts of hoisting and hauling equipment shall be guarded.

(c) Mobile crawler or truck cranes used on a vessel: (1) The maximum manufacturer's rated safe working loads for the various working radii of the boom and the maximum and minimum radii at which the boom may be safely used with and without outriggers shall be conspicuously posted near the controls and

shall be visible to the operator. A radius indicator shall be provided.

(2) The posted safe working loads of mobile crawler or truck cranes under the conditions of use shall not be exceeded.

(d) Accessible areas within the swing radius of the outermost part of the body of a revolving derrick or crane either permanently or temporarily mounted, shall be guarded in such a manner as to prevent an employee from being in such a position as to be struck by the crane or caught between the crane and fixed parts of the vessel or of the crane itself.

(e) Marine railways: (1) The cradle or carriage on the marine railway shall be positively blocked or secured when in the hauled position to prevent it from being accidentally released.

27. In § 1501.66 paragraph (m) is amended, paragraphs (n) and (o) are changed to (o) and (p), and new paragraph (n) is added to read as follows:

§ 1501.66 Use of gear.

(m) A section of hatch through which materials or equipment are being raised, lowered, moved, or otherwise shifted manually or by a crane, winch, hoist, or derrick, shall be completely opened. The beam or pontoon left in place adjacent to an opening shall be sufficiently lashed, locked or otherwise secured to prevent it from being unshipped so that it cannot be displaced by accident.

(n) Hatches shall not be opened or closed while employees are in the square of the hatch below.

(o) Before loads or empty lifting gear are raised, lowered, or swung, clear and sufficient advance warning shall be given to employees in the vicinity of such operations.

(p) At no time shall an employee be permitted to place himself in a hazardous position between a swinging load and a fixed object.

28. In § 1501.68 title to section is added and Table G-6 is amended to read as follows:

§ 1501.68 Tables.

TABLE G-6—NUMBER AND SPACING OF U-BOLT WIRE ROPE CLIPS

Improved plow steel, rope diameter, inches	Number of clips		Minimum spacing, inches
	Drop forged	Other material	
1/2	3	4	3
3/4	3	4	3 1/2
1	4	5	4 1/2
1 1/4	4	5	5 1/2
1 1/2	4	6	6
1 3/4	5	6	6 1/2
2	5	7	7 1/2
2 1/4	6	7	8 1/2
2 1/2	6	8	9

*Three clips shall be used on wire size less than 1/2-inch diameter.

Subpart H—Tools and Related Equipment

29. In § 1501.71 paragraph (a) is amended and paragraphs (f), (g), and (h) are added to read as follows:

§ 1501.71 General precautions.

(a) Hand lines, slings, tackles of adequate strength, or carriers such as tool bags with shoulder straps shall be provided and used to handle tools, materials, and equipment so that employees will have their hands free when using ship's ladders and access ladders. The use of hose or electric cords for this purpose is prohibited.

(f) The moving parts of drive mechanisms, such as gearing and belting on large portable tools, shall be adequately guarded.

(g) Headers, manifolds, and widely spaced hose connections on compressed air lines shall bear the word "air" in letters at least 1 inch high, which shall be painted either on the manifold or separate hose connections, or on signs permanently attached to the manifolds or connections. Grouped air connections may be marked in one location.

(h) Before use, compressed air hose shall be examined. Visibly damaged and unsafe hose shall not be used.

30. In § 1501.72 paragraph (a) is amended to read as follows:

§ 1501.72 Portable electric tools.

(a) The frames of portable electric tools and appliances, except double insulated tools approved by Underwriters' Laboratories, shall be grounded either through a third wire in the cable containing the circuit conductors or through a separate wire which is grounded at the source of the current.

31. In § 1501.74 introduction to paragraph (c) is amended to read as follows:

§ 1501.74 Abrasive wheels.

(c) Cup type wheels use for external grinding shall be protected by either a revolving cup guard or a band type guard in accordance with the provisions of the United States of America Standard Safety Code for the Use, Care, and Protection of Abrasive Wheels, B7.1. All other portable abrasive wheels used for external grinding shall be provided with safety guards (protection hoods) meeting the requirements of paragraph (e) of this section, except as follows:

32. Section 1501.76 is added to read as follows:

§ 1501.76 Internal combustion engines, other than ship's equipment.

(a) When internal combustion engines, furnished by the employer are used in a fixed position below decks, for such purposes as driving pumps, generators, and blowers, the exhaust shall be led to the open air, clear of any ventilation intakes and openings through which it might enter the vessel.

(b) All exhaust line joints and connections shall be checked for tightness immediately upon starting the engine, and any leaks shall be corrected at once.

(c) When internal combustion engines on vehicles, such as forklifts and mobile cranes, or on portable equipment such

as fans, generators, and pumps exhaust into the atmosphere below decks, the competent person shall make tests of the carbon monoxide content of the atmosphere as frequently as conditions require to ensure that dangerous concentrations do not develop. Employees shall be removed from the compartment involved when the carbon monoxide concentration exceeds 50 parts per million (0.005%). The employer shall use blowers sufficient in size and number and so arranged as to maintain the concentration below this allowable limit before work is resumed.

Subpart I—Personal Protective Equipment

33. In § 1501.81 paragraph (c) (1) is amended to read as follows:

§ 1501.81 Eye protection.**(c) Protection against radiant energy.**

(1) In any operation in which the eye hazard of injurious light rays or other radiant energy exists, depending upon the intensity of the radiation to which employees are exposed, they shall be protected by spectacles, cup goggles, helmets, hand shields, or face shields equipped with filter lenses meeting the requirements of paragraphs (a) and (c) (2) of this section.

34. In § 1501.83 paragraph (b) is amended to read as follows:

§ 1501.83 Head, foot, and body protection.

(b) Protective hats shall meet the specifications contained in the United States of America Standard Safety Code for Head, Eye, and Respiratory Protection, Z2.1. Hats without dielectric strength shall not be used where there is the possibility of contact with electric conductors.

35. In § 1501.84 sense of paragraph (a) (1) is transferred to §§ 1501.43(d) and 1501.47(d), and paragraph (b) (1) to § 1501.47(b); paragraphs (b) (2), (3), and (4) are amended as paragraphs (b) (2) and (3), and paragraphs (c) (4) is amended; and new paragraphs (a) (1) and (2), and (b) (1) are added to read as follows:

§ 1501.84 Lifesaving equipment.

(a) *Buoyant work vests.* (1) Buoyant work vests shall not meet the requirements of these regulations unless approved by the U.S. Coast Guard.

(2) Prior to each use, buoyant work vests shall be inspected for dry rot, chemical damage, or other defects which may affect their strength and buoyancy. Defective buoyant work vests shall not be used.

(b) *Safety belts and lifelines.* (1) Safety belts shall be equipped with lifelines which in use are secured with a minimum of slack to a fixed structure.

(2) Prior to each use, belts and lifelines shall be inspected for dry rot, chemical damage, or other defects which

may affect their strength. Defective belts and lifelines shall not be used.

(3) When employees are working in any location requiring a safety belt and a lifeline, care shall be exercised to ensure that the lifeline is not cut, pinched, or led over a sharp edge. In hot work operations or those involving the use of acids, solvents, or caustics, the line shall be kept clear to avoid its being burned or weakened. In order to keep the lifeline continuously attached with a minimum of slack to a fixed structure the attachment point of the lifeline shall be appropriately changed as the work progresses.

(c) Lifelines and ladders. * * *

(4) In the vicinity of each vessel afloat in which work is being performed there shall be at least one portable or permanent ladder of sufficient length to assist employees to reach safety in the event that they fall into the water.

Subpart J—Ship's Machinery and Piping Systems

36. In § 1501.91 paragraph (a) introductory text and subparagraphs (1) and (2) are amended to read as follows:

§ 1501.91 Ship's boilers.

(a) Before work is performed in the fire, steam, or water spaces of a boiler where employees may be subject to injury from the direct escape of a high temperature medium, such as steam, or water, oil, or other medium at a high temperature entering from an interconnecting system, the employer shall insure that the following steps are taken:

(1) The isolation and shutoff valves connecting the dead boiler with the live system or systems shall be secured, blanked, and tagged indicating that employees are working in the boiler. This tag shall not be removed nor the valves unblanked until it is determined that this may be done without creating a hazard to the employees working in the boiler, or until the work in the boiler is completed. Where valves are welded instead of bolted at least two isolation and shutoff valves connecting the dead boiler with the live system or systems shall be secured, locked, and tagged.

(2) Drain connections to atmosphere on all of the dead interconnecting systems shall be opened for visual observation of drainage.

