## Unit 11. Depreciation, Cost Recovery, Amortization, & Depletion [PAK Ch. 10-1 to 10-21]

We will cover only pages 10-1 to 10-21 (objectives 1 and 2 in the text). We will omit the sections on depletion, intangible drilling and development costs, tax planning considerations, and compliance and procedural considerations. You are welcome to read these sections, but will not be tested on the information in them.

#### Overview

- The concept of cost recovery is simple. The IRS allows those conducting trade or business or those investing for a profit to recover the cost of invested capital via tax deductions. The cost recovery process encourages business and investment activity, and thereby can stimulate economic growth.
- Rules related to cost recovery for assets used in trade or business or for production of income are complex. Before reading the chapter, I would recommend that you read through the chapter outline a few times to help grasp the broad structure and classification of cost recovery rules before focusing on detailed rules. This chapter is definitely one to read one small section at a time, taking notes on each section regarding specific rules and exceptions. You may find the chapter Topic Reviews helpful summaries of various rules.

## Concepts

- Capital goods used in trade or business can suffer from wear and tear or become obsolete (e.g. when's the last time that you saw a typewriter?). A stock of natural resources can be depleted. Intangible assets such as a trademark or copyright can lose value over time. Under the 'recovery of capital doctrine' the IRS code allows taxpayers to recover the cost of an asset. Depending on the type of asset, the process of cost recovery is called:
  - Depreciation deductions related to most tangible property
  - Amortization deductions related to intangible property
  - Depletion deductions related to natural resources

## Depreciation / Cost Recovery

- General considerations
- Depreciation methods
- Calculation of depreciation
- 4. MACRS restrictions



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#### 1) Three systems

- Tax law changes have created three different sets of rule related to depreciation and cost recovery:
  - Modified Accelerated Cost Recovery System (MACRS) –
     for property placed in service after Dec. 31, 1986
  - Accelerated Cost Recovery System (ACRS) for property placed in service after Dec. 31, 1980 and before Jan 1 1987
  - Sec. 167 for property placed in service before 1981
- Most property in service today follows MACRS.

2) Rules common to all three systems (Ex. 10-1)

- Depreciation can only be claimed on property used in trade or business or for production of income
- Assets with indefinite life cannot be depreciated (e.g. land, works of art)
- Depreciation begins when the asset is put in service,
   regardless of when purchased
- Must continue use of same method of depreciation selected when asset placed in service
- Property basis must be reduced by amount of allowable depreciation each taxable year

#### 3) Property types

- For both property law and income tax purposes,
   there are two basic types of property
  - Tangible has physical substance, e.g. buildings
    - Real land and permanently attached structures
    - Personal tangible property not classified as real, e.g. vehicles, furniture
  - Intangible –has value, but no physical substance, e.g. a patent

4) Capitalization vs. expense

Expenditures that improve efficiency of asset or extend the life of the asset beyond the end of the year should be capitalized. In practice, however, relatively small expenditures are often expensed rather than capitalized

Capitalization

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5) Conversion of personal-use property (Ex. 10-2)

□ When property is converted from personal use to business use or held for production of income (e.g., a principal residence converted to a rental house), property basis for depreciation is lesser of adjusted basis or FMV on date of conversion.



# 2. Depreciation Methods (Ex. 10-3, 10-4, 10-5)

- We will focus on MACRS for assets placed in service after 1986.
  - Does not consider salvage value
  - Uses specific asset classes, i.e., 5-year property, 7-year property
  - Depreciation methods built into MACRS tables (Page C-1)
  - MACRS convention for dates of acquisitions or dispositions
    - Half-year convention: mid point of tax year
    - Mid-quarter convention: mid point of a quarter
    - Mid-month convention: mid point of a month

1) Tangible personal property (Ex. 10-6)

- Depreciable if used for trade or business
- Property must be classified into one of six asset classes:
  - 3-year (life <= 4 years, e.g. tractor units)</p>
  - 5-year (life 4-10 years, e.g. computers, cars)
  - 7-year (life 10-16 years, e.g. office furniture)
  - 10-year (life 16-20 years, e.g. barges, food processing equipment)
  - □ 15-year (life 20-25 years, e.g. billboards
  - $\square$  20-year (life >25 years, e.g., utilities, sewers).
- □ Table 10-1 shows some examples of depreciation rates
- Depreciation deduction = costs \* depreciation rate

2) Section 179 expensing election (Ex. 10-7, 10-8)

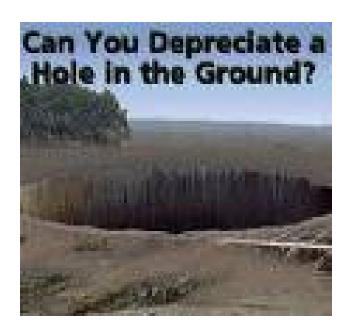
- In lieu of depreciating under the regular MACRS methods, taxpayer may elect to expense up to \$250,000 (in 2009) of the acquisition cost as an ordinary deduction in the year the property is placed in service. Two limitations:
  - Taxpayers purchasing qualifying property with a cost exceeding \$800,000 will lose \$1 of potential Sec. 179 expensing for every dollar of qualifying property acquired over \$800,000.
  - □ Sec. 179 reduction cannot exceed the taxpayer's taxable income from trade or business.

