CHAPTER 10.1
Accounting for Property, Plant and Equipment

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I. INTRODUCTION

I.A. Purpose

This chapter describes accounting requirements for the acquisition, use, and retirement of property, plant, and equipment (PP&E) consistent with Generally Accepted Accounting Principles (GAAP) including the applicable Statements of Federal Financial Accounting Standards (SFFAS) issued by the Federal Accounting Standards Advisory Board (FASAB).

I.B. Applicability

The applicability of this chapter is specified in Department of Energy (DOE) Financial Management Handbook (FMH) Chapter 1, *Financial Management Handbook Overview*. When in conflict with the provisions of this chapter, Power Marketing Administrations (PMAs) should observe the policies of the Federal Energy Regulatory Commission and other applicable industry standards as they apply to the accounting and financial management of PP&E.

The policy on accounting for leased assets is contained in DOE FMH Chapter 10.2 *Lease Accounting.*

I.C. Chapter Organization

The table below shows the relationship of each section of the chapter to real or personal property.

Section	Applicable to Real Property	Applicable to Personal Property
I: Introduction	Yes	Yes
II: General Requirements	Yes	Yes
III: Construction Work in Process (CWIP)	Yes	Yes
IV: Accounting Requirements Specific to Real Property	Yes	No
V: Personal Property Accounting Requirements	No	Yes
VI: Internal Use Software	No	Yes
VII: Depreciation and Depletion	Yes	Yes
VIII: Property Transfers	Yes	Yes
IX: Responsibilities	Yes	Yes
X: References	Yes	Yes
XI: Acronyms	Yes	Yes

Section	Applicable to Real Property	Applicable to Personal Property
Attachment 10.1-1: Standard Useful Lives	Yes	Yes

I.D. Policy

DOE governs its financial accounting policy for PP&E around the following basic principles:

I.D.1. DOE property should be accounted for and reflected in the official DOE financial records in accordance with the capitalization criteria contained in this chapter, regardless of funding source.

I.D.2. Depreciation should be calculated and recorded in the appropriate cost-of-operation account, using the appropriate fund type.

I.D.3. Timely and accurate financial reporting on facility construction and equipment fabrication must be provided.

I.D.4. Financial control over property should be maintained.

I.D.5. The primary basis of accounting for property is its acquisition cost.

I.D.6. Timely capitalize assets meeting the capitalization criteria and when physically placed in service.

I.D.7. Depreciate the assets over the appropriate useful life.

II. GENERAL REQUIREMENTS

II.A. Capitalization

DOE will capitalize PP&E that are purchased or constructed/fabricated, including betterments to existing PP&E, if they have an anticipated useful life of two years or more and if the acquisition cost or fair value exceeds the capitalization threshold specified in section II.C of this chapter. PP&E that meets the capitalization criteria will be capitalized when the asset is placed in service.

II.B. Accounting for Capitalized Property vs. Management of Accountable Property

Notwithstanding requirements to account for PP&E that meets the capitalization criteria of this policy, the Office of Asset Management establishes separate requirements to maintain records of personal property for accountability purposes. See 41 CFR 109-1.50, *Personal Property Management* and DOE Guide 580.1-1, *Personal Property*, for accountability and property record data elements requirements. For real property, see DOE Order 430.1C Change 2, *Real Property Asset Management*.

II.C. Capitalization Threshold

II.C.1. DOE's capitalization thresholds for PP&E and internal use software are listed in the table below. Contact the CFO Office of Finance and Accounting if more specific information is needed on past capitalization thresholds.

In-Service Date	Materiality Threshold ($)
PP&E Placed in Service before October 1, 2005	$25,000
PP&E Placed in Service on or after October 1, 2005, and before October 1, 2011	$50,000[i]
PP&E Placed in Service on or after October 1, 2011	$500,000
Internal Use Software	$750,000
Right-to-Use Assets on or after October 1, 2023	See DOE FMH Chapter 10.2, *Lease Accounting*

II.C.2. The capitalization threshold for internal use software is $750,000. Accounting for internal use software is discussed in section V.I. of this policy.

II.D. When to Record PP&E

PP&E shall be recorded at the date that title passes to DOE or when the PP&E is delivered to DOE.

II.E. Property Record Unit Concept

II.E.1. Purpose

Property record units are designed to establish divisions or subsections of completed PP&E. Property record units facilitate the recording of changes to asset categories and the reconciliation of physical inventories with financial accounts.

II.E.2. Definition

A property record unit, sometimes called a PP&E record unit, is a property, plant, or equipment item, for example, a building, selected to be continuously identified in the property records. The selection of property record units determines the way costs are assembled and recorded in the property records. A property record unit may be composed of one or more property record units or subcomponents. A property record unit may correspond to a single asset or a group of assets having a related purpose/utility.

A subcomponent of the property record unit is also required to be disclosed. This subcomponent was formerly known as a “retirement unit”. A subcomponent is the smallest component of a property record unit that is capitalized in a separate account and has a separate service life. Subcomponents are capitalized when placed in use or service.

In selecting the property record unit, consideration should be given to its use, relationship with other associated items, relative importance, frequency of anticipated property changes, and monetary value. A property record unit may be a functional unit consisting of an assembly of associated assets, such as a hydraulic extrusion press; a facility serving or designed to serve two or more other property record units, such as a control system or piping system; a continuous facility which includes roads, walks, and paved areas; or a unit that is complete in itself, such as a spectrometer.

II.E.3. Property Record Unit Catalog

II.E.3.i. Purpose

The description of each property record unit is intended to provide sufficient information to identify the unit in the PP&E records and for physical inventory purposes. The property record unit applicable to each asset provide a basis for distinguishing between capital (PP&E) and expense charges.

II.E.3.ii. Composition

A property record unit catalog should have the following principal features:

- An explanation of the property record units, what they consist of, and the descriptions used and type of asset.
- The way the units are to be recorded in the property records, whether as individual items or as a group of similar items.
- A list of the assets applicable to each property record unit; and
- The current PP&E capitalization criteria.

II.E.3.iii. Responsibilities

Each Designated Financial Officer (DFO) or integrated contractor develops and maintains its own property record unit catalog covering all activities reporting to that element. A property record unit catalog describes the real property (including related personal property[ii]) and personal property record units that DOE owns. It provides a basis for a common understanding as to the way PP&E costs are assembled and recorded in the field and contractor PP&E records.

DFOs should review and approve property record unit additions and deletions by contractors as appropriate.

II.F. Capitalization of Bulk Purchases/Grouped Assets

Assets acquired through a bulk/aggregate acquisition should be capitalized as indicated in the chart below to ensure period costs are not distorted or asset values understated by expensing the purchase of numerous items.

Transaction Type		Capitalization of Assets	Grouping of Assets Allowed?
Bulk Acquisition	similar items, separate purpose / utility	Capitalize if the acquisition cost exceeds capitalization threshold	No
Bulk Acquisition	similar items, related purpose / utility	Capitalize if the acquisition cost exceeds capitalization threshold	Yes
Aggregate Acquisition	dissimilar items, related purpose / utility	Capitalize if the acquisition cost exceeds capitalization threshold	Yes
Aggregate Acquisition	dissimilar items, unrelated purpose / utility	Evaluate on an asset-by-asset basis	No

SFFAS 6 anticipates that agencies will provide agency-level guidance regarding bulk purchases.[iii] DOE's guidance is tailored to ensure period costs are not distorted or asset values understated by expensing the purchase of numerous items.

Examples of bulk and aggregate acquisitions include fleets of vehicles, groups of servers, and the initial complement of equipment (for example, office equipment) for a building, when the cost of the equipment is not already capitalized as part of the building's construction cost.

Assets acquired through bulk or aggregate purchases may be grouped into one or more property record units in accordance with the guidance in section II.E. of this policy.

II.G. Reconciliation of Accounting Records with Physical Inventories

Policy requirements for conducting physical inventories are specified in 41 CFR 109-1.5110, *Physical Inventories of Personal Property*, and DOE Order 430.1C Change 2, *Real Property Asset Management*.

The financial accounting records must be updated to reflect removal of capitalized property when a physical inventory identifies the removal of capitalized items.

II.H. Purchased Assets

The capitalized cost includes the acquisition cost and all costs to bring the asset to a form and location suitable for its intended use, for example, invoice price and any added transportation and installation costs[iv] (see additional detail in SFFAS 6, *Accounting for Property, Plant, and Equipment,* Paragraph 26).

Costs should be recorded net of purchase discounts taken. Purchase discounts lost and late-payment penalties should not be included as costs of assets but should be written off as an operating expense.[v]

Indirect costs allocated to the acquisition of the item by a DOE site/facility[vi] management contractor is only capitalized for assets produced or constructed (see section II.J. of this chapter).

II.I. Ownership Transfers through Financed Asset Purchases

II.I.1. Identifying Ownership Transfer Contracts or Agreements

Ownership transfers result from a contract or agreement that (a) transfers ownership of the underlying asset to DOE by the end of the contract and (b) does not contain options to terminate the agreement, or only contains availability of funds clauses that are not likely to be executed. For this purpose, options to purchase the underlying asset prior to the transfer of ownership are not considered options to terminate (See SFFAS 54, *Leases*, paragraph 25).

Determining whether a contract or agreement represents an ownership transfer or a right to use lease typically requires a review of the terms and conditions of the specific contract or agreement.

The table below provides guidance for assessing whether a contract results in an ownership transfer or a right to use (RTU) lease.

Contract Description	**Ownership Transfer**	**RTU Lease**
Provides right to use asset Does not provide transfer of ownership. A purchase option does not solely indicate a transfer of ownership.	No	Yes
Provides for the transfer of ownership Contains options to terminate the agreement	No	Yes
Transfers ownership Does NOT contain options to terminate, or only availability of funds cancellation provisions that are unlikely to be exercised (SFFAS 61 paragraph 5)	Yes	No
Transfers ownership at the end of the contract term Contains options to transfer ownership prior to the end of the contract term (SFFAS 61 paragraph 5)	Yes	No

See SFFAS 61, *Omnibus Amendments 2023: Leases-Related Topics II*, paragraph 5 for general guidance and FASAB Technical Release 20, *Implementation Guidance for Leases*, paragraphs 37-40 for specific example scenarios.

II.I.2. Accounting for Ownership Transfer Contracts or Agreements

The underlying asset is recorded as PP&E when the asset is placed in service and depreciated according to the useful life of the asset. The cost of general PP&E acquired through a contract or agreement that transfers ownership shall be equal to the amount that would otherwise be recognized as a leased asset at the commencement of the lease term (paragraph 26A or SFFAS 6). See section II.C.2 of chapter 10.2 of the DOE Financial Management Handbook for guidance on calculating the asset cost.

See section II.C.1 of chapter 10.2 of the DOE Financial Management Handbook for guidance on calculating the initial liability for an ownership transfer.

II.J. Assets Constructed or Fabricated by Federal Entities

When a DOE federal entity constructs an asset for its own use, the acquisition cost of the constructed asset includes both direct and all allocated indirect costs of the entity that constructed the asset.

II.K. Assets Constructed or Fabricated by Contractors

Assets constructed or fabricated by contractors should be capitalized according to the total contract costs incurred by the contractor constructing or fabricating of the asset, including both direct costs incurred and allocated indirect costs.