37. In § 1501.92 paragraph (a) introductory text and subparagraphs (1) and (2) are amended to read as follows:

§ 1501.92 Ship's piping systems.

(a) Before work is performed on a valve, fitting, or section of piping in a piping system where employees may be subject to injury from the direct escape of steam, or water, oil, or other medium at a high temperature, the employer shall insure that the following steps are taken:

(1) The isolation and shutoff valves connecting the dead system with the live system or systems shall be secured, blanked, and tagged indicating that employees are working on the systems.

This tag shall not be removed nor the valves unblanked until it is determined that this may be done without creating a hazard to the employees working on the system, or until the work on the system is completed. Where valves are welded instead of bolted at least two isolation and shutoff valves connecting the dead system with the live system or systems shall be secured, locked, and tagged.

(2) Drain connections to atmosphere on all of the dead interconnecting systems shall be opened for visual observation of drainage.

Subpart L—Electrical Machinery

38. Section 1501.111 is amended to read as follows:

§ 1501.111 Electrical circuits and distribution boards.

(a) Before an employee is permitted to work on an electrical circuit, except when the circuit must remain energized for testing and adjusting, the circuit shall be deenergized and checked at the point at which the work is to be done to insure that it is actually deenergized. When testing or adjusting an energized circuit a rubber mat, duck board, or other suitable insulation shall be used underfoot where an insulated deck does not exist.

(b) Deenergizing the circuit shall be accomplished by opening the circuit breaker, opening the switch, or removing the fuse, whichever method is appropriate. The circuit breaker, switch, or fuse location shall be tagged to indicate that an employee is working on the circuit. Such tags shall not be removed nor the circuit energized until it is definitely determined that the work on the circuit has been completed.

(c) When work is performed immediately adjacent to an open-front energized board or in back of an energized board, the board shall be covered or some other equally safe means shall be used to prevent contact with any of the energized parts.

PART 1502—SAFETY AND HEALTH REGULATIONS FOR SHIPBUILDING

Subpart A—General Provisions

39. Section 1502.5 is amended to read as follows:

§ 1502.5 Reference specifications, standards, and codes.

Specifications, standards, and codes of agencies of the U.S. Government, to the extent specified in the text, form a part of the regulations of this part. In addition, under the authority vested in the Secretary under the Act, the specifications, standards, and codes of organizations which are not agencies of the U.S. Government, in effect on the date of the promulgation of the regulations of this part as listed below, to the extent specified in the text, form a part of the regulations of this part:

National Fire Protection Association, 60 Battery March Street, Boston, Mass. 02110, Subpart B, § 1502.10(a).

Underwriters' Laboratories, Inc., 207 East Ohio Street, Chicago, Ill. 60611, Subpart C §§ 1502.24(b)(7), 1502.25(a)(4); Subpart H, § 1502.72(a).

United States of America Standard Safety Code for Portable Wood Ladders, A14.1-1959, United States of America Standards Institute, Inc., 10 East 40th Street, New York, N.Y. 10016, Subpart E, § 1502.42(a)(6).

American Society of Mechanical Engineers, Boiler and Pressure Vessel Code, Section VIII, Rules for Construction of Unfired Pressure Vessels, American Society of Mechanical Engineers, 345 East 47th Street, New York, N.Y. 10017, Subpart K, § 1502.101(a).

Threshold Limit Values, American Conference of Governmental Industrial Hygienists, 1014 Broadway, Cincinnati, Ohio 45202, Subpart C § 1502.21(b).

United States of America Standard Safety Code for the Use, Care, and Protection of Abrasive Wheels, B7.1-1964, United States of America Standards Institute, Inc., 10 East 40th Street, New York, N.Y. 10016, Subpart H, § 1502.74(c).

40. The title to Subpart B is amended to read as follows:

Subpart B—Explosive and Other Dangerous Atmospheres

41. In § 1502.10 paragraphs (a) (1) and (2), (b) (1), (3), and (5), and (c) (1) are amended to read as follows:

§ 1502.10 Competent person.

(a) *Designation.* (1) For the purposes of Subparts C, D, and H of this part, except for §§ 1502.24(b)(8) and 1502.25(a)(5), one or more competent persons shall be designated by the employer in accordance with the applicable requirements of this section unless the requirements of Subparts C, D, and H of this part are always carried out by a National Fire Protection Association Certified Marine Chemist.

(2) The employer shall indicate on U.S. Department of Labor Form MAR-8, "Designation of Competent Person" either those employees designated as competent persons or that the prescribed functions of such persons are always carried out by a National Fire Protection Association Certified Marine Chemist in addition to his professional duties. When additions or changes are made in the personnel so designated, a new Form MAR-8 shall be executed. A copy of this executed form shall be forwarded to the nearest office of the Bureau of Labor Standards.

(b) *Criteria.* The following criteria shall guide the employer in designating employees as competent persons:

(1) Ability to understand the meaning of designations on certificates and of any qualifications relating thereto and to carry out any instructions, either written or oral, left by the National Fire Protection Association Certified Marine Chemist or issued by a consultant or chemist who may be used by the employer to make the tests and inspections required by Subparts C and D of this part.

(3) Familiarity with and understanding of Subparts C, D, and H of this part.

(5) Capability to perform the tests and inspections required by Subparts C, D, and H of this part and to write the required logs.

(c) *Logging of inspections and tests.*

(1) When tests and inspections required to be performed by a competent person by any provisions of Subparts C, D, and H of this part, except those referred to in § 1502.25 (b) (8) and (a) (5), are made, a record of the locations, operations performed and date, time, and results of the tests and any instructions resulting therefrom shall be recorded on U.S. Department of Labor Form MAR-9, "Log of Inspections and Tests by Competent Person." A separate form shall be used for each vessel on which tests and inspections are made.

Subpart C—Surface Preparation and Preservation

42. Section 1502.21 is amended to read as follows:

§ 1502.21 Toxic cleaning solvents.

(a) When toxic solvents are used, the employer shall employ one or more of the following measures to safeguard the health of employees exposed to these solvents.

(1) The cleaning operation shall be completely enclosed to prevent the escape of vapor into the working space.

(2) Either natural ventilation or mechanical exhaust ventilation shall be used to remove the vapor at the source and to dilute the concentration of vapors in the working space to a concentration which is safe for the entire work period.

(3) Employees shall be protected against toxic vapors by suitable respiratory protective equipment in accordance with the requirements of § 1502.82 (a) and (c), and, where necessary, against exposure of skin and eyes to contact with toxic solvents and their vapors by suitable clothing and equipment.

(b) The principles in the threshold limit values to which attention is directed in § 1502.5 will be used by the Department of Labor in enforcement proceedings in defining a safe concentration of air contaminants.

(c) When flammable solvents are used, precautions shall be taken in accordance with the requirements of § 1502.25.

43. In § 1502.23 paragraph (c) (1) (iv) is added to read as follows:

§ 1502.23 Mechanical paint removers.

(c) *Abrasive blasting—(1) Equipment.*

(iv) *Dead man control.* A dead man control device shall be provided at the nozzle end of the blasting hose either to provide direct cut off or to signal the pot tender by means of a visual and audible signal to cutoff the flow, in the event the blaster loses control of the hose. The pot tender shall be available at all times to respond immediately to the signal.

44. In § 1502.24 paragraphs (a) (4), (b) (5), (13), and (14) are amended to read as follows:

§ 1502.24 Painting.

(a) *Paints mixed with toxic vehicles or solvents.* * * *

(4) The metallic parts of air moving devices, including fans, blowers, and jet-type air movers, and all duct work shall be electrically bonded to the vessel's structure.

(b) *Paints and tank coatings dissolved in highly volatile, toxic, and flammable solvents.* * * *

(5) All motors and control equipment shall be of the explosion-proof type. Fans shall have nonferrous blades. Portable air ducts shall also be of nonferrous materials. All motors and associated control equipment shall be properly maintained and grounded.

(13) All employees continuously in a compartment in which such painting is being performed, shall be protected by air line respirators in accordance with the requirements of § 1502.82(a) and by suitable protective clothing. Employees entering such compartments for a limited time shall be protected by filter cartridge type respirators in accordance with the requirements of § 1502.82 (a) and (e).

(14) All employees doing exterior paint spraying with such paints shall be protected by suitable filter cartridge type respirators in accordance with the requirements of § 1502.82 (a) and (e) and by suitable protective clothing.

Subpart D—Welding, Cutting, and Heating

45. In § 1502.31 paragraph (a) (1) (vi) is amended to read as follows:

§ 1502.31 Ventilation and protection in welding, cutting, and heating.