3) Bonus depreciation (Ex. 10-9, 10-10)

- Bonus depreciation is for qualifying personal property placed in service during particular periods of time after 9/11/2001.
  - $\square$  9/10/2001-3/5/2003, additional 30% first-year bonus depreciation
  - 3/5/2003 1/1/2005, additional 50% first-year bonus depreciation
  - 2008 and 2009 Additional 50% first-year bonus depreciation reinstated
- Depreciation order for first year:
  - Section 179 depreciate first if so elected
  - Additional first year bonus depreciation
  - Regular MACRS depreciation
- After first year regular MACRS depreciation under normal rules.

4) Year of disposition (Ex. 10-13, 10-14)

The MACRS system requires that depreciation be taken in the year of disposition using the same convention that applied on acquisition (e.g. halfyear, mid-quarter, or mid-month).



5) Real property classification and recovery rates (Ex. 10-15)

- The MACRS recovery periods that apply to real property placed in service after 1986 are:
  - Residential rental property: 27.5 years
  - Nonresidential real property: 39 years
- Straight-line depreciation must be used (reflected in Tables 7, 8, and 9 in Appendix C)
  - Straight-line depreciation method means constant depreciation rate over time.
- A mid-month convention is used in the year of acquisition and in the year of deposition.

6) Straight-Line method election under MACRS

- For tangible personal property, taxpayers may elect to use the straight-line method instead of the accelerated method.
- Using straight-line method makes sense if the taxpayer has substantial Net Operating Loss (NOL) carryovers.



7) Alterative Depreciation System (ADS) (Ex. 10-18, Topic Review 10-1)

- MACRS provides an alternative depreciation system (ADS) that is required mostly for tangible property used predominantly outside the U.S.
- ADS is also available for all other depreciable assets if the taxpayer so elects.
- ADS requires the use of the straight-line method.
- ADS election is generally made by taxpayers who have net operating losses (NOL) or subject to the alternative minimum tax.

#### 1) Personal use assets

- Personal use assets: the personal use portion of an asset's cost is not depreciable.
  - Ex. Live in one duplex unit and rent the other one out.Only the rental unit is depreciable.



- 2) Listed property rules (Ex. 10-19, 10-20, 10-21)
- Listed property rules apply to certain assets that are conducive to mixed business/personal use.
- Listed property includes (but not limited to)
   automobiles, computers, peripheral equipment, and
   cell phones.
- Listed property restrictions:
  - □ If business use <50%
    - Cannot elect Sec. 179 expense
    - Must use ADS
    - May not use bonus depreciation

3) Recapture of excess cost recovery deductions (Ex. 10-22)

- □ Taxpayers are subject to depreciation recapture on listed property if MARCS rules were used originally but the business use portion falls below 50% subsequently.
  - Excess depreciation is recaptured as ordinary income in gross income in the year of the change.
  - □ Once business use falls under 50%, ADS must be used for current year and all subsequent years, even if the % is back to >50% later on.

#### 4) Additional rules on automobiles

- Luxury cars
  - Must be depreciated over longer than the normal 5-year period. (PAK Ex. 10-23, 10-24)
- Mixed-use automobiles
  - PAK Ex. 10-25 Table 10-3.
- Trucks, vans, and SUVs
  - PAK Ex. 10-26
- Leased vehicles
  - □ PAK Ex. 10-27
- You won't be tested on the details of these rules. You just need to know that there are special rules regarding automobiles but I don't expect you to remember all the details.

- Amortization is the process of accounting for an amount over a period of time.
- Intangibles are amortized using the straight-line method.
- Major intangible assets that may be amortized are
  - Good will and other purchased intangibles
  - Computer software
  - Startup expenditures
  - Organizational expenditures
  - Pollution control facilities

1) Definition of Sec. 197 Intangible Asset

- Section 197 allows a deduction for the amortization of certain acquired intangible assets over a 15year period. These include
  - Goodwill
  - Intangible assets relating to the workforce
  - Licenses, permits
  - Franchises, trademarks, and trade names
- Internally-created patents and copyrights are not
   Sec. 197.

2) Research and experimental (R&E) expenditures (Ex. 10-32)

- Sec. 174 deals with the income tax treatment of R&E expenditures. A taxpayer can elect to
  - Expense in the year R&E expenses incurred
  - Deter and amortize over 60 months
  - Capitalize and write off only when the research project is abandoned or is worthless
- A taxpayer must make an election to either expense or to amortize in the initial year the R&E expenditures are incurred. These are the considerations:
  - Most taxpayers elect the expense to get immediate tax benefits
  - Deferral and amortization is desirable if there is NOL carryover.

3) Computer software (Ex. 10-33, 10-34)

- Development software treated as R&E, can be either expensed in the year the costs incurred or capitalized and amortized over 60 months at the taxpayer's election.
- Purchased software may be depreciated in serveal alternative ways
  - If part of the computer hardware, no special treatment depreciated with the computer under MACRS with the computer
  - If purchased separately, depreciated on a straight-line basis over 36 months.
  - If acquired in connection with a number of assets of an existing trade or business, it is considered Sec. 197 and must be amortized over 15 years.