# Taxation of Environmental Protection Machinery (Relevant to AAT Examination Paper 5: Principles of Taxation) Dr. Dora Lee

# INTRODUCTION

The Revenue Ordinance 2008 was gazetted on 27 June 2008 to give effect to, *inter alia*, the proposal in the 2008/09 Budget delivered by Hong Kong's Financial Secretary on 27 February 2008 to provide accelerated tax deductions for certain:

- environmental protection machinery (EPM) and
- environmental protection installations (EPIs)

as from 27 June 2008.

The proposal encourages the business community to use environmental protection facilities.

This article describes the taxation for EPM together with related examples. All references to statutory provisions in this article, unless otherwise specified, refer to sections in the Inland Revenue Ordinance (IRO).

# WHAT IS ENVIRONMENTAL PROTECTION MACHINERY?

EPM is defined in Part 1 of Schedule 17 of the IRO as:

- low noise construction machinery or plant registered under the Quality Powered Mechanical Equipment system administered by the Environmental Protection Department;
- air pollution control machinery or plant in compliance with the requirements under the Air Pollution Control Ordinance;
- waste treatment machinery or plant in compliance with the requirements under the Waste Disposal Ordinance; and
- wastewater treatment machinery or plant in compliance with the requirements under the Water Pollution Control Ordinance.

# TAX TREATMENT FOR SPECIFIED CAPITAL EXPENDITURE (SCE) on EPM ACQUIRED ON/AFTER 27 JUNE 2008

Any capital expenditure incurred on the provision of any EPM, excluding expenditure:

- that can be deducted under another section of the IRO; or
- incurred under a hire-purchase agreement,

by a person on or after 27 June 2008 can be fully deducted, subject to apportionment if the EPM is not 100% used in the production of chargeable profits (section 16I(1)).

# Example 1

On 27 June 2008, A Ltd purchased for \$100,000, a low noise construction machine (Machine I, annual allowance = 20%) registered under the Quality Powered Mechanical Equipment system administered by the Environmental Protection Department and used it for the production of chargeable profits. A Ltd prepares its accounts to 30 November each year.

As the expenditure was incurred on EPM on or after 27 June 2008 during the basis period from 1 December 2007 to 30 November 2008, A Ltd can claim a deduction of \$100,000 in respect of Machine I for the year of assessment of 2008/09.

# Example 2

On 27 June 2009, in addition to the low noise machine mentioned in Example 1, A Ltd acquired, for \$200,000, a waste treatment machine (Machine II, annual allowance = 20%) in compliance with the requirements under the *Waste Disposal Ordinance* (Cap. 354) by means hire purchase. The terms of hire purchase were as follows:

Down payment on 27 June 2009:	\$80,000.
12 equal monthly instalments:	\$10,500 each commencing from 27 July 2009

Even though the expenditure was incurred on the provision of EPM, A Ltd cannot claim a full deduction for Machine II as the machine was acquired by hire purchase. A Ltd can only claim depreciation allowances in respect of Machine II as follows:

	Machine II	
	<u>under hire purchase</u>	Allowance
Cash price	200,000	
Initial allowance ("IA") 60% x (\$80,000	+ 5 x \$10,000) <u>(78,000)</u>	78,000
	122,000	
Annual allowance ("AA") 20%	( <u>24,400)</u>	<u>24,400</u>
Written down value ("WDV") c/f	<u>97,600</u>	<u>102,400</u>

# TAX TREATMENT ON DIPOSAL OF EPM

If any EPM in respect of which a deduction has been allowed under section 16I in ascertaining the profits from a trade, profession or business is subsequently sold, the relevant proceeds of the sale shall, to the extent that they are not otherwise chargeable to tax and do not exceed the amount of the deduction, be treated as a trading receipt of the trade, profession or business, arising in or derived from Hong Kong and accruing:

- at the time of the sale; or
- if the sale occurs on or after the date on which the trade, profession or business is permanently discontinued, immediately before the date of discontinuance (section 16J(2)).

# Example 3

On 2 October 2009, A Ltd in Example 1 sold Machine I to an unrelated company for \$40,000.

As A Ltd has claimed a deduction of \$100,000 for Machine I for the year of assessment 2008/09, the total proceeds of \$40,000 will be:

- treated as a trading receipt; and
- chargeable to profits tax

for the year of assessment 2009/10.

#### Sale of EPM between connected persons

If, in relation to a sale of EPM,

- (a) the buyer is a person over whom the seller has control;
- (b) the seller is a person over whom the buyer has control;
- (c) both the seller and the buyer are persons over both of whom some other person has control; or
- (d) the sale is between a husband and his wife, not being a wife living apart from her husband,

the Commissioner of Inland Revenue (CIR) shall, if he is of the opinion that the sale price of the facility does not represent its true market value at the time of the sale, determine such true market value, and the amount so determined shall be treated as the proceeds of that sale (section 16J(4)).

#### Example 4

If A Ltd in Example 3 sold Machine I to a connected person for \$10,000 while the market value was \$40,000, the CIR can treat \$40,000 as the sale proceeds of Machine I.

#### Destruction of EPM

If any EPM in respect of which a deduction has been allowed to a person is subsequently destroyed:

- (a) the EPM shall be treated as if it had been sold immediately before the destruction; and
- (b) any insurance money or other compensation of any description received by the person in respect of the destruction and any money received by him in respect of the remains of the EPM shall be treated as the proceeds of that sale (section 16J(5)).