(a) *Mechanical ventilation; requirements.* (1) * * *

(vi) Oxygen shall not be used for ventilation purposes, comfort cooling, blowing dust or dirt from clothing, or for cleaning the work area.

46. In § 1502.32 paragraph (e) is amended and paragraphs (h) and (i) are added to read as follows:

§ 1502.32 Fire prevention.

(e) When the welding, cutting, or heating operation is such that normal fire prevention precautions are not sufficient, additional personnel shall be assigned to guard against fire while the actual welding, cutting, or heating operation is being performed and for a sufficient period of time after completion of the work to insure that no possibility of fire exists. Such personnel shall be instructed as to the specific anticipated fire hazards and how the fire fighting equipment provided is to be used.

(h) Vaporizing liquid extinguishers shall not be used in enclosed spaces.

(i) Except when the contents are being removed or transferred, drums,

palls, and other containers which contain or have contained flammable liquids shall be kept closed. Empty containers shall be removed to a safe area apart from hot work operations, or open flames.

47. In § 1502.35 paragraph (a) (9), titles to paragraphs (e) and (g), and paragraphs (e) (1), (2), and (3) are amended, and paragraphs (e) (4) and (5) and (g) (2) and (3) are added to read as follows:

§ 1502.35 Gas welding and cutting.

(a) *Transporting, moving, and storing compressed gas cylinders.* * * *

(9) Acetylene cylinders shall be secured in an upright position at all times except, if necessary, for short periods of time while cylinders are actually being hoisted or carried.

(e) *Fuel gas and oxygen manifolds.*

(1) Fuel gas and oxygen manifolds shall bear the name of the substance they contain in letters at least one (1) inch high which shall be either painted on the manifold or on a sign permanently attached to it.

(2) Fuel gas and oxygen manifolds shall be placed in safe and accessible locations in the open air. They shall not be located within enclosed spaces.

(3) Manifold hose connections, including both ends of the supply hose that lead to the manifold, shall be such that the hose cannot be interchanged between fuel gas and oxygen manifolds and supply header connections. Adapters shall not be used to permit the interchange of hose. Hose connections shall be kept free of grease and oil.

(4) When not in use, manifold and header hose connections shall be capped.

(5) Nothing shall be placed on top of a manifold, when in use, which will damage the manifold or interfere with the quick closing of the valves.

(g) *Torches.* * * *

(2) Torches shall be inspected at the beginning of each shift for leaking shut-off valves, hose couplings, and tip connections. Defective torches shall not be used.

(3) Torches shall be lighted by friction lighters or other approved devices, and not by matches or from hot work.

48. In § 1502.36 paragraph (a) (2) is amended to read as follows:

§ 1502.36 Arc welding and cutting.

(a) *Manual electrode holders.* * * *

(2) Any current carrying parts passing through the portion of the holder which the arc welder or cutter grips in his hand, and the outer surfaces of the jaws of the holder, shall be fully insulated against the maximum voltage encountered to ground.

Subpart E—Scaffolds, Ladders, and Other Working Surfaces

49. In § 1502.41 paragraphs (a) (6), (1) (2) and (3) are amended to read as follows:

§ 1502.41 Scaffolds or staging.

(a) *General requirements.* * * *

(6) Barrels, boxes, cans, loose bricks, or other unstable objects shall not be used as working platforms or for the support of planking intended as scaffolds or working platforms.

(1) *Backrails and toeboards.* * * *

(2) Rails shall be of 2 x 4 inch lumber, flat bar or pipe. When used with rigid supports, taut wire or fiber rope of adequate strength may be used. If the distance between supports is more than 8 feet, rails shall be equivalent in strength to 2 x 4 inch lumber. Rails shall be firmly secured. Where exposed to hot work or chemicals, fiber rope rails shall not be used.

(3) Rails may be omitted where the structure of the vessel prevents their use. When rails are omitted employees working more than 5 feet above solid surfaces shall be protected by safety belts and life lines meeting the requirements of § 1502.84(b), and employees working over water shall be protected by buoyant work vests meeting the requirements of § 1502.84(a).

50. In § 1502.42 paragraphs (a) (4) and (6) are amended to read as follows:

§ 1502.42 Ladders.

(a) *General requirements.* * * *

(4) Portable metal ladders shall be of strength equivalent to that of wood ladders. Manufactured portable metal ladders provided by the employer shall be in accordance with the provisions of the United States of America Standard Safety Code for Portable Metal Ladders, A14.2.

(6) Manufactured portable wood ladders provided by the employer shall be in accordance with the provisions of the United States of America Standard Safety Code for Portable Wood Ladders, A14.1.

51. In § 1502.43 title to section is amended and paragraphs (c), (d), (e), and (f) are added to read as follows:

§ 1502.43 Guarding of deck openings and edges.

(c) When employees are exposed to unguarded edges of decks, platforms, flats, and similar flat surfaces, more than 5 feet above a solid surface, the edges shall be guarded by adequate guardrails meeting the requirements of § 1502.41(i) (1) and (2), unless the nature of the work in progress or the physical conditions prohibit the use or installation of such guardrails.

(d) When employees are working near the unguarded edges of decks of vessels afloat, they shall be protected by buoyant work vests, meeting the requirements of § 1502.84(a).

(e) Section of bilges in which floor plates or gratings have not been installed shall be guarded by guardrails except where they would interfere with the work in progress. If these open sections are in

a walkway at least two 10-inch planks placed side by side, or equivalent, shall be laid across the opening to provide a safe walking surface.

(f) Gratings, walkways, and catwalks, in which sections of gratings and ladders have not been installed shall be barricaded with adequate guardrails.

52. In § 1502.45 title to section is amended and paragraph (g) is added to read as follows:

§ 1502.45 Access to and guarding of drydocks and marine railways.

(g) Catwalks on stiles of marine railways shall be no less than 20 inches wide and shall have on at least one side a guardrail and midrail meeting the requirements of § 1502.41 (1) (1) and (2).

53. In § 1502.47 the paragraph designation (a) is assigned to the first paragraph and paragraphs (b), (c), and (d) are added to read as follows:

§ 1502.47 Working surfaces.

(a) When firebox floors present tripping hazards of exposed tubing or of missing or removed refractory, sufficient planking to afford safe footing shall be laid while work is being carried on within the boiler.

(b) When employees are working aloft, or elsewhere at elevations more than 5 feet above a solid surface, either scaffolds or a sloping ladder, meeting the requirements of this subpart, shall be used to afford safe footing, or the employees shall be protected by safety belts and lifelines meeting the requirements of § 1502.84 (b). Employees visually restricted by blasting hoods, welding helmets, and burning goggles shall work from scaffolds, not from ladders, except for the initial and final welding or burning operation to start or complete a job, such as the erection and dismantling of hung scaffolding, or other similar, nonrepetitive jobs of brief duration.

(c) For work performed in restricted quarters, such as behind boilers and in between congested machinery units and piping, work platforms at least 20 inches wide meeting the requirements of § 1502.41 (h) (1) shall be used. Backrails may be omitted if bulkheading, boilers, machinery units, or piping afford proper protection against falling.

(d) When employees are boarding, leaving, or working from small boats or floats, they shall be protected by buoyant work vests meeting the requirements of § 1502.84 (a).

Subpart F—General Working Conditions

54. In § 1502.51 paragraph (a) is amended to read as follows:

§ 1502.51 Housekeeping.

(a) Good housekeeping conditions shall be maintained at all times. Adequate aisles and passageways shall be maintained in all work areas. All staging platforms, ramps, stairways, walkways, aisles, and passageways on vessels or drydocks shall be kept clear of all tools, materials, and equipment except that which

is in use, and all debris such as welding rod tips, bolts, nuts, and similar material. Hose and electric conductors shall be elevated over or placed under the walkway or working surfaces or covered by adequate crossover planks.

55. In § 1502.52 paragraph (b) (2) is amended to read as follows:

§ 1502.52 Illumination.

(b) (2) Temporary lights shall be equipped with heavy duty electric cords with connections and insulation maintained in safe condition. Temporary lights shall not be suspended by their electric cords unless cords and lights are designed for this means of suspension. Splices which have insulation equal to that of the cable are permitted.

56. In § 1502.53 paragraph (c) (1) is added to read as follows:

§ 1502.53 Utilities.

(c) *Infrared electrical heat lamps.* (1) All infrared electrical heat lamps shall be equipped with guards that surround the lamps with the exception of the face, to minimize accidental contact with the lamps.