II.L. Property Acquired by Foreclosure

Property acquired by foreclosure should be recognized at its appraised value. The difference between amounts due, costs incurred, and the appraised value of the assets acquired should be recognized as current period loss or gain.

II.M. Property Acquired by Other Means

The cost of general PP&E acquired through donation, device, or judicial process excluding forfeiture should be recorded at the estimated fair value at the time acquired by the government plus any costs incurred to place the property in use. (SFFAS 6, paragraph 30)

II.N. Government-Owned, Contractor-Held Property

II.N.1. Overview

Integrated contractors provide accounting and financial reporting information to DOE on a monthly basis as part of the normal integrated contractor monthly reporting process (DOE Financial Management Handbook, Chapter 4, section II.D.3).

Nonintegrated contractors must provide information to DOE on government-owned assets that allows DOE to maintain the necessary financial accounting records (see DOE Financial Management Handbook, Chapter 4, section III.E.).

II.N.2. Integrated Contractors

II.N.2.i. Financial Controls

An integrated contract is a contract containing the clause at 48 CFR 970.5232-8, *Integrated Accounting*. The financial control between DOE and the integrated contractor is accomplished by integrating the contractor's accounts with those of DOE.

II.N.2.ii. Property Records

Property records used for financial accounting of Integrated contractors should include the following data:

- Account and supplementary data code number (such as asset type, use status, and site).
- Property record unit title and description, including inventory or property control number (U.S. Government identification tag number).
- Location data sufficient to facilitate physical inventories and provide other necessary administrative controls.
- Reference to accounting journal entry, project number, and other project information.
- Date of the accounting entry and date placed in service, if substantially different from the date of accounting entry.
- Additions, quantity, and dollar amount (acquisition cost, net of discounts).
- Retirements, quantity, and dollar amount; and
- Useful life.

Separate personal property accountability requirements are specified in 41 CFR 109-1.5108.

II.N.2.iii. Reconciliation Requirements

The integrated contractor should reconcile any differences between its property records and the summary financial control records maintained by DOE.

II.N.3. Nonintegrated Contractors

II.N.3.i. Financial Controls

Non-integrated site/facility management contractors must establish and maintain detailed financial records on property acquisition, disposition, and fabrication as required by the contract. At a minimum, property records of non-integrated contractors should include:

- Contract number

- Asset type
- Description of item (name and serial number)
- Tag number (Government ownership identity)
- Acquisition document reference and date
- Manufacturer’s name and model number
- Location (physical area)
- Unit acquisition cost (including delivery and installation)
- Use status
- Site code

II.N.3.ii. PP&E Reporting Requirements

The cognizant DFO should establish appropriate reporting procedures so that contractors itemize accountable property purchases, categorized by DOE funding type, and record this information accordingly.

In addition, the contractor should prepare a semiannual report, for each of its contracts and subcontracts, showing, by asset type, the dollar amount and the number of line items of PP&E that were acquired, fabricated, or disposed of during the period. At a minimum, the report should show the beginning balance, acquisition, fabrication, disposition, and ending balance.

The report should be submitted within 45 days after the end of the reporting period, or final date of the contract if applicable. The report should be sent to the property administrator, the Contracting Officer, and the servicing financial organization. More specific requirements may apply according to the terms of the contract or per instructions provide by the Contracting Officer or DFO.

II.N.3.iii. Reconciliation Requirements

The above semiannual report provides DOE with financial data on DOE-furnished or contractor-acquired property in which title is vested with DOE and facilitates the reconciliation of the detailed property accounts of the contractor with the summary financial control accounts of the cognizant DOE DFO. Reconciliation means to compare the dollar acquisition cost, by asset type, of property in the possession of a contractor with the dollar, by asset type, of property in the corresponding financial control account. The contractor should identify and explain differences, and the DFO should approve all accounting adjustments to the financial control accounts.

II.O. Property Acquired Under DOE Financial Assistance Awards

II.O.1. General Requirements

Property that is owned by DOE must be included in the DOE financial accounting records when the property otherwise meets the capitalization criteria specified in this chapter. As specified in the DOE Financial Management Handbook, Chapter 14, section II.E, the DFO is responsible for proper accounting of government-owned property held by DOE financial assistance recipients.

As specified in section 4.5.4. of the DOE Guide to Financial Assistance, federally owned property shall be managed in accordance with 2 CFR Part 200.312 and a list of federally owned property accountable under an award must be provided as an attachment to the award. Title to federally owned property remains vested in the federal government.

The non-federal entity must submit an annual inventory of property in its custody to the DOE. Upon completion or when the property is no longer needed, the non-federal entity must report the property to the DOE. Property acquired under the terms of a DOE financial assistance award may vest with the DOE when specified by the financial assistance agreement or may be transferred to DOE upon completion of the financial assistance award.

II.O.2. Real Property Interests

When DOE retains an interest in real property acquired through a financial assistance agreement, the real property interest must be included in DOE financial accounting records when it otherwise meets the capitalization criteria specified in this chapter.

Recipients must provide reporting on real property consistent with provisions of 2 CFR 200.330, as specified section 4.5.3 of the DOE Guide to Financial Assistance. Annually, and at the completion of the agreement, recipients must provide DOE reports on the status of real property in which the federal government retains an interest. Reporting may be less frequent than annual when permitted by 2 CFR 200.330.

II.P. Property Acquired through Energy Savings Performance Contracts (ESPCs) and Similar Arrangements

ESPCs allow federal agencies to complete energy-savings projects without up-front appropriations to cover the capital cost of the energy-savings investment. The ESPC authority allows DOE to utilize third-party financing for covered energy-savings projects.

The ESPC is a partnership between a federal agency and an energy service company (ESCO). The ESCO conducts a comprehensive energy audit of federal facilities and identifies improvements to save energy. In consultation with the federal agency, the ESCO designs and constructs a project that meets the agency's needs and arranges the necessary funding. The ESCO guarantees that the improvements will generate energy cost savings to pay for the project over the term of the contract (up to 25 years). After the contract ends, all additional cost savings accrue to the agency.

Property acquired through ESPC contracts shall be recorded as DOE PP&E if they otherwise meet the capitalization criteria in this policy. The acquisition cost of the asset should be determined in accordance with the requirements for determining the cost of an asset acquired under SFFAS 6, *Accounting for Property, Plant, and Equipment*, also see Section II.C (Materiality) and Section II.H. (Purchased Assets) of this policy.

The ESPC liability is the amount owed to the ESCO. In accordance with the specific statutory authority authorizing ESPCs, the liability for ESPCs is an unfunded liability.

If the property acquired through an ESPC contract meets the Right to Use lease criteria guidance of SFFAS 54, then the ESPC should follow lease accounting requires under FMH Chapter 10.2 *Lease Accounting.*

Property acquired through Utility Energy Service Contracts (UESC) or other similar contracts will be treated in the same manner as property acquired through ESPCs. Utility Energy Service Contracts are entered into with the utility service provider instead of a separate ESCO.

II.Q. Assets Acquired or Constructed with Funding from Non-DOE Entities

These assets are capitalized if DOE takes title and possession of the asset according to the terms of the reimbursable work agreement or other governing document.

II.R. Property Belonging to Others

Property belonging to others includes property borrowed or in DOE's possession through purchase with funds provided by others to perform their work in accordance with a reimbursable agreement. Each organization having custody of any such property should establish detailed procedures to provide effective control over the property. Property control, including the vesting of title, should be in accordance with 41 CFR 109 and the terms and conditions of the agreement (see FAR 52.245-1, *Government Property* and DOE Order 481.1E *Strategic Partnership Projects*). It is not intended that DOE record such property in its financial accounts, nor that depreciation be recorded thereon, if title is vested in the other party or parties. However, property management personnel are responsible for developing and administering detailed procedures for the control or property belonging to others.

II.S. Items That Are Generally Not Capitalized

II.S.1. PP&E Supporting DOE's Legacy Waste Mission

II.S.1.i. General Treatment

PP&E acquired to support DOE's legacy waste mission, including activities of the DOE Office of Environmental Management (EM) and the DOE Office of Legacy Management (LM), shall be accounted for in a manner consistent with Chapter 4 of SFFAS 6, *Cleanup Costs*. Accounting requirements relating to legacy waste PP&E do not impact applicable budgetary rules.

Costs incurred to acquire or construct/fabricate PP&E supporting the DOE legacy waste mission are reflected as a reduction of the Department's environmental liability account.

II.S.1.ii. Determining which Property is Expensed as PP&E Supporting the Legacy Waste Mission

All EM and LM activities are considered legacy waste activities, including funding for infrastructure where EM and LM have landlord responsibilities, when the primary purpose is to address legacy environmental waste. The primary purpose is determined by assessing whether the asset is more than 50 percent utilized to support the DOE legacy waste mission. If the greater than 50 percent criterion is not met for legacy waste, the asset should be capitalized and depreciated.

If the property is acquired or constructed/fabricated by EM or LM but its primary purpose is to support a current or future operation not related to DOE's legacy waste mission (e.g., construction of a waste management facility for storing non-EM newly generated waste), then the PP&E should be capitalized.

II.S.1.iii. PP&E Acquired to Support the DOE Legacy Waste Mission but Utilized for Other Purposes

In unusual circumstances, PP&E acquired or constructed/fabricated for the DOE legacy waste mission may be transferred to support other DOE mission activities. When this occurs, the property should be added as PP&E to DOE's accounting records according to the current fair value.

II.S.2. Inherently Experimental Items

Items that are inherently experimental, used as special tools, and, by nature of their association with a particular scientific experiment, not expected to have an extended useful life or an alternative future use, are not capitalized.

II.S.3. Interest

Generally, interest paid during the acquisition of PP&E is not capitalized.

An exception to the general rule applies when the acquisition or construction/fabrication of PP&E is funded through direct borrowing from the Department of the Treasury (Treasury), and interest is paid directly to Treasury. Typically, this scenario is limited to the borrowing authority of the Power Marketing Administrations.

When direct Treasury borrowing authority is used for the acquisition or construction/fabrication of PP&E, interest is capitalized based on the interest rate charged by Treasury for the funds borrowed. The interest capitalization begins when expenditures for PP&E have been made and activities that are necessary to get PP&E ready for its intended use are in process and ends when the asset is substantially complete and ready for its intended use.

II.S.4. Maintenance and Repair

Maintenance and repairs activities are not capitalized. As defined by SFFAS 42[vii], *Deferred Maintenance and Repairs*: *Amending Statements of Federal Financial Accounting Standards 6, 14, 29, and 32,* maintenance and repair are directed toward keeping fixed assets in an acceptable condition. Activities include preventive maintenance; replacement of parts, systems, or components; and other activities needed to preserve or maintain the asset.

Maintenance and repairs, as distinguished from capital improvements, exclude activities directed towards expanding the capacity of an asset or otherwise upgrading it to serve needs different from (or significantly greater than) its current use.

II.S.5. Alterations

Alterations are adjustments to the physical characteristics of an existing property record unit so that it may be more effectively adapted to or utilized for its designated purpose.

The following are examples of alterations:

- Removal or installation of interior walls for purposes of rearranging the layout of an office building, and incidental heating and ventilation ducting system modifications that do not significantly extend the capacity of the system.
- Construction of a door or passage through an interior structural wall; and

- Installation of new lighting fixtures that do not significantly increase the lumens emitted but may result in energy or maintenance savings.