#### Time of sale of EPM

The time of the sale, in relation to any EPM, shall be taken as:

- the time of completion of the sale of the EPM; or
- 3/6

• the time when possession of the EPM is given,

whichever is the earlier (section 16J(6)).

# TAX TREATMENT OF EPM ACQUIRED BEFORE 27 JUNE 2008

Subject to an election under section 16K(7), if, immediately before 27 June 2008, a person owned and had in use any EPM, that person shall, for the purposes of section 16I, be deemed to have incurred, on 27 June 2008, SCE in relation to that machinery or plant (section 16K(1)).

#### Example 5

On 1 June 2008, A Ltd in Example 1 purchased for 50,000 an air pollution control machine (Machine III, AA = 20%) in compliance with the requirements under the Air Pollution Control Ordinance for the production of chargeable profits.

As Machine III was owned and used by A Ltd immediately before 27 June 2008, A Ltd was deemed to have incurred on 27 June 2008 SCE in relation to Machine III and A Ltd can claim a deduction of \$50,000 in respect of Machine III for the year of assessment 2008/09.

Subject to an election under section 16K(7), if, immediately before 27 June 2008, a person owned and had in use any machinery or plant that would otherwise have qualified as EPM but for the fact that that machinery or plant does not comply with the registration or other requirements under Part 1 of Schedule 17, that person shall, for the purposes of section 16I, be deemed to have incurred SCE in relation to that machinery or plant on the date on which the registration or other requirements are complied with (section 16K(2)).

#### Example 6

On 1 May 2008, B Ltd purchased for 80,000 a low noise machine (Machine IV, AA = 20%). B Ltd prepares its accounts to 30 June each year. Machine IV did not comply with the registration requirement under the Quality Powered Mechanical Equipment system administered by the Environmental Protection Department until 1 August 2009. The written down value of the 20% pool brought forward from the year of assessment 2007/08 was \$1,000,000. There were no other movements in plant and machinery for the year of assessment 2008/09.

As the registration requirement was complied with on 1 August 2009, B Ltd is deemed to have incurred SCE in relation to Machine IV on 1 August 2009 and can elect for accelerated deduction under section 16K(7) (see below) in respect of Machine IV for the year of assessment 2009/10 (section 16K(2))

For the year of assessment 2008/09, B Ltd can only claim depreciation allowances in respect of the 20% pool (including Machine IV) as follows:

	20% <u>Pool</u>	Allowance
WDV b/f	1,000,000	
Machine IV	800,000	
IA 60%	<u>(480,000)</u>	480,000
	1,320,000	
AA 20%	<u>(264,000)</u>	<u>264,000</u>
WDV c/f	<u>1,056,000</u>	<u>744,000</u>

The SCE deemed to have been incurred by a person in relation to any machinery or plant under sections 16K(1) and 16K(2) shall be the capital expenditure incurred on the provision of that machinery or plant reduced by the aggregate of:

- the amount of the initial allowances, if any, under s.37(1), 37A(1) or 39B(1); and
- the amount of the annual allowances, if any, under s.37(2), 37A(3) or 39B(2),

made to the person in respect of the capital expenditure in all prior years of assessment (section 16K(3)).

#### Example 7

The SCE deemed to be incurred by B Ltd (see Example 5) on Machine IV on 1 August 2009 was \$256,000 (see Example 5), being calculated as follows:

	Machine IV	<u>Allowance</u>
Cash price	800,000	
IA 60%	<u>(480,000)</u>	480,000
	320,000	
AA 20%	<u>(64,000)</u>	<u>64,000</u>
WDV c/f	<u>256,000</u>	<u>544,000</u>

# ELECTION UNDER SECTION 16K(7) FOR ACCELERATED DEDUCTION IN RESPECT OF EPM

Where a person is deemed to have incurred SCE under either of section 16K(1) and (2) (the relevant provision) in the basis period for any year of assessment, the relevant provision applies to him only if he, at any time within one month after the date on which a notice of the assessment made in respect of that year of assessment under section 59 is given under section62, elects in writing that the relevant provision shall so apply to him (section 16K(7)). An election under section 16K(7), once made, is irrevocable (section 16K(8)).

#### Example 8

If B Ltd wants to obtain an accelerated deduction in respect of Machine IV for the year of assessment 2009/10, it can make such an election within one month after the notice of assessment 2009/10. B Ltd may make such election in its profits tax return for the year of assessment 2009/10. On making a valid election, B Ltd can claim the following deduction for the year of assessment 2009/10:

	Pool	<b>Deduction</b>
WDV b/f	\$1,056,000	
Unallowed amount of Machine IV	<u>(256,000)</u>	256,000
	800,000	
AA 20%	<u>(160,000)</u>	<u>160,000</u>
WDV c/f	<u>640,000</u>	<u>416,000</u>

If B Ltd does not make such an election, the annual allowance in respect of Machine IV will continue to be calculated in the 20% pool for the year of assessment 2009/10.

Once B Ltd has made a valid election, it cannot subsequently revoke the election.

A taxpayer should make the election in writing and lodge it within one month after the date of the relevant notice of assessment. If the taxpayer makes such an election in its profits tax return, the Inland Revenue Department would consider this when raising the assessment.

#### CONCLUSION

The statutory provisions in relation to EPM became operative as from 27 June 2008. This article explains the deduction for capital expenditure incurred on EPM on/before/after 20 June 2008 as well as the tax treatment for the sale proceeds of EPM. Students preparing for Paper 5: Principles of Taxation in 2009 and after should know how to apply the above provisions as well as other examinable provisions.