57. In § 1502.57 paragraphs (a) and (b) are changed to (e) and (f), and new paragraphs (a), (b), (c), and (d) are added to read as follows:

§ 1502.57 Health and sanitation.

(a) No chemical product, such as a solvent or preservative; structural material, such as cadmium or zinc coated steel or plastic materials; or process material, such as welding filler metals, shall be used until the employer ascertains the potential fire and toxic hazards which may be encountered in the handling, application, or utilization of these materials.

(b) The employer shall instruct employees who will be exposed to the hazardous materials as to the nature of the hazards and the means of avoiding them.

(c) The employer shall provide all necessary controls, and the employees shall be protected against the hazards referred to in paragraph (a) of this section and those hazards for which specific precautions are required in Subparts C and D of this part, by suitable personal protective equipment.

(d) Paragraphs (a), (b), and (c) of this section shall take effect 180 days after the effective date of this amendment.

(e) The employer shall provide adequate washing facilities for employees engaged in the application of paints or coatings or in other operations where contaminants can, by ingestion or absorption, be detrimental to the health of the employee. The employer shall encourage good personal hygiene practices by informing the employees of the need for removing surface contaminants by thorough washing of hands and face prior to eating or smoking.

(f) The employer shall not permit eating or smoking in areas undergoing surface preparation or preservation.

58. In § 1502.58 paragraph (d) is amended to read as follows:

§ 1502.58 First aid.

(d) There shall be available for each vessel on which ten (10) or more employees are working one Stokes basket stretcher, or equivalent, permanently equipped with bridles for attaching to the hoisting gear, except that no more than two stretchers are required on each job location. A blanket or other liner suitable for transferring the patient to and from the stretcher shall be provided. Stretchers shall be kept close to the vessels. This paragraph does not apply where ambulance services which are available are known to carry such stretchers.

Subpart G—Gear and Equipment for Rigging and Materials Handling

59. In § 1502.64 paragraph (d) is added to read as follows:

§ 1502.64 Chain falls and pull-lifts.

(d) Scaffolding shall not be used as a point of attachment for lifting devices, such as tackles, chain falls, and pull-lifts unless the scaffolding is specifically designed for that purpose.

60. In § 1502.65 paragraphs (a) and (c) are changed to (b) and (e), paragraphs (b) (1) and (2) are changed to (c) (1) and (2), paragraph (b) (3) is amended and changed to paragraph (d), and new paragraph (a) is added to read as follows:

§ 1502.65 Hoisting and hauling equipment.

(a) Derrick and crane certification: (1) Derricks and cranes which are part of, or regularly placed aboard, barges, other vessels, or on wingwalls of floating drydocks, and are used to transfer materials or equipment from or to a vessel or drydock, shall be tested and certificated in accordance with the standards provided in Part 1505 of this chapter by persons accredited for that purpose.

(2) Subparagraph (1) of this paragraph shall take effect 180 days after the effective date of this amendment.

(b) The moving parts of hoisting and hauling equipment shall be guarded.

(c) Mobile crawler or truck cranes used on a vessel: (1) The maximum manufacturer's rated safe workingloads for the various working radii of the boom and the maximum and minimum radii at which the boom may be safely used with and without outriggers shall be conspicuously posted near the controls and shall be visible to the operator. A radius indicator shall be provided.

(2) The posted safe working loads of mobile crawler or truck cranes under the conditions of use shall not be exceeded.

(d) Accessible areas within the swing radius of the outermost part of the body of a revolving derrick or crane either permanently or temporarily mounted,

shall be guarded in such a manner as to prevent an employee from being in such a position as to be struck by the crane or caught between the crane and fixed parts of the vessel or of the crane itself.

(e) Marine railways: (1) The cradle or carriage on the marine railway shall be positively blocked or secured when in the hauled position to prevent it from being accidentally released.

61. In § 1502.66 paragraph (m) is amended, paragraphs (n) and (o) are changed to (o) and (p), and new paragraph (n) is added to read as follows: § 1502.66 Use of gear.

(m) A section of hatch through which materials or equipment are being raised, lowered, moved, or otherwise shifted manually or by a crane, winch, hoist, or derrick, shall be completely opened. The beam or pontoon left in place adjacent to an opening shall be sufficiently lashed, locked or otherwise secured to prevent it from being unshipped.

(n) Hatches shall not be opened or closed while employees are in the square of the hatch below.

(o) Before loads or empty lifting gear are raised, lowered, or swung, clear and sufficient advance warning shall be given to employees in the vicinity of such operations.

(p) At no time shall an employee be permitted to place himself in a hazardous position between a swinging load and a fixed object.

62. In § 1502.68 Table G-6, is amended to read as follows:

§ 1502.68 Tables.

TABLE G-6—NUMBER AND SPACING OF U-BOLT WIRE ROPE CLIPS

Improved plow steel, rope diameter, inches	Number of clips		Minimum spacing, inches
	Drop forged	Other material	
1 1/2	3	4	3 1/4
1 1/4	3	4	3 1/4
1 1/2	4	5	4 1/4
1 1/4	4	5	4 1/4
1 1/2	4	6	5 1/4
1 1/4	5	6	5 1/4
1 1/2	5	7	6 1/4
1 1/4	6	7	6 1/4
1 1/2	6	8	7 1/4

*Three clips shall be used on wire size less than 1 1/2-inch diameter.

Subpart H—Tools and Related Equipment

63. In § 1502.71 paragraph (a) is amended and paragraphs (f), (g), and (h) are added to read as follows:

§ 1502.71 General precautions.

(a) Hand lines, slings, tackles of adequate strength, or carriers such as tool bags with shoulder straps, shall be provided and used to handle tools, materials, and equipment so that employees will have their hands free when using ship's ladders and access ladders. The use of

hose or electric cords for this purpose is prohibited.

(f) The moving parts of drive mechanisms, such as gearing and belting on large portable tools, shall be adequately guarded.

(g) Headers, manifolds, and widely spaced hose connections on compressed air lines shall bear the word "air" in letters at least 1 inch high, which shall be painted either on the manifold or separate hose connections, or on signs permanently attached to the manifolds or connections. Grouped air connections may be marked in one location.

(h) Before use, compressed air hose shall be examined. Visibly damaged and unsafe hose shall not be used.

64. In § 1502.72 paragraph (a) is amended to read as follows:

§ 1502.72 Portable electric tools.

(a) The frames of portable electric tools and appliances, except double insulated tools approved by Underwriters' Laboratories, shall be grounded either through a third wire in the cable containing the circuit conductors or through a separate wire which is grounded at the source of the current.

65. In § 1502.74 introduction to paragraph (c) is amended to read as follows:

§ 1502.74 Abrasive wheels.

(c) Cup type wheels used for external grinding shall be protected by either a revolving cup guard or a band type guard in accordance with the provisions of the United States of America Standard Safety Code for the Use, Care, and Protection of Abrasive Wheels, B7.1. All other portable abrasive wheels used for external grinding shall be provided with safety guards (protection hoods) meeting the requirements of paragraph (e) of this section, except as follows:

66. Section 1502.76 is added to read as follows:

§ 1502.76 Internal combustion engines, other than ship's equipment.

(a) When internal combustion engines, furnished by the employer are used in a fixed position below decks, for such purposes as driving pumps, generators, and blowers, the exhaust shall be led to the open air, clear of any ventilation intakes and openings through which it might enter the vessel.

(b) All exhaust line joints and connections shall be checked for tightness immediately upon starting the engine, and any leaks shall be corrected at once.

(c) When internal combustion engines on vehicles, such as forklifts and mobile cranes, or on portable equipment such as fans, generators, and pumps exhaust into the atmosphere below decks, the competent person shall make tests of the carbon monoxide content of the atmosphere as frequently as conditions require to insure that dangerous concentrations do not develop. Employees shall be re-

moved from the compartment involved when the carbon monoxide concentration exceeds 50 parts per million (0.005%). The employer shall use blowers sufficient in size and number and so arranged as to maintain the concentration below this allowable limit before work is resumed.

Subpart I—Personal Protective Equipment

67. In § 1502.81 paragraph (c)(1) is amended to read as follows:

§ 1502.81 Eye protection.

(c) Protection against radiant energy. (1) In any operation in which the eye hazard of injurious light rays or other radiant energy exists, depending upon the intensity of the radiation to which employees are exposed, they shall be protected by spectacles, cup goggles, helmets, hand shields, or face shields equipped with filter lenses meeting the requirements of paragraphs (a) and (c) (2) of this section.

68. In § 1502.83 paragraph (b) is amended to read as follows:

§ 1502.83 Head, foot, and body protection.