An alteration does not result in betterment to the property record unit and thus is not capitalized. Work to accommodate a change in use is a betterment (see Section II.T. of this policy for a detailed discussion of betterments).

II.S.6. Demonstration Projects

Expense demonstration projects that have limited useful lives and that will not be used for actual production or operations. A special circumstance may apply if the resulting facility is originally intended for demonstration purposes but is later deemed to be successful and is used for operations. In such circumstances the facility should be capitalized when the decision is made to use the facility for operations.

II.S.7. Prototype Equipment

Expense conceptual design, fabrication, testing, and reworking of prototype equipment subject to redesign as fabrication and testing are performed. This usually applies only to the first production unit if several similar units are to be acquired. Expense testing and reworking of prototype equipment for which design has been established.

If prototype units become usable for production and are placed in service, the units are no longer considered to be prototype units and thus should be capitalized consistent with the capitalization criteria in this chapter.

II.T. Accounting for Betterments

II.T.1. General Provisions

Betterments are improvements to PP&E that result in better quality, higher capacity, or greater energy efficiency; extend the useful life of a facility; accommodate a change in the use of the facility; or accommodate regulatory and other requirement changes.

Determining when and to what extent a facilities project should be treated as a betterment requires judgment. When a minor item is replaced in each of a number of similar units, use of the cost basis is the proper basis for determining whether a betterment should be recorded. Although a particular project may meet some of the characteristics of a betterment, if the capitalization criteria are not met or the improvement added is insignificant, then the project should be expensed.

In some cases, betterments may be funded through alternative finance mechanisms such as ESPC. Betterments that meet the criteria for capitalization shall be capitalized regardless of the funding source.

II.T.2. Placed In Service Date

Betterments should be recorded according to the placed-in-service date of the betterment, as determined by the DOE project management official responsible for the betterment.

II.T.3. Depreciation

Betterments should be depreciated according to the remaining useful life of the underlying asset if the asset is not expensed or fully depreciated.

For betterments to fully depreciated or expensed assets, the betterment should be depreciated according to the standard useful life of the betterment. For assets scheduled for demolition, disposal, or permanent removal from service at a specific future date, the remaining period of utility should not exceed the anticipated removal date (see section VII, Depreciation and Depletion).

II.T.4. Special Circumstances

II.T.4.i. Betterments to Fully Depreciated Assets

Betterments to fully depreciated assets that remain in use should be capitalized and depreciated only if the value of the betterment exceeds the capitalization threshold at section II.C.

II.T.4.ii. Betterments to Non-Capital or Expensed Assets

Betterments to non-capital or expensed items shall be capitalized if the cost of the betterment exceeds the capitalization threshold and the betterment otherwise meets the criteria for capitalized PP&E.

The placed in-service date is the date the betterment is completed. The underlying asset—if properly expensed in a prior period—should not be capitalized.

II.T.4.iii. Betterments to Assets Permanently Removed from Service

Betterments to assets permanently removed from service should be expensed in the current period. This would include any improvements made to stabilize and/or secure facilities that are pending demolition or transfer to the EM program for ultimate decontamination and demolition. FASAB Technical Release 14, *Implementation Guidance on the Accounting for the Disposal of General Property, Plant, and Equipment,* requires that depreciation be discontinued for assets permanently removed from service[viii], with the asset recorded at the estimated net realizable value. Thus, betterments to assets permanently removed from service should be expensed in the current year to ensure that depreciation does not continue for such assets. As necessary, the net realizable value of the asset should be adjusted to reflect the betterment.

II.T.5. Common Categories of Betterments

II.T.5.i. Construction

Construction is the erection, installation, or assembly of a new plant facility; the addition, expansion, improvement, or replacement of an existing facility; or the relocation of a facility. Construction includes equipment installed in and made part of the facility and related site preparation; excavation, filling and landscaping, or other land improvements; and the design of the facility.

Examples of improvements to an existing facility include the following:

- Replacing standard walls with fireproof walls.
- Installing a fire suppression system in a space that was not previously protected.
- Replacing utility system components with significantly larger capacity components (for example, replacing a 200-ton chiller with a 300-ton chiller); and
- Converting the functional purpose of a room (for example, converting an office into a computer room).

II.T.5.ii. Conversion

Conversion is a major structural revision of a facility that changes the functional purpose for which the facility was originally designed or used.

II.T.5.iii. Replacement

Replacement is a complete reconstruction of a property record unit that has deteriorated or has been damaged beyond the point where its individual parts can be economically repaired. The replacement cost is the cost of the newly installed item, including installation cost. The replacement is capitalized as PP&E. Remove the damaged/deteriorated PP&E from property and financial records.

II.U. Permanent Removal of Impaired PP&E

II.U.1. General Requirements

PP&E shall be removed from general PP&E accounts along with associated accumulated depreciation/amortization, if, before disposal, retirement, or removal from service, and due to damage, obsolescence, or considered excess, the asset is deemed no longer vital to DOE operations. See FASAB's Technical Release 14, *Implementation Guidance on the Accounting for the Disposal of General Property, Plant, and Equipment,* for further guidance.

For abandoned projects including CWIP impairments see Section III.G.4.

II.U.2. Determining when Permanent Removal Occurs

Two business events are necessary for the permanent removal from service:

- Use of the asset is terminated, and
- There is documented written evidence of management's decision to permanently remove the asset from service.

If only one of these two events has occurred, permanent removal from service has not occurred (i.e., considered other than permanent removal) and there is no change in the PP&E reported value and depreciation continues.

Management's decision to remove the property from service is evidenced by the actions taken in accordance with the entity's policies and procedures to commence the abandonment, retirement and/or disposal process. property records must be maintained to show the occurrence of the two events.

II.U.3. Recording Permanent Removal

If management has decided that an item is permanently removed, the item should be reclassified into an Other Asset account at its expected net realizable value. Any difference in the book value of the PP&E and its expected net realizable value shall be recognized as a gain or a loss in the period of the adjustment. The expected net realizable value shall be adjusted at least annually, and any further adjustments in value recognized as a gain or a loss.

The CFO Office of Finance and Accounting provides a *PP&E Best Practices Guide* that describes Standard General Ledger (SGL) transactional information.

II.U.4. Discontinuation of Depreciation and Amortization

When permanent removal occurs, no additional depreciation or amortization shall be taken once such assets are removed from PP&E in anticipation of disposal or retirement.

II.U.5. Applying the PP&E Capitalization Threshold

The requirements relating to permanent removal from service do not apply to property that has a residual book value that is less than the capitalization threshold at the time of the property's removal from service (See Section II.C.). Depreciation should continue for such assets, with the book value adjusted at the time of disposal, retirement, or removal from service.

II.V. Permanent Impairment of PP&E Remaining in Service

II.V.1. Basic Requirements

DOE must account for the permanent and significant impairment of PP&E remaining in use, beginning on October 1, 2014. The requirement applies to all PP&E, including CWIP, except for internal use software[ix].

II.V.2. Definition of Impairment for Accounting Purposes

As defined by FASAB in SFFAS 44, *Accounting for Impairment of General Property, Plant, and Equipment Remaining in Use,* impairment is a significant and permanent decline in the service utility of PP&E or expected service utility for CWIP. Entities generally hold PP&E because of the services they provide or will provide in the future; consequently, impairments affect the service utility of the PP&E.

The events or changes in circumstances that lead to impairments are not considered normal and ordinary. That is, at the time the PP&E was acquired, the event or change in circumstance would not have been expected to occur during the useful life of the PP&E or, if expected, sufficiently predictable to be considered in estimating its useful life. PP&E will be identified as potentially impaired as a result of the occurrence of significant events, or changes in circumstances, or routine asset management processes.

The following are common, but not exclusive, indicators of impaired assets:

- Evidence of physical damage.

- Enactment or approval of laws or regulations which limit or restrict general PP&E usage.
- Changes in environmental or economic factors.
- Technological changes or evidence of obsolescence.
- Changes in the manner or duration of use of general PP&E.
- Construction stoppage or contract termination; or
- General PP&E idled or unserviceable for excessively long periods.

Detailed guidance on identifying impaired assets is provided in SFFAS 44, *Accounting for Impairment of General Property, Plant, and Equipment Remaining in Use*.

II.V.3. Identifying impaired PP&E

There is no requirement to conduct an annual or other periodic assessment solely for the purpose of identifying impaired PP&E. Impairments should be recorded when they are identified through normal business practices, or the impairment of the PP&E is generally known. In the normal course of business, permanent impairments of items that remain in service should be infrequent.

II.V.4. Assessing The Significance of The Impairment

Judgment is required to determine whether impairments are significant. Specific guidance for assessing the significance of the impairment is contained in SFFAS 44, *Accounting for Impairment of General Property, Plant, and Equipment Remaining in Use*.

II.V.5. Measuring Impairment

SFFAS 44, *Accounting for Impairment of General Property, Plant, and Equipment Remaining in Use,* provides multiple approaches for measuring the impairment. Impairments will be measured using one of the accepted methodologies in this standard.

II.W. Improvements to Non-DOE Property

II.W.1. Accounting for Improvements to non-DOE Property

Improvements to non-DOE property, such as leasehold improvements, must be capitalized and recorded as a DOE asset if the improvement otherwise meets the capitalization criteria, including the capitalization threshold.

Improvements to non-DOE property are amortized over the useful life of the improvement, but no longer than the expected lease term. The capitalization threshold applicable to leasehold improvements is the threshold for PP&E.

For improvements made to non-DOE federal property as part of an intragovernmental lease, see section II.X. of this chapter.

III.W.2. Use of Federal Funds for Improvements to Non-Federal Property

The use of federal funds for improvements to the property of others is only permitted under certain circumstances. DOE follows the general principle, established by the Comptroller General, that the Government cannot make permanent improvements to non-Government-owned property. Exceptions to this general principle are based on whether the Government's interests in the overall project are adequately protected with respect to such improvements.