(b) Protective hats shall meet the specifications contained in the United States of America Standard Safety Code for Head, Eye, and Respiratory Protection, Z2.1. Hats without dielectric strength shall not be used where there is the possibility of contact with electric conductors.

69. In § 1502.84 sense of paragraph (a)(1) is transferred to §§ 1502.43(d) and 1502.47(d), and paragraph (b)(1) to § 1502.47(b); paragraphs (b) (2), (3), and (4) are amended as paragraphs (b) (2) and (3), and paragraph (c)(4) is amended; and new paragraphs (a) (1) and (2), and (b)(1) are added to read as follows:

§ 1502.84 Life saving equipment.

(a) Buoyant work vests. (1) Buoyant work vests shall not meet the requirements of these regulations unless approved by the U.S. Coast Guard.

(2) Prior to each use, buoyant work vests shall be inspected for dry rot, chemical damage, or other defects which may affect their strength and buoyancy. Defective buoyant work vests shall not be used.

(b) Safety belts and lifelines. (1) Safety belts shall be equipped with lifelines which in use are secured with a minimum of slack to a fixed structure.

(2) Prior to each use, belts and lifelines shall be inspected for dry rot, chemical damage, or other defects which may affect their strength. Defective belts and lifelines shall not be used.

(3) When employees are working in any location requiring a safety belt and a lifeline, care shall be exercised to insure that the lifeline is not cut, pinched, or led over a sharp edge. In hot work

operations or those involving the use of acids, solvents, or caustics, the line shall be kept clear to avoid its being burned or weakened. In order to keep the lifeline continuously attached with a minimum of slack to a fixed structure the attachment point of the lifeline shall be appropriately changed as the work progresses.

(c) *Liferings and ladders.* * * *

(4) In the vicinity of each vessel afloat on which work is being performed there shall be at least one portable or permanent ladder of sufficient length to assist employees to reach safety in the event that they fall into the water.

Subpart J—Ship's Machinery and Piping Systems

70. In § 1502.91 paragraph (a) introductory text and subparagraphs (1) and (2) are amended to read as follows:

§ 1502.91 Ship's boilers.

(a) Before work is performed in the fire, steam, or water spaces of a boiler where employees may be subject to injury from the direct escape of a high temperature medium, such as steam, or water, oil, or other medium at a high temperature entering from an interconnecting system, the employer shall insure that the following steps are taken:

(1) The isolation and shutoff valves connecting the dead boiler with the live system or systems shall be secured, blanked, and tagged indicating that employees are working in the boiler. This tag shall not be removed nor the valves unblanked until it is determined that this may be done without creating a hazard to the employees working in the boiler, or until the work in the boiler is completed. Where valves are welded instead of bolted at least two isolation and shutoff valves connecting the dead boiler with the live system or systems shall be secured, locked, and tagged.

(2) Drain connections to atmosphere on all of the dead interconnecting systems shall be opened for visual observation of drainage.

71. In § 1502.92 paragraph (a) introductory text and subparagraphs (1) and (2) are amended to read as follows:

§ 1502.92 Ship's piping systems.

(a) Before work is performed on a valve, fitting, or section of piping in a piping system where employees may be subject to injury from the direct escape of steam, or water, oil, or other medium at a high temperature, the employer shall insure that the following steps are taken:

(1) The isolation and shutoff valves connecting the dead system with the live system or systems shall be secured, blanked, and tagged indicating that employees are working on the system. This tag shall not be removed nor the valves unblanked until it is determined that this may be done without creating a hazard to the employees working on the system, or until the work on the system is completed. Where valves are welded

instead of bolted at least two isolation and shutoff valves connecting the dead system with the live system or systems shall be secured, locked, and tagged.

(2) Drain connections to atmosphere on all of the dead interconnecting systems shall be opened for visual observation of drainage.

Subpart L—Electrical Machinery

72. Section 1502.111 is amended to read as follows:

§ 1502.111 Electrical circuits and distribution boards.

(a) Before an employee is permitted to work on an electrical circuit, except when the circuit must remain energized for testing and adjusting, the circuit shall be deenergized and checked at the point at which the work is to be done to insure that it is actually deenergized. When testing or adjusting an energized circuit, a rubber mat, duck board, or other suitable insulation shall be used underfoot where an insulated deck does not exist.

(b) Deenergizing the circuit shall be accomplished by opening the circuit breaker, opening the switch, or removing the fuse, whichever method is appropriate. The circuit breaker, switch, or fuse location shall be tagged to indicate that an employee is working on the circuit. Such tags shall not be removed nor the circuit energized until it is definitely determined that the work on the circuit has been completed.

(c) When work is performed immediately adjacent to an open-front energized board or in back of an energized board, the board shall be covered or some other equally safe means shall be used to prevent contact with any of the energized parts.

PART 1503—SAFETY AND HEALTH REGULATIONS FOR SHIPBREAKING

Subpart A—General Provisions

73. Section 1503.5 is amended to read as follows:

§ 1503.5 Reference specifications, standards, and codes.

Specifications, standards, and codes of agencies of the U.S. Government, to the extent specified in the text, form a part of the regulations of this part. In addition, under the authority vested in the Secretary under the Act, the specifications, standards, and codes of organizations which are not agencies of the U.S. Government, in effect on the date of the promulgation of the regulations of this part as listed below, to the extent specified in the text, form a part of the regulations of this part:

National Fire Protection Association, 60 Batterymarch Street, Boston, Mass. 02110, Subpart B § 1503.13(b).

Underwriters' Laboratories, Inc., 207 East Ohio Street, Chicago, Ill. 60611, Subpart B, § 1503.12(b) and (f); Subpart H, § 1503.72(a).

United States of America Standard Safety Code for Portable Wood Ladders, A14.1-1959, United States of America Standards Institute, Inc., 10 East 40th Street, New York, N.Y. 10016, Subpart E, § 1503.42(a) (6).

United States of America Standard Safety Code for Portable Metal Ladders, A14.2-1956, United States of America Standards Institute, Inc., 10 East 40th Street, New York, N.Y. 10016, Subpart I, § 1503.42(a) (4).

United States of America Standard Safety Code for Head, Eye, and Respiratory Protection, Z2.1-1959, United States of America Standards Institute, Inc., 10 East 40th Street, New York, N.Y. 10016, Subpart I, §§ 1503.61(a) (1), 1503.63(b).

Threshold Limit Values, American Conference of Governmental Industrial Hygienists, 1014 Broadway, Cincinnati, Ohio 45202, Subpart B, § 1503.11 (a) (3) and (b) (3).

74. The title to Subpart B is amended to read as follows:

Subpart B—Explosive and Other Dangerous Atmospheres

75. In § 1503.10 paragraphs (a) (1) and (2), (b) (1), (3), and (5), and (c) (1) and (3) are amended to read as follows:

§ 1503.10 Competent person.

(a) *Designation.* (1) For the purposes of Subparts B, D, and H of this part one or more competent persons shall be designated by the employer in accordance with the applicable requirements of this section unless the requirements of Subparts B, D, and H of this part are always carried out by a National Fire Protection Association Certified Marine Chemist.

(2) The employer shall indicate on U.S. Department of Labor Form MAR-8, "Designation of Competent Person" either those employees designated as competent persons or that the prescribed functions of such persons are always carried out by a National Fire Protection Association Certified Marine Chemist in addition to his professional duties. When additions or changes are made in the personnel so designated, a new Form MAR-8 shall be executed. A copy of this executed form shall be forwarded to the nearest office of the Bureau of Labor Standards.

(b) *Criteria.* The following criteria shall guide the employer in designating employees as competent persons:

(1) Ability to understand the meaning of designations on certificates and of any qualifications relating thereto and to carry out any instructions, either written or oral, left by the National Fire Protection Association Certified Marine Chemist.

(3) Familiarity with and understanding of Subparts B, D, and H of this part.

(5) Capability to perform the tests and inspections required by Subparts B, D, and H of this part and to write the required logs.

(c) *Logging of inspections and tests.*

(1) When tests and inspections required to be performed by a competent person by any provisions of Subparts B, D, and H of this part are made, a record of the locations, operations performed and date, time, and results of the tests and any instructions resulting therefrom shall be recorded on U.S. Department of Labor Form MAR-9, "Log of Inspections

and Tests by Competent Person." A separate form shall be used for each vessel on which tests and inspections are made.

(3) A copy of any certificate issued in accordance with § 1503.13 and of any instructions issued by the National Fire Protection Association Certified Marine Chemist shall be kept on file with the log for a period of at least 3 months from the date of the completion of the job.

76. Section 1503.11 is amended to read as follows:

§ 1503.11 Precautions before entering.

(a) *Flammable atmospheres and residues.* (1) Before employees are initially permitted to enter any of the ship's spaces designated in subdivisions (i) and (ii) of this subparagraph, the atmosphere within the space to be entered shall be tested by a competent person to determine the concentration of flammable vapors or gases within the space.

(i) Cargo spaces or other spaces containing or having last contained combustible or flammable liquids or gases in bulk.

(ii) Spaces immediately adjacent to those described in subdivision (i) of this subparagraph.

(2) If the tests indicate that the atmosphere in the space to be entered contains a concentration of flammable vapor or gas greater than 10 percent of the lower explosive limit, the space shall be ventilated to reduce the concentration below 10 percent of the lower explosive limit before men are permitted to enter.

(3) If the atmosphere in the space to be entered is found to contain a concentration of flammable vapor or gas below the level immediately dangerous to life as defined in § 1503.82(b)(1), but above the threshold limit value, employees shall be protected in accordance with the requirements of § 1503.82 (a), and (c), (d), or (e), whichever is applicable.

(b) *Toxic atmospheres and residues.*

(1) Before employees are initially permitted to enter any of the ship's spaces designated in subdivisions (i) and (ii) of this subparagraph, the atmosphere in the space to be entered shall be tested for toxic atmospheric contaminants, and the space inspected for the presence of toxic or corrosive residues by a Marine Chemist, Industrial Hygienist or other person qualified to make these tests and inspections.

(i) Cargo spaces or other spaces containing or having last contained bulk liquids, gases, or solids of a toxic, corrosive or irritant nature.

(ii) Spaces immediately adjacent to those described in subdivision (i) of this subparagraph.

(2) If the tests indicate that the atmosphere in the space to be entered contains a concentration of toxic contaminants above the level which is immediately dangerous to life, the space shall be ventilated to reduce the concentration below the level immediately

dangerous to life as defined in § 1503.82 (b)(1).

(3) If the atmosphere in the space to be entered is found to contain a concentration of toxic contaminants below the level immediately dangerous to life as defined in § 1503.82(b)(1), but above the threshold limit value, employees shall be protected in accordance with the requirements of § 1503.82 (a), and (c), (d), or (e), whichever is applicable.

(4) The person qualified to make the tests and inspections referred to in subparagraph (1) of this paragraph shall make a record of the tests, inspections and instructions pertaining to subparagraph (3) of paragraph (a) of this section and subparagraphs (2) and (3) of this paragraph on U.S. Department of Labor Form MAR-9, which shall be available for inspection and kept on file in accordance with § 1503.10(c)(2).

(c) *Oxygen deficient atmospheres.* (1) Before employees are initially permitted to enter any of the ship's spaces designated in subdivisions (i) through (v) of this subparagraph, the atmosphere in the spaces to be entered shall be tested by a competent person with an oxygen indicator or other suitable device to ensure that it contains at least 16.5 percent oxygen.

(i) Spaces in which the tests required by paragraphs (a) and (b) of this section indicate that no flammable or toxic contaminants are present in the atmosphere.

(ii) Compartments which have been sealed.

(iii) Spaces which have been coated and closed up.

(iv) Nonventilated compartments which have been freshly painted.

(v) Cargo spaces containing cargoes or residues of cargoes which absorb oxygen, such as scrap iron, fresh fruit and molasses, and various vegetable drying oils in bulk.

(2) If the tests indicate that the atmosphere in the space to be entered contains less than 16.5 percent oxygen, the space shall be ventilated until tests indicate an oxygen content above this level.

(d) *Exceptions.* In emergencies and in cases of work of brief duration necessary to accomplish the ventilation required or to start operations, work may be performed in atmospheres containing concentrations of flammable contaminants above the upper explosive limit or otherwise immediately dangerous to life, provided employees are protected in accordance with the requirements of § 1503.82 (a) and (b).

77. In § 1503.12 introduction to paragraph (a) and paragraphs (b) and (d) are amended, and paragraphs (e), (f), and (g) are added to read as follows:

§ 1503.12 Cleaning and other cold work.

(a) Employees shall be permitted to remove residue materials or to perform other cold work in spaces described in § 1503.11 (a)(1) (i) and (ii), and (b)(1) (i) and (ii) only under the following conditions:

(b) Only approved explosion-proof, self-contained, battery-fed, portable lamps shall be used in spaces described in paragraph (b) of § 1503.13 before the spaces have been certified as "Safe for Men." Battery-fed, portable lamps bearing the approval of the Underwriters' Laboratories for use in Class I, Group D atmospheres, or approved as permissible by the U.S. Bureau of Mines, and such lamps listed by the U.S. Coast Guard as approved for such use are deemed to meet the requirements of this paragraph.

(d) The metallic parts of air moving devices, including fans, blowers, and jet-type air movers, and all duct work shall be electrically bonded to the vessel's structure.

(e) All motors and control equipment shall be of the explosion-proof type. Fans shall have nonferrous blades. Portable air ducts shall also be of nonferrous materials. All motors and associated control equipment shall be properly maintained and grounded.

(f) In spaces described in paragraph (b) of § 1503.13 which have been certified "Safe for Men," either battery lamps or explosion-proof lights, approved by the Underwriters' Laboratories for use in Class I, Group D atmospheres, or approved as permissible by the U.S. Bureau of Mines or the U.S. Coast Guard, shall be used, provided the lights are mounted to the space openings from the exterior, or suspended within the space with the cables so led as to protect them from injury.

(g) In spaces certified "Safe for Fire" nonexplosion proof lights may be used.

78. In § 1503.13 paragraphs (b) (3) and (4) are amended to read as follows:

§ 1503.13 Certification before hot work is begun.

(b) *Hot work below decks.*

(3) In dry cargo holds for which a Marine Chemist's certificate is not required by paragraph (b)(2)(ii) of this section, hot work may be performed only after a competent person has carefully examined the hold and found it to be free of flammable liquids, gases, and vapors. If flammable liquids, gases, or vapors are found, hot work shall not be performed within the space until the flammable liquids, gases, or vapors have been removed and a test indicates that the space is safe for fire.

(4) Before hot work is performed in engine room and boiler room spaces of any vessel for which a Marine Chemist's certificate is not required by the provision of paragraph (b)(1) and (2) of this section or in fuel tank and engine compartments of boats, the bilges shall be inspected and tested by a competent person to ensure that they are free of flammable liquids, gases, and vapors. If flammable liquids, gases, or vapors are found, hot work shall not be performed within the space until the flammable liquids, gases, or vapors have been removed and a test indicates that the space is safe for fire.

79. In § 1503.14 paragraph (b) is amended to read as follows:

§ 1503.14 Maintaining gas free conditions.

(b) *Hot work below decks.* (1) When conditions in spaces below decks described in § 1503.13(b) (1) and (2) are such that there is a possibility of hazardous vapors being released from residues or other sources, after a Marine Chemist's certificate has been issued, a competent person shall make tests to ensure that the gas free condition is maintained irrespective of whether hot work is being performed in or on the aforementioned spaces. When the competent person finds that the atmospheric conditions have altered, work shall be stopped and a new Marine Chemist's certificate in accordance with § 1503.13(b) (1) and (2) shall be obtained, before work is resumed.

Subpart D—Welding, Cutting, and Heating

8. In § 1503.31 paragraph (a) (1) (vi) is amended to read as follows:

§ 1503.31 Ventilation and protection in welding, cutting, and heating.

(a) *Mechanical ventilation; requirements.* (1) . . .

(vi) Oxygen shall not be used for ventilation purposes, comfort cooling, blowing dust or dirt from clothing, or for cleaning the work area.

81. In § 1503.32 paragraph (b) is amended to read as follows:

§ 1503.32 Fire prevention.

(b) In all cases suitable fire extinguishing equipment shall be immediately available in the work area and shall be maintained in a state of readiness for instant use. Personnel assigned to contain fires within controllable limits shall be instructed as to the specific anticipated fire hazards and how the fire fighting equipment provided is to be used.

82. In § 1503.35 paragraph (a) (9), titles to paragraphs (e) and (g), and paragraphs (e) (1), (2), and (3) are amended, and paragraphs (e) (4) and (5) and (g) (2) and (3) are added to read as follows:

§ 1503.35 Gas welding and cutting.

(a) *Transporting, moving, and storing compressed gas cylinders.* . . .

(9) Acetylene cylinders shall be secured in an upright position at all times except, if necessary, for short periods of time while cylinders are actually being hoisted or carried.