In making such a determination, the Comptroller General has established the following general criteria for determining whether it is allowable to use federal funds for such improvements:

- The proposed alterations are incidental to and essential for the accomplishment of the purpose of the appropriation.
- The cost of the alterations are reasonable.
- The improvements are used for the principal benefit of the government; and
- The government's interest in the improvements is protected. The Comptroller General has normally found that a lease or other agreement securing the occupancy rights of the government is sufficient to protect the government's interest in the improvements. (See, e.g., 71 Comp. Gen. 4, B-243866.1)

II.X. Intragovernmental Leasehold Reimbursable Work Agreements

II.X.1. Overview

Intragovernmental leasehold reimbursable work agreements are agreements whereby one federal agency (the provider-lessor) acquires, constructs, improves, and/or alters an underlying asset that is or will be leased to another federal agency (the customer-lessee) and the customer lessee agrees to reimburse the provider-lessor for direct and indirect costs for the acquisition, construction, improvement, and/or alteration. These reimbursement costs are beyond the tenant improvement allowances included in the lease agreement of the underlying asset (FASAB Technical Bulletin 2023-1),

II.X.2. Customer-Lessee as Primary Beneficiary

Normally, for intragovernmental reimbursable leasehold work agreements, the customer-lessee is expected to be the predominant beneficiary of the acquisition, construction, improvement, and/or alteration to the underlying asset. The customer-lessee should recognize the leasehold improvement asset in accordance SFFAS 6, Accounting for PP&E, paragraph 18 and SFFAS 54, Leases, paragraph 34.[x]

The customer-lessee is not considered the predominant beneficiary when 1) the expected useful life is beyond the remaining lease term and 2) the provider-lessor is expected to derive a significant level of residual economic benefits or services from the reimbursable work, the customer-lessee is not considered the predominant beneficiary. When the customer-lessee is not the predominant beneficiary, the customer-lessee must apply the requirements specified in paragraphs 20 through 25 of FASAB Technical Bulletin 2023-1.[xi]

II.X.3. Provider-Lessor as Primary Beneficiary

Usually, a provider-lessor would not be expected derive significant residual economic benefits or services from the acquisition, construction, improvement, and/or alteration to the underlying asset in an intragovernmental reimbursable leasehold work agreement. When this is the case, the provider-lessor should expense the costs incurred for the reimbursable work and recognize the amounts received as reimbursable as intragovernmental revenue. The provider-lessor should account for the underlying asset, other than the leasehold improvement, in accordance with SFFAS 6, and SFFAS 54, Leases, paragraph 66.[xii]

Different accounting requirements apply when the when 1) the expected useful life is beyond the remaining lease term and 2) the provider-lessor is expected to derive a significant level of residual economic benefits or services from the reimbursable work. In such cases, the provider-lessor should account for the underlying asset, including the leasehold improvement in accordance with SFFAS 6, and SFFAS 54, Leases, paragraph 66.[xiii]

III. CONSTRUCTION WORK IN PROCESS (CWIP)

III.A. General Requirements

Construction and fabrication costs shall be accrued in the CWIP account. When DOE constructs a capital asset for its own use, the construction cost includes both direct and all allocated indirect costs of the entity that constructed the asset. For assets constructed for DOE by integrated contractors, construction costs include all direct and allocated indirect costs incurred during construction. Construction activities may include additions or betterments to existing PP&E; erecting temporary construction facilities; and, in certain circumstances, demolition, dismantling, and removal.

III.B. Accumulating CWIP Costs

Costs shall be accumulated in the CWIP account until the asset is completed.

Detailed accounting records should be maintained for:
- Each construction project or job; and
- Each item of capital equipment.

III.C. Demolition, Dismantling, and Removal Costs & Salvage Credits

Removal costs should be accounted for as CWIP when the removal is in connection with an authorized project and when one of the following conditions is met:

- Removal of existing facilities or equipment is a required part of the construction project.
- Costs are incurred when it is economical to salvage or reuse items.
- The removal is necessary for health and safety considerations; or
- Contractual agreements require removal.

III.D. Transferring CWIP to General PP&E

Per SFFAS 6, paragraph 34, CWIP shall be transferred to general PP&E when the asset is placed in service. The placed in-service date is determined at the discretion of the management official with responsibility for the construction project. When determining the placed in-service date, management officials may consider project management completion dates as appropriate, including consideration of when the facility begins operations for its predominate use. Both Standard Accounting and Reporting System (STARS) and Facilities Information Management System (FIMS) shall be updated when an asset is placed in service.[xiv]

When a construction effort involves multiple property record units, the placed in-service date shall be determined separately for each unit.

Special provisions apply for EM property. See Section II.S.1 of this policy for a discussion of EM property.

III.E. Construction and Fabrication Activities

III.E.1. Separating Construction and Fabrication Costs from Research and Development Costs

Costs incurred for construction and fabrication activities are recorded as a CWIP and capitalized when the asset is placed in service; costs incurred for Research and Development (R&D) activities are expensed. DOE entities--including contractor-operated sites or national laboratories—that perform both R&D and construction/fabrication activities must be able to appropriately segregate costs.

III.E.2. Equipment Acquired as Part of a Construction Project

Equipment acquired specifically to support a construction or fabrication activity are not personal property items. Instead, for items of equipment that are an integral part of that activity or are related to, designed for, or specially adapted to the functional or productive capacity of that activity, the costs to purchase, fabricate, and install such items are considered related personal property and shall be included as part of the construction or fabrication activity. Related personal property is defined in IV.F of Chapter 2.4 of the Financial Management Handbook and 41 CFR 102-36.40.

III.E.3. Equipment Fabricated

When the costs and estimated useful life of items fabricated at a DOE facility meet the capitalization criteria, the item should be capitalized and recorded. For assets fabricated by a site/facility management contractor, the asset value is determined by the contract cost, including all direct costs incurred and allocated indirect costs as determined by the contractor's approved Cost Accounting Standards (CAS) Disclosure Statement. Actual costs should be used whenever possible, but a cost estimate, approved by DOE management, may be used when necessary. Refer to DOE FMH, Chapter 15.1, *DOE Application of CAS,* and Chapter 15.3, *Production Cost Accounting*, for additional guidance regarding cost accounting requirements.

III.F. Existing Facilities Moved Because of Construction Activities

III.F.1. Moving existing permanent facilities, such as utility lines and roads, because of construction activities involves the retirement by removal or abandonment of existing facilities and the addition of new facilities. Such new facilities will be accounted for as a cost of the new project. Removal costs should be charged to CWIP for Removal Costs. Credit the book cost of materials reused in the new project to CWIP for Salvage Credits and charge the assigned cost to the new project.

The book cost of other materials salvaged should also be credited to CWIP Salvage Credits, and this cost should be charged to inventory or other appropriate accounts. Removal costs and salvage credits should be closed from these accounts to the appropriate accumulated depreciation account. The retirement loss (the difference between the new amount closed to the accumulated depreciation account and the depreciation accrued on the retired facilities to the date of retirement) should be charged to Plant and Capital Equipment Adjustments Extraordinary Losses. The book cost of the retired facilities should be closed directly to the appropriate accumulated depreciation account.

III.F.2. Costs of moving temporary construction facilities should be charged to CWIP accounts and distributed to all projects served by the temporary facilities.

III.G. Closeout of Construction Projects

III.G.1. Coordination between Finance and Project Management Personnel

Finance and project management personnel should coordinate to establish effective procedures to provide for the capitalization of construction projects.

III.G.2. Determination of Acquisition Costs

Acquisition costs are based on the final cost report prepared by the prime construction contractor or architect-engineer, or otherwise as determined by financial and project management officials.

If necessary, to ensure timely capitalization the acquisition costs (actual costs) used for the initial capitalization should be based on the best current information when the project is placed in service. Adjustments may be needed if acquisition costs indicated by the final cost report are different.

III.G.3. Capitalization of a Completed Construction Project

The total cost of a construction project or an operative unit within a project should be closed to the appropriate completed PP&E categories from the CWIP account once the PP&E is placed in service. Each element of a construction project, such as a building, a parcel of land, or a warehouse that has been physically and financially completed except for the settlement of minor outstanding claims must be closed to the completed PP&E categories based on actual total cost incurred to date.

III.G.4. Abandoned Projects

Abandoned project costs include costs incurred because of the cancellation of all or part of a contract or purchase order to acquire or construct/fabricate an item of PP&E.

CWIP accounts must be reviewed on an annual basis to identify construction or fabrication activities that have been put on hold, resulting in CWIP accounts with no recent activity (stale CWIP accounts). When this occurs, the federal project manager must be consulted to determine whether a project is abandoned. All charges for write-off of abandoned projects must be approved in writing first by the federal project management official responsible for the abandoned project, and then by the DFO.

Abandoned projects must meet the Technical Release 14, *Implementation Guidance on the Accounting for the Disposal of General Property, Plant, and Equipment,* criteria for permanent removal at II.U.2. and II.U.3.

III.G.5. Adjustments to Historical Cost

To maintain project historical data, significant costs incurred in the settlement of claims outstanding at the time the project is closed, and claims arising after an element has been closed, should be recorded in the CWIP account when paid, but subsequently closed to completed Plant and Capital Equipment. Necessary adjustments to the original costs of the related financial accounting property record units previously recorded should be made at the time the project is placed in service.

III.G.6. Determination of the Placed in-Service Date

As indicated by SFFAS 6, *Accounting for Property, Plant, and Equipment,* construction projects must be capitalized when they are placed in service. See Paragraph II.T.2. of this policy for additional detail on determining the placed in-service date for betterments.

IV. ACCOUNTING REQUIREMENTS SPECIFIC TO REAL PROPERTY

IV.A. Real Property Definition

Per DOE Order 430.1C Change 2 (Sept 2020) Attachment 1 *Real Property Asset Management,* Real Property is defined as “Any interest in land, together with the improvements, structures, and fixtures located thereon (including prefabricated movable structures, such as Butler-type storage warehouses and Quonset huts, and house trailers with or without undercarriages), and appurtenances thereto, under the control of any federal agency. See DOE Order 430.1C Attachment 1 Section 73.a. for exceptions. A real property trailer must be affixed to the ground or permanently connected to a utility service per DOE Order 430.1C Change 2 Attachment 1 Section 75.

IV.B. Financial Controls Over Real Property

Detailed records of DOE-owned property must be maintained by the DOE DFO or by a designated contractor. The summary financial control records maintained by the DFO, and contractors must include, at a minimum, the reporting entity of the organization holding the property, the site code, the type of property (asset type), the acquisition cost, the accumulated depreciation, and the use of status code.

Accurate and up-to-date accounting records must be maintained to provide the proper accountability for DOE’s investment in property. As property is acquired, transferred, retired, or otherwise taken out of service because of loss, consumption, or casualty, documentation must be prepared, retained, and used to support entries into the accounting records, to authorize disposals and transfers, and to explain total or partial losses of property.

Detailed accountability records of all DOE-owned land, such as deeds, plats, and other legal documents need to be maintained.

IV.C. Purchase of Real Property

The acquisition cost of real property includes the following:

IV.C.1. The cost of land and land rights includes the purchase price, other acquisition costs, and net costs of removing or wrecking any facilities acquired with the land.

IV.C.2. The cost of completed facilities purchased from non-government sources includes the purchase price, other costs incident to the purchase, and the net cost of converting the facilities to make them useful to DOE. Exceptions to this policy must be authorized by the CFO Office of Finance and Accounting.

IV.D. Financial Reporting Requirements

DOE prepares its annual financial statements and accompanying note disclosures in accordance with OMB Circular A-136 and DOE's Agency Financial Report (AFR) Note 8. DOE segregates its PP&E into several major categories including:

Land and Land improvements
Structures and facilities
Internal Use Software
Equipment
Natural Resources
Construction Work in Process

IV.E. Reconciliation of Real Property Records

DOE organizations and integrated contractors must reconcile their real property records. Financial control records are kept in the Department's accounting system, STARS; the real property records are kept in the FIMS database maintained by the Office of Management. Reconciliation is a necessary step to ensure the accuracy of the Department's financial reporting.

The end of year reconciliation must use the financial control records as of September 30. To assist with the reconciliation of STARS and FIMS records, the following guidance must be observed:

- To permit reconciliation with the September 30 STARS financial control records, restrict changes and additions to FIMS to real property changes incurred only through September 30.

- To ensure that real property changes are recorded in the same month and amounts in both STARS and FIMS, both financial and facility management should coordinate real property changes.
- Only appropriate real property asset-type and use status codes should be used.
- The cognizant project manager must provide an allocation to the appropriate asset type codes for any project even though the final cost report is not complete.
- FIMS records the acquisition cost of the property. The acquisition cost recorded in FIMS is not adjusted downward to account for depreciation.

V. PERSONAL PROPERTY ACCOUNTING REQUIREMENTS

V.A. Definition

Current DOE Guide 580.1-1A (June 9, 2015) defines Personal Property includes all equipment, material, and supplies not classified as real property[xv].

Personal property is capitalized for accounting purposes when it has an estimated useful life of two years or more and meets the capitalization threshold specified in section II.C of this policy.

Personal property does not include real property as defined in section IV.A (DOE Order 430.1C Change 2 (Sept 2020) Attachment 1 *Real Property Asset Management)* or related personal property defined in endnote ii.

V.B. Capitalized Personal Property Accounts

V.B.1. Subsidiary Accounts

Ledger subsidiary accounts are maintained to include capital equipment by account and additional data code elements, such as asset type, use status, and site.

V.B.2. Major Items of Equipment

Major Items of Equipment are defined in DOE FMH Chapter 2.4 *Major Items of Equipment*, section IV.A. Separate accounts are maintained for Major Items of Equipment to meet budgetary reporting requirements. See DOE FMH Chapter 2.4 for current budgetary requirements.

V.C. Financial Controls Over Capitalized Personal Property

V.C.1. All capital equipment, except as qualified below, is recorded in the appropriate account, which is supported by summary and detail accounts for each DOE activity.

V.C.2. The costs to similarly acquire capital equipment must be accumulated and transferred, using accounting entries, directly into the completed Plant and Equipment account.

V.C.3. Financial records do not duplicate the detailed property records maintained by the cognizant program office. However, for internal control purposes, the balances in the financial accounts should be reconciled semiannually with the detailed property records.

V.D. Property Acquired by Purchase

V.D.1. The cost of property acquired by purchase includes invoice cost, less discount, plus transportation charges, modification, and installation costs. If property acquired by purchase includes a trade-in, the recorded cost of the purchased asset should be the net invoice cost plus the allowance for the traded-in asset. Indirect costs allocated to the acquisition of the asset by a DOE site/facility management contractor are only capitalized for assets produced or constructed.

V.D.2. The amount capitalized under an installment contract includes the purchase price, other costs incident to the purchase (for example, freight), and the net cost to make the equipment ready for use. Record such equipment in the accounts at the time it is placed in service.

V.E. Research and Development Equipment

Property acquired or fabricated for use in research is not capitalized if the property is not expected to have a useful life of two years or more in essentially its original form. The cost of such property is charged to operating expense.

V.F. Property Acquired for DOE by Another Agency

V.F.1 Overview

An interagency agreement is a written agreement entered into between two federal agencies that specifies the goods to be furnished or tasks to be accomplished by one agency in support of the other. In some cases, another agency may acquire capital equipment or property to support the performance of an interagency agreement that is funded by DOE.

V.F.2. Management of Property Acquired During Execution of the Interagency Agreement

If capital equipment is purchased or otherwise acquired with DOE funds pursuant to an agreement, the title remains with DOE.

The other federal agency is accountable for the property until it is transferred to DOE and should maintain a record of capital equipment procured or fabricated.

The other agency should furnish DOE cost or financial reports in the detailed format as stated in the interagency agreement. Any costs incurred for capital equipment should be supported by a list showing the description, make, any serial number, and the cost of each item acquired.

V.F.3. Disposition of Property Acquired at the Completion of the Agreement

At the termination or completion of the interagency agreement, accountability and control of assets, regardless of dollar value, should be transferred to DOE if requested. If transfer is not requested, title should be transferred to the other federal agency.

The capital equipment shall be recorded in the DOE accounting records when it is transferred to DOE, if the equipment otherwise meets DOE capitalization requirements, including the applicable capitalization threshold. The capitalization threshold shall be applied to the acquisition cost, not the book value when transferred. The accounting process for property transfers is described in section VIII. of this policy.

VI. INTERNAL-USE SOFTWARE

VI.A. Applicability

SFFAS 10, *Accounting for Internal Use Software*, is applicable to all internal use software either purchased or in the development phase after September 30, 2000[xvi]. "Internal use software" means software that is purchased from commercial vendors "off-the-shelf," internally developed, or contractor-developed solely to meet the entity's internal or operational needs[xvii]. It applies to internal use software procured or developed by federal as well as contractor entities, assuming that such software will be owned by the Department. Software includes the application and operating system programs, procedures, rules, and any associated documentation pertaining to the operation of a computer system or program.

VI.B. Capitalization Criterion

Software valued at the current capitalization threshold for internal use software (see II.C of this chapter) and more with a useful life of at least two years shall be capitalized. The capitalization threshold applies to the total cost of the project. Thus, the threshold should be applied not only to the current increment of a phased software project but also to planned future increments and enhancements if the aggregate cost exceeds the capitalization threshold.

As specified in section II.R of this chapter, property, including internal-use software acquired to support the EM legacy waste mission is not capitalized. See VI.D.1. for software acquired to support DOE’s legacy waste mission and then subsequently utilized primarily for other missions.

VI.C. Bulk Purchase

A bulk purchase of software is the single purchase of like items of software in a lot, with the cost of each individual item being below the Department's established software capitalization threshold [xviii]. Bulk purchases of internal use software that meet the Department's established capitalization threshold and possess a minimum two-year lifespan shall be capitalized.

VI.D. Exclusions

The following types of projects should not be capitalized:

VI.D.1. Software supporting DOE’s legacy waste mission: i.e., internal use software whose primary purpose (more than 50%) is to support DOE’s legacy waste mission, is excluded from the requirements of SFFAS 10, *Accounting for Internal Use Software*.

VI.D.2. Software that is an integral part of stewardship PP&E.

VI.D.3. Research and Development Software
However, in some cases software may originally be developed for R&D purposes but may later be used for operational purposes. In such circumstances, the software should be capitalized if it otherwise meets the capitalization criteria.

VI.D.4. Minor Enhancements of Existing Internal Use Software

Per SFFAS 10, paragraph 25, the acquisition cost of enhancements to existing internal use software should be capitalized when it is more likely than not that they will result in significant additional capabilities or functionality. For example, in an instance where the federal entity adds a capability or function to existing software for making ad hoc queries, the cost would be capitalized. (See Section VI.F.2. of this policy).

VI.E. Expenses Capitalized According to Project Phases

Federal entities may purchase software as part of a package of products and services (e.g., training, maintenance, data conversion, reengineering, site licenses and rights to future upgrades and enhancements). Federal entities should allocate the capitalizable and noncapitalizable cost of the package among individual elements on the basis of a reasonable estimate of their relative fair values. Costs that are not susceptible to allocation between maintenance and relatively minor enhancements should be expensed. (SFFAS 10, paragraph 23)

Not all costs associated with a software project or procurement will be capitalized. Costs incurred before project authorization, and costs incurred after testing and acceptance, will be expensed. Further, in accordance with FASAB standards, all data conversion costs are to be expensed.

The table below summarizes the phases of a software project and shows which phases should be capitalized and which phases should be expensed.

Phases of Software Task/Project	Capitalize or Expense?
Conceptual Design	Expense
Authorization	Initiate Capitalization
Design & Implementation	Capitalize
Testing	Capitalize
Data Conversion	Expense
Acceptance	Terminate Capitalization
Operation	Expense
Maintenance	Expense
Enhancements	Capitalize (See VI.F.1.)
Impairment	Reduce capital value
Retirement	Remove capital asset

For more detailed guidance relating to software phases and related processes refer to SFFAS 10, *Accounting for Internal Use Software.*

VI.F. Capitalization & Expense Guidance

VI.F.1 Costs to be Capitalized

The following costs related to the purchase, development or modification of internal use software or modules or components of a total software systems[xix] should be capitalized if those costs exceed the capitalization threshold for internal use software (see II.C of this chapter) and the software is expected to have a useful life of two years or more:

- The actual cost of software procured from a software provider.
- Any material internal cost incurred by the entity to make commercial off-the shelf (COTS) software ready for use.
- The direct and indirect costs of developing software internally including initial training and documentation manuals. The direct costs of developing software include internal labor charges for personnel compensation and benefits of programmers, systems analysts, project management, and administrative personnel directly involved in the planning, designing, coding, or testing of the software, and costs incurred for supplies during the development stage.
- The amounts paid by the entity to a contractor to design, code, test, install, and implement the software. In addition, any material internal cost incurred by the entity to make the software ready for use should be capitalized.
- The acquisition cost of enhancements to existing internal use software should be capitalized when it is more likely than not that they will result in additional capabilities, and they meet the capitalization threshold. (SFFAS 10, paragraph 25)
- The cost of changes and modifications to existing software or purchased software that results in additional capabilities (i.e., added functionality) of the software.
- The cost of software configuration, software interfaces, and installation to hardware; and
- The cost of testing, including any parallel processing.

VI.F.2. Costs to be Expensed

The following costs related to the purchase, development, or modification of internal use software should be expensed:

- Costs incurred in the preliminary design stage such as the identification, evaluation, and testing of various alternatives; the determination of technology requirements; and the final selection of an alternative.
- Data conversion costs.
- Costs incurred after final acceptance testing has been successfully completed.
- Enhancements costing less than the capitalization threshold for internal use software (see II.C of this chapter) that are part of a phased software development project and enhancements that extend the useful life of the software should be expensed. Note that patches and routine updates are not enhancements

- Per SFFAS 10, paragraph 26, enhancements require new software specifications and may require a change of all or part of the existing software specifications as well. The cost of minor enhancements resulting from ongoing systems maintenance should be expensed in the period incurred. Also, the purchase of enhanced versions of software for a nominal charge are properly expensed in the period incurred.
- Costs incurred which extend the useful life of the software without adding capabilities. Examples include the repair of a design flaw or minor upgrades that extend the useful life of the software. However, in instances where the useful life of the software is extended, the amortization period would be adjusted.
-

VI.G. Amortization of Capitalized Software Costs

Software that is capitalized pursuant to the above must be amortized in a systematic and rational manner over the estimated useful life of the software. The estimated useful life used for amortization must be consistent with that used for planning the software's acquisition.

On a software project, amortization begins when DOE completes final testing of each module or component. If the use of a module or component is dependent on the completion of another action, amortization of that module or component must begin when both actions have successfully completed final testing.

Any additions to the book value or changes in useful life must be treated prospectively. The change must be accounted for during the period of change and future periods. No adjustments should be made to previously recorded amortization. When an entity replaces existing internal use software with new software, the unamortized cost of the old software should be expensed when the new software has successfully completed testing.

VI.H. Special Considerations for Cloud Computing Arrangements

VI.H.1. For accounting purposes, FASAB defines a cloud computing service as any resource that is provided over the Internet. It has the following essential characteristics: on-demand self-service, broad network access, resource pooling, rapid elasticity, and measured service. The most common cloud service resources are software as a service, platform as a service, and infrastructure as a service[xx] (Technical Release 16, *Implementation Guidance for Internal Use Software*, paragraph 28).

VI.H.2. In general, SFFAS 10, *Accounting for Internal Use Software,* is not applicable to a cloud computing arrangement that does not convey a contractual right to the internal-use software or to ones that do not include an internal-use software license[xxi] (Technical Release 20, *Implementation Guidance for Leases*, paragraph 102). If the Department enters a cloud computing arrangement with a non-DOE entity that includes a software license, the Department should account for the software license element of the arrangement consistent with the acquisition of other software licenses in accordance with the lease criteria stated in SFFAS 54, *Leases*.

Dependent upon contractual terms, it is possible for internal use software that includes a cloud service arrangement to meet the definition of a lease if the lessee receives a right to control access to the economic benefits or services derived from the underlying asset as specified in the contract or agreement[xxii] (SFFAS 54, *Leases,* paragraphs 2 and 3). DOE FMH, Chapter 10.2, *Lease Accounting* contain additional information on leases.

VI.H.3. If the Department develops and owns the software, platform or infrastructure that is used in the cloud computing arrangement, the DOE entity should account for the software asset in accordance with SFFAS 10, *Accounting for Internal Use Software*.

VI.H.4. If the Department acts as the service provider for cloud computing software and/or infrastructure funded in part by non-DOE entities, the Department should account for the software in accordance with SFFAS 10, *Accounting for Internal Use Software*.

VII. DEPRECIATION AND DEPLETION

VII.A. Purpose

Assets are recorded at acquisition cost and in accordance with definitions of types of assets, such as buildings, motor vehicles, and computers. DOE reports depreciation, depletion, or amortization expenses for all Departmental property other than land.

VII.A.1. Tangible Assets (Depreciation)

Accumulated depreciation accounts are maintained and reported for tangible assets.

VII.A.2. Minerals, Timber, and Natural Resources (Depletion)

Depletion is recorded for natural resource assets such as minerals and timber.

VII.A.3. Land

VII.A.3.i. FASAB considers land and permanent land rights acquired for or in connection with other general PP&E as general PP&E that should not be capitalized. General PP&E land excludes land categorized as stewardship land, such as (1) withdraw public lands and (2) land restricted for conservation, preservation, historical, or similar purposes[xxiii]. (SFFAS 59, *Accounting and Reporting of Government Land,* paragraph 4(a))

VII.A.3.ii. DOE should recognize depreciation expense on all general PP&E except land and permanent land rights which are expensed as incurred[xxiv]. (SFFAS 59, *Accounting and Reporting of Government Land,* paragraph 4(d))

VII.A.3.iii. DOE should depreciate or amortize temporary land rights, such as easements or rights-of-way, that are held for a specified period of time, or limited duration, over that timeframe[xxv]. (SFFAS 59, *Accounting and Reporting of Government Land,* paragraph 4(d))

VII.B. Basic Requirements

VI.B.1. Depreciation charges should be based on the cost of depreciable assets recorded in the PP&E categories, less the estimated net salvage value, if significant. Net salvage value is the actual or estimated amount recovered or recoverable from the sale, transfer, or reuse of retired PP&E, less expenditures for the sale or transfer. Charges to inventory or other appropriate accounts for reusable materials or parts recovered from retired units also are considered as salvage, including plant and equipment with inherent useful value, as well as the value as scrap material.

VII.B.2. Generally, all limited-life property, including property being acquired by capital lease, is considered depreciable, whether in service or in standby.

VII.B.3. All items of property that have an unlimited life, or for which the salvage value is estimated to equal the original cost of the assets, should be considered as non-depreciable. Such assets include those recorded in the asset type classifications for land, land rights, and site preparation, grading, and landscaping. However, land rights acquired for a limited period of years are depreciable.

VII.B.4. The straight-line method of assigning depreciation expense to accounting periods is to be used generally throughout DOE. The units-of-production method may be used only in special cases where applicable, such as depreciating automotive equipment on a mileage basis or construction equipment on an hourly use basis.

VII.B.5. PP&E should not be depreciated in the process of construction until the facility, or segment thereof, is placed in service and the cost closed or transferred to the completed PP&E categories.

VII.C. Depreciation Methods Utilized by DOE

VII.C.1. Unit Procedure for Computing Depreciation Expense

Under the unit procedure, a unit of property is depreciated at a rate based on its specific useful life. If it is retired from service because of normal causes before the expiration of its estimated useful life, the retirement loss is charged to depreciation expense and a credit is made to the accumulated depreciation account.

VII.C.2. Group Procedure for Computing Depreciation Expense

Under the group procedure, an average useful life is determined for all like units. An average depreciation rate is determined and applied to the total cost of a group of similar units. Depreciation expense is applied to the group according to the average useful life of the group until the group is fully depreciated. At the time the retirement work order is closed, and if the retirement is due to normal causes, the original cost of the retired facilities may be charged to the accumulated depreciation account, and no loss or gain is recognized.

VII.C.3. Composite Rates

Composite depreciation rates may be applied to PP&E categories in computing depreciation amounts, provided the composite rates are based on calculations using particular groups of assets (for example, trucks, cars, and buses) and their applicable individual rates, and not on rough general estimates. Composite rates should be computed by applying the appropriate individual rates to the cost of each group included in the account and dividing the sum of the amounts thus obtained by the total balance of the account.

Composite rates should be redetermined whenever substantial changes occur in the relative proportion of different groups in an account or when individual rates based on standard useful lives are changed. To illustrate, assume a PP&E category includes three groups of units, each having a different depreciation rate.

The computation of the composite rate would be as follows:

Asset	Cost	Rate (percentage)	Annual Depreciation ($)
1 (5-year useful life)	$100,000	20	20,000

2 (6-year useful life)	$50,000	16.6	8,300
3 (10-year useful life)	$350,000	10	35,000

Composite annual depreciation: $63,300, or 12.7% of the $500,000 total asset cost

VII.D. Standard Useful Lives

VII.D.1. List of Standard Useful Lives

DOE must calculate depreciation rates on PP&E assets using a standard useful life (see attachment 10.1) except for those assets having useful lives that are materially different from normal averages because of the peculiarity of their use or other special conditions. The useful life of a constructed or fabricated asset should normally be determined by the project manager. The list of standard useful lives is expanded or revised as required. Extraordinary obsolescence and nonrecurring casualties were not considered in establishing the standard useful lives noted in attachment 10.1.

For financed asset purchases, the underlying asset is recorded as PP&E when the asset is placed in service and depreciated according to the useful life of the asset and not the lease term.

VII.D.2. Revision to Standard Useful Lives

Requests for each revision to the standard useful lives must contain a complete description; use made, unit costs, retirement history of identical or comparable assets and recommended useful life (including support for the recommendation). In addition to this information, the following must also be described fully: the peculiar uses or other considerations, the dollar investment in the anticipated net salvage value of PP&E for which revision is requested, and any other information considered pertinent to the specific case.

Power Marketing Administrations should refer to publications or studies on utility plant useful lives.

VII.E. Recording Depreciation

Depreciation is recorded monthly. When major retirements or additions occur that are large enough to materially affect the depreciation expense related to unit product costs or to the depreciation expense applicable to other DOE activities, adjustments to the depreciation base is effective within the first of the month following the month in which the change occurred.

Depreciation on the PP&E in each use status is treated as follows:

VII.E.1. In Service

Depreciation on PP&E in service is charged to the appropriate program values (for example, production cost, development, research, or program directions) in which the items are used.

VII.E.2. In Standby

Depreciation on PP&E in standby is charged to the budget and reporting classification of former use. However, when there is a definite plan use of the PP&E in standby, depreciation should be charged to the program values of future use. However, standby expense items applicable to production activities is reported (but excluded from product inventory) as other production expenses.

VII.E.3. Equipment Held for Future Projects

To the extent that equipment in this classification can be identified as being held for use in a given program value, the depreciation expense on such equipment is allocated to that program value. For equipment held for general or multipurpose use, depreciation expense is allocated to program values on a reasonable and equitable basis.

VII.E.4. Excess

Depreciation on excess PP&E should not be calculated.

VII.F. Exceptions

VII.F. Depreciation of Improvements to Property of Others

Depreciation accruals on PP&E included in the Improvements to Property of Others account are based on the normal useful lives of the PP&E involved or the estimated period of occupancy, whichever is less. Any cost of PP&E remaining on the records at the termination of the contract should be written off–either at that time or upon the disposal of the property–.

VII.F.2. Calculation of Depletion

To calculate depletion, an estimate is made for the amount of natural resources to be extracted, in units of tons, barrels, or any other acceptable measurement. The estimate of total recoverable units is then divided into the total cost of the depletable asset to arrive at the depletion rate per unit. The annual depletion expense is the rate per unit times the number of units extracted during an accounting period.

VII.F.3. Depletion for Oil and Gas Production

VI.F.3.i. Depletion is recorded on a units of production basis for acquisition, exploratory, and development costs of proved properties and the cost of facilities for extracting, gathering, and storing oil and gas.

VI.F.3.iii. Depletion for the cost of gas plants is recorded on a straight-line basis (one half of first year depreciation in the year of acquisition, and the other half in the year of disposition).

VIII. PROPERTY TRANSFERS

VIII.A. Transfers Between DOE Offices and Contractors

Transfers are typically made as a result of changes in responsibility for administering items of property, such as the plant and equipment included in contract transfers. Usually, an administrative transfer is made without physical relocation of the property. The acquisition cost, accumulated depreciation, date of original purchase, and any other pertinent data shall be reported on DOE F 2240.7, "Transfer Voucher," with the transfer recorded in STARS.

VIII.A.1. Transfers of Completed PP&E

Completed PP&E shall be transferred based on the acquisition cost less the accumulated depreciation or amortization. If the receiving entity cannot reasonably ascertain those amounts, the cost of the PP&E shall be its fair value at the time of transfer (SFFAS 6, paragraph 31).

VIII.A.2. Transfers of Construction Work in Process

CWIP is transferred based on costs accumulated for a particular construction project.

VIII.B. Documentation and control of transfers

DOE Form 2240.7, *Transfer Voucher*, shall be used for transfers of property within DOE. Transfer vouchers reflecting activity between DOE offices shall be forwarded to the DOE Office of Finance and Accounting for processing.

VIII.B.1. Preparation of the Voucher Transfer

The transferring organization shall prepare and issue transfer vouchers for the movement of material and property. In preparing the transfer voucher, the transferring organization shall complete all applicable sections. The transfer voucher or an attached supplement shall show complete information concerning the items being transferred and shall include a reference to the transfer authorization. This will allow either the receiving organization or the DOE Office of Finance and Accounting to process the transfer and identify and distribute the costs. The transfer organization shall furnish copies of source documents, when available, along with the transfer voucher.

To ensure appropriate accounting, each transfer voucher shall show the appropriate type of transfer in a conspicuous manner as part of the description, as follows:

- Administrative transfers
- Excess equipment for disposal
- Other excess plant and capital equipment transfers

VIII.B.2. Cutoff Dates

The transferring organization shall not issue transfer vouchers for a given month on an inter-organizational basis after the 15th calendar day of the month. The cutoff date for the ending month of the fiscal year is prescribed in the fiscal yearend closing instructions issued by the DOE Office of Finance and Accounting. If there are significant amounts that cannot be transferred formally by the prescribed date, the organization furnishing the services or materials shall advise the receiving organization or the Office of Finance and Accounting soon enough for such amounts to be accrued.

VIII.C. Reconciliation of DOE transfer accounts

Each organization shall adhere to the following rules, as well as to the procedures prescribed in Section VIII.B above, for preparing and forwarding transfer vouchers to keep the DOE transfer accounts in agreement:

VIII.C.1. The transferring organization shall review its accounting records to ensure that all charges or credits to Transfers Issued reconcile to the completed transfer voucher.

VIII.C.2. The offices shall resolve and correct differences in the same monthly edit. Each office shall review the monthly reconciliation of transfers provided by the Office of Finance and Accounting on a cumulative transaction basis in summary form and initiate any necessary corrective action. The Office of Finance and Accounting shall record any corrections, including out-of-balance problems, during the following month except at the end of the fiscal year, when they shall be issued on a timely basis and received by the office authorizing the work or service for recording as business of that month.

VIII.C.3. If any transferred items are inadequately supported by documentation or are improper, the organization receiving the transfer voucher shall ask the office that prepared the transfer voucher to furnish additional information or a correcting transfer voucher, as the situation may require.

VIII.C.4. Confirmation of Transfers. Each organization preparing transfer vouchers shall confirm all transfers made at the end of the month. Additional confirmation requirements, such as a transfer confirmation document, may be provided in the annual year-end requirements memorandum.

VIII.D. Transfers to and from Other Federal Agencies

Such transfers occur when an agency assumes responsibility for an item of completed plant or capital equipment under terms mutually agreed upon by the agencies involved. No transfer voucher shall be issued for these transfers.

VII.D.1. Transfers of completed plant and capital equipment to Other Federal Agencies (OFA's). Transfers of completed plant and capital equipment of OFAs are recorded by crediting the Completed Plant and Capital Equipment Account for the acquisition cost, debiting the Accumulated Depreciation Account for the amount accumulated, and debiting the Financing Sources Transferred Out Account for the net book value.

VII.D.2. Transfers of completed plant and capital equipment from OFAs shall be recorded by debiting the Completed Plant and Capital Equipment Account for the acquisition cost, crediting the Accumulated Depreciation Account for the amount (estimated if unknown) accumulated, and crediting the Financing Sources Transferred In Account for the net book value, based on the transfer documents.

IX. RESPONSIBILITIES

IX.A. The Office of the Chief Financial Officer

The CFO develops property accounting policies and procedures and accounts for property at DOE headquarters.

IX.B. The Office of Asset Management

IX.B.1. Serves as the Department's official point of contact relating to the acquisition, use, or disposal of real property.

IX.B.2. Is responsible for property management through the promulgation of acquisition regulations and financial assistance rules governing DOE property held by contractors; and

IX.B.3. Develops and maintains procedures, standards, and guides for property, supply, and equipment management programs and for personal property management.

IX.C. Designated Financial Officers

DFOs are responsible for oversight and review of integrated contractor accounting records and supporting documentation to properly account for DOE's investment in property.

DFOs also record DOE PP&E held by non-integrated contractors and financial assistance recipients.

IX.D. DOE Contractors

DOE contractors must maintain accurate and up-to-date accounting records and supporting documentation to provide the proper accountability for DOE’s investment in property. Contractors also must maintain financial control records for all subcontractors having DOE-owned property.

IX.E. Project Management Officials

Determines the placed-in-service date for constructed or fabricated assets and provides necessary information and support to ensure that financial management staff can properly account for PP&E.

X. REFERENCES

- 2 CFR 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards*
- 41 CFR 102, *Federal Property Management Regulations*
- 41 CFR 109, *Department of Energy Property Management Regulations*
- 41 CFR 109-1.50, *Department of Energy Personal Property Management System*
- 41 CFR 109-1.5105, *Identification Marking of Personal Property*
- 41 CFR 109-1.5110, *Physical Inventories of Personal Property*
- SFFAS 6, *Accounting for Property, Plant, and Equipment*
- SFFAS 10, *Accounting for Internal Use Software*
- SFFAS 42, *Deferred Maintenance and Repairs*: *Amending Statements of Federal Financial Accounting Standards 6, 14, 29, and 32.*
- SFFAS 44, *Accounting for Impairment of General Property, Plant, and Equipment Remaining in Use*
- SFFAS 54, *Leases*
- SFFAS 59*, Accounting and Reporting of Government Land*
- Technical Release 14, *Implementation Guidance on the Accounting for the Disposal of General Property, Plant, and Equipment*
- Technical Release 16, *Implementation Guidance for Internal Use Software*
- Technical Release 20, *Implementation Guidance for Leases*

- Technical Bulletin 2023-1, *Intragovernmental Leasehold Reimbursable Work Agreements*
- IRS Publication 946, Table B-1, *Table of Class Lives and Recovery Periods: Specific Depreciable Assets Used in All Business Activities*, Expect Otherwise Noted
- IRS Publication 946, Table B-2, Table *of Class Lives and Recovery Periods: Depreciable Assets Used in Specific Activities*
- DOE Order 430.1C Change 2, *Real Property Asset Management*
- DOE Guide 580.1-1A, *Personal Property*
- DOE Form 2240.7, *Transfer Voucher*
- DOE FMH, Chapter 1, *Financial Management Handbook Overview*
- DOE FMH, Chapter 2.4, *Major Items of Equipment*
- DOE FMH, Chapter 4, *DOE Accounting Structure, Organization, and Systems*
- DOE FMH, Chapter 10.2, *Lease Accounting*
- DOE FMH, Chapter 15.1, *DOE Application of Cost Accounting Standards*
- DOE FMH, Chapter 15.2, *Laboratory, Plant, and Site Directed Research and Development*
- 71 Comp. Gen. 4, B-243866.1

XI. ACRONYMS

CAS	Cost Accounting Standards
CFO	Chief Financial Officer
COTS	Commercial Off the Shelf
CWIP	Construction Work in Process
DFO	Designated Financial Officer
DOE	Department of Energy
EM	Office of Environmental Management
ESPC	Energy Savings Performance Contracts
FASAB	Federal Accounting Standards Advisory Board
FEMP	Federal Energy Management Program
FIMS	Facilities Information Management System
FMH	Financial Management Handbook
IRS	Internal Revenue Service
OFA	Other Federal Agencies

PMA	Power Marketing Administration
PP&E	Property, Plant, and Equipment
R&D	Research and Development
SFFAS	Statement of Federal Financial Accounting Standard
SGL	Standard General Ledger
STARS	Standard Accounting and Reporting System
TSD	Treatment, Storage, and Disposal

ATTACHMENT 10.1-1 STANDARD USEFUL LIVES

Item	Useful Life (Years)
Absorbers	20
Accelerators	20
Acid Handling Equipment	10
Agitators and Mixers	20
Air-Conditioning Equipment:	
Large (over 20 tons)	20
Medium (5-20 tons)	15
Small (under 5 tons)	10
Air Coolers (Spray Oil)	20
Aircraft	12
Air Preheaters	25
Air Supply Units	20
Alley, Robot, Complete	10
Ash Handling Systems	20
Autoclaves	20
Automatic Data Processing Equipment	5
Automotive Equipment:	
Ambulances Buses, Passenger	10
Carriers, Weapon	10
Cars, Armored	10
Jeeps	5
Sedans	6
Scooters	6
Station Wagons	6
Trailers, Automotive (All Types)	10
Trucks (All Types):	
Heavy	10
Light	8
Bag Sealers	20
Baking Panels	20
Balers:	
Metal	25
Paper	20
Bar Turners	15
Bath, Temperature	20
Batteries, Storage (Stationary)	10
Battery Chargers	10
Beds, Cooling	25
Benches, Work:	
Metal	10
Wood	15
Bevatrons	20
Binoculars and Telebinoculars	15

Item	Useful Life (Years)
Bins, Storage:	
Concrete	35
Metal	30
Wood	15
Blenders, Dry Material	20
Blowers, Exhaust, Portable	10
Blowers and Fans	20
Boats	10
Boiler Feed Water System	25
Boilers	25
Boothers, Ingot Separation, Complete	8
Boxes, Fare	15
Breaching and Flue Systems	25
Breathing Air System	20
Bridges, Highway:	
Concrete	50
Steel: Heavy	50
Light	35
Wood	15
Briquetters	20
Buckets:	
Load Lugger	20
Slug	20
Buildings:	
Temporary, light wood frame, plywood or sheet metal exterior walls or arched sheet metal construction	10
Prefabricated (rehabilitated flattops)	20
Wood framing, exterior walls covered with wood siding, asbestos shingles	30
Light steel structures with finished interiors	30
Masonry exterior walls; wood interior framing or steel frame with metal panel walls; corrugated sheet metal siding and roofing	40
Masonry exterior walls, concrete, or steel frame	50
Bus, Electrical	Same life as principal structure, but not to exceed 50 years
Cabinets, drying, firehose	15
Cable, aerial, telephone	30

Item	Useful Life (Years)
Cable, Underground:	
Telephone	30
Electric	40
Calciners:	
Pot	5
Trough	10
Tube	
Under 1,000°C	10
1,000°C and above	5
Canning stations	20
Capacitors	25
Car mover or puller, railroad	20
Carrier current telephone equipment	15
Car spot, railroad	30
Cathodic protection units	15
Cells:	
Electrolytic	20
Electrolytic, steel-fluorine production	5
Mockup facilities	20
Structural	20
Centrifuges	20
Chargers, slug, portable	20
Chargers, Stationary (remote charging cave)	25
Chime recovery system	10
Chime straightener	15
Chlorinators	20
Circuit breakers, power	25
Classifiers:	
Hydro	30
Mechanical, wet	30
Cleaners:	
Furnace pot	20
Natural gas	25
Clocks, watchman	15
Coal handling systems	20
Comminutors	15
Communication systems (excludes intercommunication systems)	30
Community furnishings and equipment:	
Barber and beauty shop equipment	10
Dormitory and hotel furniture and fixtures	15
Dry cleaning fixtures	15
Grocery store furniture and fixtures	15

Item	Useful Life (Years)
Musical instruments	10
Playground equipment	10
Shoe repair shop equipment	15
Theater furniture and equipment	15
Compressors	25
Compressors, gaseous diffusion cascades	40
Concrete finishing machines, portable	10
Condensers:	
Gas	20
Synchronous	30
Conductors:	
Overhead	35
Underground	
Electric	40
Telephone	20
Conduit, Underground:	
Electric	40
Telephone	50
Containers, trash	15
Control systems	20
Converters	20
Converters:	
Condenser, and tube test system	15
Dry ice	25
Gaseous diffusion cascades	40
Conveyors	20
Coolant systems	30
Coolers	20
Cosmotrons	20
Counters, traffic	15
Cranes, mobile, crawler	15
Cranes and hoists, installed	30
Crucible loading stations	20
Crushers	20
Crystallizers (over 100-ft 3 tank size, 40 ft of deck length, or 3 ft 2 of cooling surface per linear foot)	15
Curtains, ventilation	10
Cutters, shade	10
Cyclotrons	20
Cylinders, product storage, steel	40
Dams	100
Deaerators	25
Decks, slime	20

Item	**Useful Life (Years)**
Degasifiers	20
Degreasers	20
Deheaders, drum	10
Dehumidifiers (over 20-ft3 tank size)	20
Deionizers (over 100,000 g of CaCO)	25
Demineralizers	25
Demulsifiers	20
Denitration units	10
Digestors (over 100 gal)	10
Dishwashers, electric	10
Dissociators, ammonia	20
Dissolvers	10
Drainage systems, open	50
Drills, earth	10
Drum painting and drying stations	10
Drums, cylinders, and containers	10
Drunkometers	10
Dryers	20
Dumpers, drum	20
Dust collectors	15
Economizers	25
Elevators	25
Elevators, portable	10
Engravers and engravographs	10
Evaporators	20
Exciters	25
Exposure fields	25
Extrusion presses	20
"F" machines	20
Feeders	25
Fences:	
Chain Link	25
Wire	15
Wood	15
Filter presses	20
Filters	20
Fire alarm equipment	25
Firefighting equipment, mobile	15
Flagpoles	30
Flexible shafts, with motors	15
Freezers, electric	15
Furnaces:	
Electric:	
Reaction	20
Remelt	20

Item	Useful Life (Years)
Hearth	25
Heat treating	25
Roasting	20
Tilting pot	20
Garage equipment	10
Generators:	
Electric:	
Emergency, turbine-driven	30
Diesel-driven	25
Motor-driven	25
Gas	25
Van de Graaff	20
Geological Equipment:	
Geiger Counters	10
Scintillometers	10
Globes, geographic	15
Grates, sluice	50
Grease flotation units	20
Grounding systems	40
Ground wires, overhead	40
Guard towers Rate according to type of construction guns, deluge	15
Gymnasium equipment (such as boxing rings, rowing machines, tumbling mats)	10
Health instruments	10
Heaters	25
Heaters, portable, electric:	
Over 10,000 BTU	10
10,000 BTU and under	5
Heat Exchangers	20
Hoppers	25
Hospital and medical equipment:	
Beds and hospital furniture	15
Dental chairs	15
Medical instruments	10
X-ray equipment	15
Hot mix plants	20
Hydrants, fire	50
Hydraulic accumulator systems (pneumatic oil)	25
Hydraulic pressure boosters	20
Incinerators	20
Industrial trucks and tractors	10
Instrumentation, gaseous diffusion cascades	25

Item	Useful Life (Years)
Instruments:	
Engineering	25
Industrial	15
Measurement and control	10
Surveying	25
Intercommunication systems	15
Irrigation canals	100
Janitorial service equipment	10
Jolters	5
Kettles, heating, and melting	15
Kilns (over 50 ft3)	20
Laboratory Equipment:	
Hoods	15
Photographic equipment	10
Professional and scientific instruments	10
Pumps and other general equipment	20
Sinks, cabinets, and other furniture	20
Special radiation instruments, apparatus, and accessories	10
Ladders, extension, metal (30 ft and over)	10
Laundry equipment	15
Lighting fixtures, street and fence	20
Lightning arresters	25
Light plants, emergency	25
Loaders	5
Locators, cable fault	15
Locker assemblies	10
Lubrication oil systems	20
Magnets, lifting	15
Magniflux machines	15
Manholes	40
Mannequins, thyroid uptake and calibration	5
Meters, Customer:	
Electric	25
Gas	25
Water	30
Meters, Speed:	
Electric	15
Radar	10
Mills, tumbling, wet grinding	20
Mixing machines, gas and air	20
Mobile and accessory equipment:	

Item	Useful Life (Years)
Air compressors	15
Concrete mixers and pavers	10
Excavating machinery	10
Farm machinery	15
Pumps	20
Road machinery	10
Tractors	10
Welders:	
Electric	15
Gas	10
Mold coating systems	20
Monorail material handling systems	20
Motor generator sets	20
Motors:	
Electric	20
Internal combustion	10
Nets, lifesaving	15
Odorizers, natural gas	25
Office furniture and equipment:	
Furniture, fixtures, and filing cases:	
Metal	25
Wood	20
Mechanical equipment and machines	10
Safes and vaults	40
Oil bubblers	20
Oil recovery devices	20
Oil storage and filtering systems	25
Optical devices	25
Ovens, electric or gas	15
Partitions, movable	25
Photographic and reproduction equipment	10
Piles (see Reactors)	
Pipe supports, outdoor	20
Piping systems, indoor:	
Air	25
Gas	25
Process	25
Process, gas, gaseous diffusion cascades	40
Steam	25
Water	40
Piping systems, outdoor:	
Air	25

Item	Useful Life (Years)
Gas	25
Process	25
Sewer	40
Steam	25
Water	40
Pistol or rifle range equipment	15
Platform lifts, portable	25
Platforms:	
Concrete	25
Steel	25
Transformer	20
Wood	10
Plating, Coating, and Stripping Systems	5
Poles, Crossarms, and Fixtures:	
Steel	40
Wood	30
Pools, spray	20
Portable cranes, derricks, hoists, and winches	10
Portable scales	20
Portable tools:	
Air	10
Electric	10
Gasoline engine	10
Power mowers	5
Powerplants, portable	20
Power wiring system, indoor	25
Precipitators, electrostatic	20
Process equipment, heavy water	35
Projectors, contour	10
Proportioners, chemical	25
Protection Equipment:	
Firearms	15
Fire extinguishers	10
Radio equipment	10
Protective breathing apparatus	15
Public address systems, portable	5
Pulverizers	15
Pumps:	
Water	20
Other	15
Purgers	25
Radiation Source Material:	
Cesium 137	15
Cobalt 60	5

Item	**Useful Life (Years)**
Radium	50
Radios	10
Radio Stations:	
Antenna	15
Towers	25
Transmitters	10
Railroad Rolling Stock:	
Cars	20
Locomotives	25
Railroads:	
Bridges and Culverts	45
Grading and Ballast	30
Rails and Ties	25
Signal Systems	25
Ranges, Electric	15
Reactivators (100,000-g capacity)	25
Reactors (electrical system devices)	25
Reactors, Nuclear:	
Production	25
Research	25
Receivers, Air	25
Recreational Facilities, Outdoor	20
Rectifiers (over 10 kVA)	10
Refrigeration Systems	20
Refrigerators	15
Regulators:	
Circuit and Bus	25
Pressure	20
Remote Handling Equipment	10
Repulpers	20
Reservoirs and Pits	50
Restaurant, Cafe, and Canteen Equipment	10
Resuscitator Units	15
Retaining Walls:	
Concrete	40
Timber	20
Roads, Walks, and Paved Areas:	
Asphalt	20
Concrete	30
Gravel or Stone	15
Robots, general purpose	20
Rolling mills	20
Saddles	20
Sampler, Automatic	15

Item	Useful Life (Years)
Scales:	
Conveyor	20
Platform	20
Screens:	
Trash	35
Traveling	25
Vibrating	20
Scrubbers (tank over 20 ft^3)	20
Security Alarm System	25
Separation Equipment	20
Septic Tanks	35
Services:	
Electric	25
Gas	40
Sewer	30
Water	40
Sewage clarifier mechanisms	20
Sewer rod machines	20
Sewing machines	15
Shakers, car	20
Shears, powered	20
Shell loading machines	15
Shop Equipment:	
Electric shop equipment	15
General maintenance shop equipment	10
Machine metalworking tools	25
Paint shop equipment	10
Pipe shop equipment	25
Plumbing shop equipment	25
Sheet metal shop equipment	25
Woodworking machinery and equipment	20
Shredders, paper	10
Silos:	
Concrete and masonry	50
Metal	40
Wood	20
Sludge drying beds	30
Sludge heaters	30
Slusher haulers	20
Spur tracks	25
Screens:	
Trash	35
Traveling	25

Item	**Useful Life (Years)**
Vibrating	20
Scrubbers (tank over 20 ft^3)	20
Security alarm system	25
Stacks:	
Concrete or masonry	50
Metal	30
Stitchers, wire	10
Stills	20
Straighteners, bar	20
Strapping machines	15
Structures, outdoor substation:	
Metal	40
Wood	25
Superheaters (tank over 20 ft^3 or 100-ft^2 surface)	15
Switchboards	20
Switches, Disconnecting	20
Switchgear	30
Synchrotrons:	
Electron	20
Tables, pool	15
Tanks:	
Concrete	50
Metal	40
Process	25
Wood	15
Telephone exchange equipment	30
Telephone subscribers station equipment	30
Teletypewriter equipment	30
Thickener	20
Timer, driver training	20
Tools, process, installed	10
Towers:	
Chemical process	10
Cooling	15
Meteorological and other structural steel towers	25
Traffic lights	20
Transformers:	
Current and potential	25
Steel lighting	20
Transmission and distribution	30
Trestles	40
Tunnels	50
Turbines	25

Item	Useful Life (Years)
Turbogenerators	30
Turntables (over 10 ft in diameter)	20
Unit substations	30
Vacuum systems	15
Vaporizers	20
Varidrives (over 5 hp)	20
Washers, drum or can	20
Waste gas burners	25
Water softening systems	25
Wells	40
Wires, open, overhead	25
Wiring systems, outdoor	30

[i] 41 CFR 109-1.5110 (e)
[ii] Related personal property is defined 41 CFR 102-36.40 as property that is related to, designed for, or specifically adapted to the functional capacity of real property; removal of this personal property would significantly diminish the economic value of the real property.
[iii] See paragraph 149 or SFFAS 6.
[iv] SFFAS 6, Paragraph 26
[v] Lost discounts and late payments may constitute reportable improper payments and/or unallowable contract costs. Follow applicable guidance from the CFO Office of Finance and Accounting regarding the reporting of improper payments.
[vi] Site/Facility management contractors are designated by the DOE Office of Acquisition Management. The current list of site/facility management contractors is posted on the DOE website.
[vii] SFFAS 42, Paragraph 8
[viii] Technical Release 14, Paragraph 5
[ix] SFFAS 44
[x] FASAB Technical Bulletin 2023-1, paragraphs 10 and 10a
[xi] FASAB Technical Bulletin 2023-1, paragraph 11
[xii] FASAB Technical Bulletin 2023-1, paragraph 10b
[xiii] FASAB Technical Bulletin 2023-1, paragraph 11 and paragraphs 26 – 31
[xiv] Requirements for using the FIMS system for real property assets are contained in DOE Order 430.1C (current version).
[xv] DOE Guide 580.1-1A is currently under revision (August 2024). The proposed revision updates the definition of personal property to include any property, except real property. For purposes of this guide, the term excludes records of the federal government, and naval vessels of the following categories: battleships, cruisers, aircraft carriers, destroyers, and submarines
[xvi] SFFAS 10, Paragraph 7
[xvii] SFFAS 10, Paragraph 8
[xviii] Each federal entity should establish its own threshold as well as guidance on applying the threshold to bulk purchases of software programs (e.g., spreadsheets, word-processing programs, etc.) and to modules or components of a total software system. That guidance should consider whether period cost would be distorted or asset values understated by expensing the purchase of numerous copies of a software application or numerous components of a software system and, if so, provide that the collective cost should be capitalized (SFFAS 10, paragraph 24).
[xix] See SFFAS 10, paragraph 24
[xx] Technical Release 16, Paragraph 28

[xxi] Technical Release 20, Paragraph 102
[xxii] SFFAS 54, paragraphs 2 and 3
[xxiii] SFFAS 59, paragraph 4(a)
[xxiv] SFFAS 59, paragraph 4(d)
[xxv] SFFAS 59, paragraph 4(d)