(e) *Fuel gas and oxygen manifolds.*

(1) Fuel gas and oxygen manifolds shall bear the name of the substance they contain in letters at least one (1) inch high which shall be either painted on the manifold or on a sign permanently attached to it.

(2) Fuel gas and oxygen manifolds shall be placed in safe and accessible

locations in the open air. They shall not be located within enclosed spaces.

(3) Manifold hose connections, including both ends of the supply hose that lead to the manifold, shall be such that the hose cannot be interchanged between fuel gas and oxygen manifolds and supply header connections. Adapters shall not be used to permit the interchange of hose. Hose connections shall be kept free of grease and oil.

(4) When not in use, manifold and header hose connections shall be capped.

(5) Nothing shall be placed on top of a manifold, when in use, which will damage the manifold or interfere with the quick closing of the valves.

(g) *Torches.* . . .

(2) Torches shall be inspected at the beginning of each shift for leaking shut-off valves, hose couplings, and tip connections. Defective torches shall not be used.

(3) Torches shall be lighted by friction lighters or other approved devices, and not by matches or from hot work.

83. In § 1503.36 paragraph (a) (2) is amended to read as follows:

§ 1503.36 Arc welding and cutting.

(a) *Manual electrode holders.* . . .

(2) Any current carrying parts passing through the portion of the holder which the arc welder or cutter grips in his hand, and the outer surfaces of the jaws of the holder, shall be fully insulated against the maximum voltage encountered to ground.

Subpart E—Scaffolds, Ladders, and Other Working Surfaces

84. In § 1503.41 paragraphs (a) (6), (e) (2) and (3) are amended to read as follows:

§ 1503.41 Scaffolds or staging.

(a) *General requirements.* . . .

(6) Barrels, boxes, cans, loose bricks, or other unstable objects shall not be used as working platforms or for the support of planking intended as scaffolds or working platforms.

(e) *Backrails and toeboards.* . . .

(2) Rails shall be of 2 x 4 inch lumber, flat bar or pipe. When used with rigid supports, taut wire or fiber rope of adequate strength may be used. If the distance between supports is more than 8 feet, rails shall be equivalent in strength to 2 x 4 inch lumber. Rails shall be firmly secured. Where exposed to hot work or chemicals, fiber rope rails shall not be used.

(3) Rails may be omitted where the structure of the vessel prevents their use. When rails are omitted employees working more than 5 feet above solid surfaces shall be protected by safety belts and lifelines meeting the requirements of § 1503.84(b); and employees working over water shall be protected by buoyant

work vests meeting the requirements of § 1503.84(a).

85. In § 1503.42 paragraphs (a) (4) and (6) are amended to read as follows:

§ 1503.42 Ladders.

(a) *General requirements.* . . .

(4) Portable metal ladders shall be of strength equivalent to that of wood ladders. Manufactured portable metal ladders provided by the employer shall be in accordance with the provisions of the United States of America Standard Safety Code for Portable Metal Ladders, A14.2.

(6) Manufactured portable wood ladders provided by the employer shall be in accordance with the provisions of the United States of America Standard Safety Code for Portable Wood Ladders, A14.1.

86. In § 1503.45 title to section is amended and paragraph (g) is added to read as follows:

§ 1503.45 Access to and guarding of drydocks and marine railways.

(g) Catwalks on stiles of marine railways shall be no less than 20 inches wide and shall have on at least one side a guardrail and midrail meeting the requirements of § 1503.41(e) (1) and (2).

87. Section 1503.47 is added to read as follows:

§ 1503.47 Working surfaces.

(a) When employees are boarding, leaving, or working from small boats or floats, they shall be protected by buoyant work vests meeting the requirements of § 1503.84(a).

Subpart F—General Working Conditions

88. In § 1503.52 paragraph (b) (2) is amended to read as follows:

§ 1503.52 Illumination.

(b) . . .

(2) Temporary lights shall be equipped with heavy duty electric cords with connections and insulation maintained in safe condition. Temporary lights shall not be suspended by their electric cords unless cords and lights are designed for this means of suspension. Splices which have insulation equal to that of the cables are permitted.

89. In § 1503.57 paragraphs (a), (b), and (c) are changed to (e), (f), and (g), and new paragraphs (a), (b), (c), and (d) are added to read as follows:

§ 1503.57 Health and sanitation.

(a) No chemical product, such as a solvent or preservative; structural material, such as cadmium or zinc coated steel or plastic materials; or process material, such as welding filler metals, shall be used until the employer ascertains the potential fire and toxic hazards

which may be encountered in the handling, application, or utilization of these materials.

(b) The employer shall instruct employees who will be exposed to the hazardous materials as to the nature of the hazards and the means of avoiding them.

(c) The employer shall provide all necessary controls, and the employees shall be protected against the hazards referred to in paragraph (a) of this section and those hazards for which specific precautions are required in Subparts B and D of this part, by suitable personal protective equipment.

(d) Paragraphs (a), (b), and (c) of this section shall take effect 180 days after the effective date of this amendment.

(e) The employer shall provide adequate washing facilities for employees engaged in the various shipbreaking operations where contaminants can, by ingestion or absorption, be detrimental to the health of the employee. The employer shall encourage good personal hygiene practices by informing the employees of the need for removing surface contaminants by thorough washing of hands and face prior to eating or smoking.

(f) The employer shall not permit eating or smoking in the immediate areas where shipbreaking operations produce atmospheric contaminants.

(g) No minor under 18 years of age shall be employed in shipbreaking or related employments.

90. In § 1503.58 paragraph (d) is amended to read as follows:

§ 1503.58 First aid.

(d) There shall be available for each vessel one Stokes basket stretcher, or equivalent, permanently equipped with bridles for attaching to the hoisting gear, except that no more than two stretchers are required on each job location. A blanket or other liner suitable for transferring to patients to and from the stretcher shall be provided. Stretchers shall be kept close to the vessels. This paragraph does not apply where ambulance services which are available are known to carry such stretchers.

Subpart G—Gear and Equipment for Rigging and Materials Handling

91. In § 1503.64 paragraph (d) is added to read as follows:

§ 1503.64 Chain falls and pull-lifts.

(d) Scaffolding shall not be used as a point of attachment for lifting devices, such as tackles, chain falls, and pull-lifts unless the scaffolding is specifically designed for that purpose.

92. In § 1503.65 paragraphs (a) and (c) are changed to (b) and (e), paragraphs (b) (1) and (2) are changed to (c) (1) and (2), paragraph (b) (3) is amended

and changed to paragraph (d), and new paragraph (a) is added to read as follows:

§ 1503.65 Hoisting and hauling equipment.

(a) Derrick and crane certification: (1) Derricks and cranes which are part of, or regularly placed aboard, barges, other vessels, or on wingwalls of floating drydocks, and are used to transfer materials or equipment from or to a vessel or drydock, shall be tested and certificated in accordance with the standards provided in Part 1505 of this chapter by persons accredited for that purpose.

(2) Subparagraph (1) of this paragraph shall take effect 180 days after the effective date of this amendment.

(b) The moving parts of hoisting and hauling equipment shall be guarded.

(c) Mobile crawler or truck cranes used on a vessel: (1) The maximum manufacturer's rated safe working loads for the various working radii of the boom and the maximum and minimum radii at which the boom may be safely used with and without outriggers shall be conspicuously posted near the controls and shall be visible to the operator. A radius indicator shall be provided.

(2) The posted safe working loads of mobile crawler or truck cranes under the conditions of use shall not be exceeded.

(d) Accessible areas within the swing radius of the outermost part of the body of a revolving derrick or crane either permanently or temporarily mounted, shall be guarded in such a manner as to prevent an employee from being in such a position as to be struck by the crane or caught between the crane and fixed parts of the vessel or of the crane itself.

(e) Marine railways:

(1) The cradle or carriage on the marine railway shall be positively blocked or secured when in the hauled position to prevent it from being accidentally released.

93. In § 1503.66 paragraph (m) is amended, and paragraph (n) is added to read as follows:

§ 1503.66 Use of gear.

(m) A section of hatch through which materials or equipment are being raised, lowered, moved, or otherwise shifted manually or by a crane, winch, hoist, or derrick, shall be completely opened. The beam or pontoon left in place adjacent to an opening shall be sufficiently lashed, locked or otherwise secured to prevent it from being unshipped.

(n) Hatches shall not be opened or closed while employees are in the square of the hatch below.

94. In § 1503.68 Table G-6 is amended to read as follows:

§ 1503.68 Tables.

TABLE G-6—NUMBER AND SPACING OF U-BOLT WIRE ROPE CLIPS

Improved plow steel, rope diameter, inches	Number of clips		Minimum spacing, inches
	Drop forged	Other material	
1/2	3	4	3
3/4	3	4	3 1/2
1	4	5	4 1/2
1 1/4	4	5	5 1/2
1 1/2	4	6	6
1 3/4	5	6	6 1/2
2	5	7	7 1/2
2 1/4	6	7	8 1/2
2 1/2	6	8	9

*Three clips shall be used on wire size less than 1/2-inch diameter.

Subpart H—Tools and Related Equipment

95. In § 1503.71 paragraph (a) is amended and paragraphs (f), (g), and (h) are added to read as follows:

§ 1503.71 General precautions.

(a) Hand lines, slings, tackles of adequate strength, or carriers such as tool bags with shoulder straps shall be provided and used to handle tools, materials, and equipment so that employees will have their hands free when using ship's ladders and access ladders. The use of hose or electric cords for this purpose is prohibited.

(f) The moving parts of drive mechanisms, such as gearing and belting on large portable tools, shall be adequately guarded.

(g) Headers, manifolds, and widely spaced hose connections on compressed air lines shall bear the word "air" in letters at least 1 inch high, which shall be painted either on the manifold or separate hose connections, or on signs permanently attached to the manifolds or connections. Grouped air connections may be marked in one location.

(h) Before use, compressed air hose shall be examined. Visibly damaged and unsafe hose shall not be used.

96. In § 1503.72 paragraph (a) is amended to read as follows:

§ 1503.72 Portable electric tools.

(a) The frames of portable electric tools and appliances, except double insulated tools approved by Underwriters' Laboratories, shall be grounded either through a third wire in the cable containing the circuit conductors or through a separate wire which is grounded at the source of the current.

97. In § 1503.74 introduction to paragraph (c) is amended to read as follows:

§ 1503.74 Abrasive wheels.

(c) Cup type wheels used for external grinding shall be protected by either a revolving cup guard or a band type guard

in accordance with the provisions of the United States of America Standard Safety Code for the Use, Care, and Protection of Abrasive Wheels, B7.1. All other portable abrasive wheels used for external grinding shall be provided with safety guards (protection hoods) meeting the requirements of paragraph (e) of this section, except as follows:

98. Section 1503.76 is added to read as follows:

§ 1503.76 Internal combustion engines, other than ship's equipment.

(a) When internal combustion engines, furnished by the employer are used in a fixed position below decks, for such purposes as driving pumps, generators, and blowers, the exhaust shall be led to the open air, clear of any ventilation intakes and openings through which it might enter the vessel.

(b) All exhaust line joints and connections shall be checked for tightness immediately upon starting the engine, and any leaks shall be corrected at once.

(c) When internal combustion engines on vehicles, such as forklifts and mobile cranes, or on portable equipment such as fans, generators, and pumps exhaust into the atmosphere below decks, the competent person shall make tests of the carbon monoxide content of the atmosphere as frequently as conditions require to ensure that dangerous concentrations do not develop. Employees shall be removed from the compartment involved when the carbon monoxide concentration exceeds 50 parts per million (0.005%). The employer shall use blowers sufficient in size and number and so arranged as to maintain the concentration below this allowable limit before work is resumed.

Subpart I—Personal Protective Equipment

99. In § 1503.81 paragraph (c) (1) is amended to read as follows:

§ 1503.81 Eye protection.

(c) **Protection against radiant energy.** (1) In any operation in which the eye hazard of injurious light rays or other radiant energy exists, depending upon the intensity of the radiation to which employees are exposed, they shall be protected by spectacles, cup goggles, helmets, hand shields, or face shields equipped with filter lenses meeting the requirements of paragraphs (a) and (c) (2) of this section.

100. In § 1503.83 paragraph (b) is amended to read as follows:

§ 1503.83 Head, foot, and body protection.

(b) Protective hats shall meet the specifications contained in the United States of America Standard Safety Code for Head, Eye, and Respiratory Protection, Z2.1. Hats without dielectric strength shall not be used where there

is the possibility of contact with electric conductors.

101. In § 1503.84 sense of paragraph (a) (1) is transferred to § 1503.47(a); paragraphs (b) (1), (2), (3), and (4) are amended as paragraphs (b) (1), (2), and (3), and paragraph (c) (4) is amended; and new paragraphs (a) (1) and (2) are added to read as follows:

§ 1503.84 Life saving equipment.

(a) **Buoyant work vests.** (1) Buoyant work vests shall not meet the requirements of these regulations unless approved by the U.S. Coast Guard.

(2) Prior to each use, buoyant work vests shall be inspected for dry rot, chemical damage, or other defects which may affect their strength and buoyancy. Defective buoyant work vests shall not be used.

(b) **Safety belts and lifelines.** (1) Safety belts shall be equipped with lifelines which in use are secured with a minimum of slack to a fixed structure.

(2) Prior to each use, belts and lifelines shall be inspected for dry rot, chemical damage, or other defects which may affect their strength. Defective belts and lifelines shall not be used.

(3) When employees are working in any location requiring a safety belt and a lifeline, care shall be exercised to insure that the lifeline is not cut, pinched, or led over a sharp edge. In hot work operations or those involving the use of acids, solvents, or caustics, the line shall be kept clear to avoid its being burned or weakened. In order to keep the lifeline continuously attached with a minimum of slack to a fixed structure the attachment point of the lifeline shall be appropriately changed as the work progresses.

(c) **Life rings and ladders.** * * *

(4) In the vicinity of each vessel afloat in which work is being performed there shall be at least one portable or permanent ladder of sufficient length to assist employees to reach safety in the event that they fall into the water.

(Sec. 41, 44 Stat. 1444; Sec. 1, 72 Stat. 825; 33 U.S.C. 941, Secretary's Order 12-66 (31 F.R. 12620))

[F.R. Doc. 67-11884; Filed, Oct. 9, 1967; 8:45 a.m.]

Title 31—MONEY AND FINANCE: TREASURY

Chapter I—Monetary Offices, Department of the Treasury

PART 128—TRANSACTIONS IN FOREIGN EXCHANGE, TRANSFERS OF CREDIT, AND EXPORT OF COIN AND CURRENCY

Subpart B—Description of Forms Prescribed Under This Part

ALTERNATIVE METHODS OF REPORTING

Subpart B of Part 128, Chapter I of Title 31 is amended by adding § 128.23, as follows:

§ 128.23 Alternative methods of reporting.

In lieu of reports on the forms described in this subpart, the required data may be reported on punch cards, magnetic tape, or other media that can be processed by data processing equipment, accompanied by a printed copy of the data reported which must be signed by a responsible officer of the reporting institution. The proposed method and format of reporting must be acceptable to the Federal Reserve Bank of the district in which the report is filed, and must be approved in writing by that Bank.

[SEAL] WINTHROP KNOWLTON,
Assistant Secretary.

[F.R. Doc. 67-11863; Filed, Oct. 9, 1967; 8:45 a.m.]

Title 41—PUBLIC CONTRACTS AND PROPERTY MANAGEMENT

Chapter 9—Atomic Energy Commission

PART 9-1—GENERAL

Subpart 9-1.53—Novation Agreements and Change of Name Agreements

New Subpart 9-1.53 is added, reading as follows:

Subpart 9-1.53—Novation Agreements and Change of Name Agreements

Sec.
9-1.5300 Scope of subpart.
9-1.5301 Agreement to recognize a successor in interest.
9-1.5302 Agreement to recognize change of name of contractor.
9-1.5303 Procedures.

AUTHORITY: The provisions of this Subpart 9-1.53 issued under sec. 161, Atomic Energy Act of 1954, as amended, 68 Stat. 949, 42 U.S.C. 2201; sec. 205, Federal Property and Administrative Services Act of 1949, as amended, 63 Stat. 390, 40 U.S.C. 486.

§ 9-1.5300 Scope of subpart.

This subpart prescribes the policy and procedures for (a) recognition of a successor in interest to contracts when such interests are required incidental to transfer of all the assets of a contractor or such part of his assets as is involved in the performance of the contract, and (b) a change of name of a contractor.

§ 9-1.5301 Agreement to recognize a successor in interest.

(a) The transfer of a Government contract by a contractor is prohibited by law (41 U.S.C. 15). However, the Government may recognize a third party as the successor in interest to a Government contract where the third party's interest is incidental to the transfer of all the assets of the contractor, or all that part of the contractor's assets involved in the performance of the contract. Examples include, but are not limited to: