



Revised Standard Cost Model of the Environment Protection (Scheduled Premises and Exemptions) Regulations 2007

Revised Standard Cost Model of the Environment Protection (Scheduled
Premises and Exemptions) Regulations 2007

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1 Introduction

This document sets out the Environment Protection Authority's (EPA) Standard Cost Model (SCM) Report associated with the new *Environment Protection (Scheduled Premises and Exemptions) Regulations 2007* (the new regulations).

This Report replaces the previous SCM Report published in April 2007 which contains a number of spreadsheet-modelling errors that were detected in a recent review. Given that these errors have a material impact on the administrative cost savings calculated for the new regulations, it has been necessary for EPA to issue this revised SCM Report which contains the correct cost estimates. Please note that the errors detected in the previous SCM Report were spreadsheet-modelling errors only. There were no issues with the underlying analysis, assumptions or methodology that underpinned the SCM and the errors related only to the calculation of the burden for the now replaced regulations. A summary of the identified errors is contained in Appendix A.

1.1 Background

The broad environmental framework that governs environmental management in Victoria is driven by the *Environment Protection Act 1970* (the Act), *State Environmental Protection Policies* (SEPPs) and *Waste Management Policies* (WMPs). The framework prescribes the environmental requirements that all Victorians must adhere to. Within this framework is a works approval and licence system (the system) which encompasses businesses whose activities pose a potentially high risk to the environment. The system is designed to provide the EPA with greater monitoring and oversight of these businesses to ensure that they meet their environmental obligations under the Act.

The *Environment Protection (Scheduled Premises and Exemptions) Regulations (the regulations)* specify which businesses are in the system. The regulations determine the number of businesses in the system, not the specific requirements. Elements of the Act, SEPPs, WMPs and other subordinate regulations stipulate the requirements on businesses in the system, such as the information (administrative) requirements.

Given that the regulations stipulate which businesses are in the system, the SCM measures the administrative burden on businesses in the system and the change in the burden that resulted from the introduction of the new regulations in June 2007.

The structure of this report follows the suggested reporting approach detailed in Attachment B of the *Interim Victorian Standard Cost Model Manual*¹.

1.2 Acknowledgements

In undertaking this analysis, EPA relied upon analysis provided by KPMG. Neither KPMG nor any member or employee of KPMG undertakes responsibility arising in any way from reliance placed by a third party on this report. EPA is also grateful to the Victorian Competition and Efficiency Commission (VCEC) for its feedback in developing this SCM Report.

¹ Department of Treasury and Finance (2006), *Interim Victorian Standard Cost Model Manual*, Version 1.1, Melbourne, October.

2 Background

Under the *Reducing the Regulatory Burden* initiative, the Victorian Government has made a commitment to cut the existing administrative burden of regulation by 15 per cent over three years and 25 per cent over five years.

Progress towards achieving targeted reductions in administrative burdens will be measured using the Standard Cost Model (SCM).

The SCM is designed to produce indicative estimates of burdens, and to develop a strong understanding of the drivers of these costs. However, the measurement results should not be regarded as being representative in statistical terms because of the limited sample size and non-random sample design of the measurement exercise.

2.1 The nature of the administrative burden

As discussed in the section 1.1, the SCM will measure the former administrative burden on businesses in the system and the change in burden that resulted from the introduction of the new regulations. It is important to note that the information obligations on business will not change under the new regulations. The change in administrative burden has been driven completely by the change in the number of businesses that are in the system.

2.1.1 Information obligations

Businesses in the system are required to meet two information obligations which give rise to a host of associated data requirements and administrative activities. These are discussed below.

Works approvals applications

Works approvals are designed to ensure that development proposals adequately address potential environmental risks before construction begins. Works approvals involve EPA granting approval of the design of the plant prior to construction or major modification of a facility to ensure that the design will deliver environmental outcomes that meet the requirements of the Act. A works approval application has a number of data requirements and associated administrative activities.

Licence reporting

Licensing is a tool used to manage the ongoing operations of premises to ensure that they operate in a way that minimises the risk of any environmental damage. EPA uses licences to ensure that specific types of premises meet their environmental obligations under the Act. The EPA requires licence holders to provide annual reports which demonstrate that their environmental obligations under the Act are being met. The reporting involves a range of data requirements and associated administrative activities.

3 Overview of the burden

The new regulations are expected to reduce the administrative burden on Victorian business. The net reduction is shown in Table 3.1 below.

Table 3-1: The net impact of the new regulations on the administrative burden

Information obligation	Administrative burden under new regulations	Administrative burden under former regulations	Change to the burden (Net impact)
Works approval application	\$1,421,835	\$1,701,240	-\$279,405
Licence reporting	\$13,378,100	\$16,012,200*	-\$2,634,100
Total	\$14,799,935	\$17,713,440	-\$2,913,505

* Amended in this report

The new regulations are expected to reduce the administrative burden on Victorian businesses overall by an estimated \$2.91 million per year over the life of the regulations which represents an estimated 16.45 per cent reduction on the administrative burden that was imposed under the former regulations. This is a material administrative saving and is in line with the Victorian Government's desired policy objective of reducing the overall administrative burden on business by 25 per cent over the next five years.

Note, that while administrative savings will be realised from a whole-of-business perspective, some businesses that have entered the system as a result of the new regulations will incur a higher administrative burden while other businesses that exit the system will have decreased burden. Given that more businesses are expected to exit the system rather than enter it, the burden on Victorian businesses, overall, is expected to fall.

4 Summary of SCM measurement exercise

4.1 Overview of the exercise

The SCM measurement exercise undertook a rigorous process of consultation consisting of ten face-to-face consultations of a range of businesses from different industry categories and a survey sent out to all businesses captured under the former regulations. The data collected from the survey and face-to-face interviews was used to populate the SCM.

4.2 Cost parameter assumptions

4.2.1 Tariff (or price)

The following is an overview of the assumptions used to calculate the tariff per business.

1. Two wage rates are used in the SCM; one for medium-large businesses and another for small businesses. The wage rate used for medium-large business is \$50 per hour. The wage rate used by small businesses is \$40 per hour. These wage rates are the average wage rates reported by business in the survey.
2. The default overhead percentage rate of 75 per cent is used.² As such, the all-inclusive opportunity cost of staff time³ used for medium-large businesses is \$87.50 per hour and for small businesses \$70 per hour.
3. The external tariff estimate is \$150 per hour. This did not vary for the business size, since the services performed by external consultants and service providers were the same across all businesses. This estimate is the average hourly rate reported by businesses in the survey.
4. No costs for monitoring equipment were included in the tariff estimates. In the interviews/survey *all* businesses reported that any monitoring equipment purchased by the business is to ensure compliance with the environmental requirements of the Act and not to comply with the system.
5. No other significant costs were included in the tariff estimates such as depreciation rates or capital expenditure. In the interviews/survey *all* businesses reported that the system does not impose compliance costs on business; it only imposes administrative costs. As such, business reported that no major capital expenditure was necessary to comply with the system.

4.2.2 Time

The ten face-face interviews provided base time estimates for each administrative activity. Given that all of the businesses interviewed were medium-large in size, the estimates obtained are sufficient for measuring the burden on medium-large businesses.

The estimated time for each administrative activity is reduced by 50% for small businesses in light of the survey finding that the amount of time required by small businesses to undertake administrative activities is, on average, 50 per cent lower.

² The VCEC advises that an average, economy-wide percentage rate of 75 per cent can be used for both on-costs and overheads in the absence of more specific cost data.

³ All-inclusive opportunity cost of staff time = Wage rate inflated by the default overhead rate of 75 per cent.

4.2.3 Quantity

The number of businesses in the system

The number of businesses that were captured under the former regulations are as follows:⁴

- 68 businesses, on average, required a works approval each year; and
- 996 businesses were licensed.

In developing the new regulations, the EPA estimated that the number of businesses that will be captured under the new regulations are as follows:⁵

- 57 businesses, on average, will require a works approval each year; and
- 832 will be licensed.

Business size

The number of small businesses in the system is assumed to be 12 per cent of all businesses, based on the relative proportion of small businesses that provided a survey response. This forms a key assumption in the SCM and is discussed further in section 4.3.2. The table below shows the number of medium-large and small businesses that are captured under both regulations using this assumption.

Table 4-1: The number of businesses captured in the system

Business size	Works approval		Licence	
	Former regulations	New regulations	Former regulations	New regulations
All businesses (100 per cent)	68	57	996	832
Medium-large businesses (88 per cent)	60	50	876	732
Small businesses (12 per cent)	8	7	120	100

Industry segmentation

Survey responses were received from a broad cross-section of businesses in all the major industry categories. The high-level estimates of time and cost reported by businesses to complete each information obligation did not vary with the industry category of the businesses. This suggests that the administrative burden on businesses is the same or very close across all the industry categories with the implication that there was no apparent need to account for industry segmentation in the SCM.

Compliance rate

The default compliance rate of 100 per cent is assumed. The EPA has no reason to expect to expect less than 100 per cent compliance given that all businesses must comply with their administrative requirements as a condition of their works approval or licence.

⁴ Source: EPA Victoria

⁵ Source: EPA Victoria

4.2.4 Frequency

The assumed frequency for licence reporting is one. Given that licence reporting occurs on an annual basis, respondents in both in the interview consultations and the survey were asked to estimate the time and associated cost to meet the administrative requirements each year.

The assumed frequency for a works approval application is also one. While most businesses do not generally apply for a works approval every year, respondents were asked, for those years in which they do apply for a works approval, to estimate the annual time and associated cost to meet the administrative requirements.

4.3 Empirical data collection

The data collection strategy consisted of ten face-to-face interviews and an online survey that was sent-out to all businesses in the system.

4.3.1 The ten face-to-face interviews

The interviews form the basis of much of the input data into the SCM. In each interview the business concerned was asked to provide an internal and external estimate of the time currently required to complete the administrative activities under each information obligation. Given that the information obligations will not change under the new regulations, it was not necessary to ask for time estimates under the new regulations as they are assumed to be the same.

The ten businesses chosen for interviews were selected on the basis of their industry category. At least one business from each major industry category was selected. In addition, all of the ten businesses selected undertook annual licence reporting while eight of them had recently completed a works approval. This ensured that there was a good cross-spectrum of responses on the administrative burden imposed by each information obligation. All of the businesses interviewed were medium-large in size as there were no small businesses available for interview during the scheduled interview period.

It is important to note that most of the interviews were conducted before KPMG received formal training from the VCEC on the operation of the SCM. Only three of the interviews were conducted after the training.⁶ Following the training, KPMG developed a much better understanding of the SCM and was able to adapt its interview approach to better extract the information that is required for the SCM. As such, the results obtained from the later interviews contain information that is more pertinent for the purposes of the SCM and are accordingly given a higher weighting than the results obtained from the earlier interviews.

4.3.2 The online survey

A survey was sent-out to all businesses that were in the system. The survey asked businesses for high level estimates of the time and associated required to complete each information obligation, including the hourly cost of staff that complete these tasks. The survey data was very comprehensive. Ninety-six businesses responded to the survey, representing almost 220 licensed premises. This was over 20 per cent of all premises holding a licence at that time. The data extracted from the survey was used to validate the data obtained from the interviews and to develop key assumptions. Major findings from the survey are outlined in the section below.

Key findings from the survey

The major findings for the survey include:

- 12 per cent of all businesses in the system are small businesses⁷ based on the relative proportion of small businesses that submitted answers. This forms a key assumption.
- The magnitude of the administrative burden imposed on a business depends on the size of the business. The survey results indicate that, on average, the amount of time required by small businesses to undertake administrative activities is 50 per cent lower than that on a medium-large business. This forms a key assumption;

⁶ KPMG received formal training on the operation of the SCM from the VCEC on the 14th of November, 2006 at the Old Treasury Building after conducting seven interviews.

⁷ The ABS defines a small business as having 20 employees or less.

- The wage rates of the persons used to undertake the administrative activities varied with the size of the business. On average the wage rate of persons who undertake administrative activities at medium-large businesses was \$50 per hour, \$10 more per hour than for their small business counterparts. These wage rates are used in the SCM; and
- The magnitude of the administrative burden imposed on business is the same or very close (the difference is immaterial) across all the industry category of scheduled premises. This forms a key assumption.

4.4 Empirical data standardisation process

The data collected from the interviews and survey was standardised as follows:

1. Time estimates for each administrative activity were compared across interviews. The results obtained from the last three interviews were given a higher weight than the first seven interviews. The results from these interviews were used to populate the SCM;
2. A qualitative assessment was made of the results obtained from the last three interviews to determine how long it would take a normally efficient business to carry-out each administrative activity. This assessment was relatively straightforward given that, overall, there was little variation in the time estimates obtained for most of the administrative activities;
3. Expert opinion from the EPA was used in two instances to determine the most appropriate time estimate for an administrative activity. The last company interviewed had not recently completed a works approval. As such, there were only two reliable time estimates for the administrative activities involved in a works approval. For two of these activities there was a slight difference in the time estimates obtained. Expert opinion from the EPA was used in these instances to determine the most appropriate estimate. In both instances the EPA used the higher of the two estimates as this ensured that a conservative calculation of the administrative burden was undertaken⁸; and
4. The aggregate cost calculated using the standardised time estimates for each information obligation (which is the sum of the cost of each underlying administrative activity) was compared with the high-level cost estimates of these information obligations reported by businesses in their survey responses. There is a high degree of consistency in both sets of costs which helps to validate the method and assumptions used in this SCM.

Variation to the required SCM approach

This SCM Report essentially uses the results of three interviews to calculate the time required by a normally efficient business to undertake the administrative activities involved in licence reporting and two interviews for the time required in a works approval application. The EPA acknowledges that this is less than the *Interim Victorian Standard Cost Model Manual's* requirement of using five interviews. However, after discussion with the VCEC it was agreed that this was sufficient given that the interviews were conducted during the development and implementation of the SCM by the Victorian Government.⁹

⁸ This method is not strictly in line with the SCM method but is viewed by the EPA as the most practical approach given the data constraints.

⁹ Advice received from the VCEC on the 1st of February, 2007

A. Explanation of the errors contained in the original SCM Report

This section outlines the modelling errors identified during a recent review of the SCM Report and subsequently rectified in this revised Report. The following errors were identified in the medium and large business segment component of the SCM model:

- Greenhouse gas reporting was required under the former regulations and should have been included in the SCM calculations. The previous SCM model did not include the population that was required to complete this administrative requirement. Failing to including the correct population of 876 medium and large businesses underestimated the former burden¹⁰ by \$919,800;
- The calculations and preparation requirements for the review of waste acceptance, management, treatment, and/or storage procedures was required under the former regulations and should have been included in the SCM model. Omission of the population of 876 medium and large businesses underestimated the former burden by \$383,250; and
- The annual requirement to gather information for the review inspection and maintenance procedures under the former regulations was not included. Adjusting for this error increases the former burden by \$383,250.

The following errors were identified in the small business component of the SCM model:

- The administrative burden for the review of waste of acceptance, management, treatment, and/or storage for small business should be the same under the former regulations and the new regulations. The price used in the calculation of the small business costs for the former regulations was the same as the price used for the medium and large business calculation. Including the correct price (\$175 per small business) reduces the estimate of the 'existing burden' by \$63,000¹¹;
- A similar translation error was identified for the finalisation of reporting obligations. The price included in the small business calculation was the same price used for the medium and large businesses. Adjusting for this error reduces the former burden by \$261,000.¹²; and
- The annual requirement to gather information for the review inspection and maintenance procedures under the former regulations was not included. Adjusting for this error increases the former burden by \$21,000.

¹⁰ Former burden refers the administrative burden associated with the former regulations

¹¹ This figure is the net impact of the administrative costs associated with gathering information and calculation and preparation of materials

¹² This figure is the net impact of the administrative costs associated with calculation, preparation, finalisation and transmission of materials

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(SCHEDULED PREMISES AND EXEMPTIONS) REGULATIONS 2007

B. SCP Spreadsheets

Table A.1: The results sheet for medium-large businesses

Environment Protection (Scheduled Premises and Exemptions) Regulations 2007 Results sheet for medium and large businesses										
	Standardised time		Burden under new regulations				Burden under former regulations			
	Internal time	External time	Price (\$)	Frequency	Population	Cost of new burden (\$)	Price (\$)	Frequency	Population	Cost of former burden (\$)
Works approval application										
Collate plans & specifications for control equipment										
Gather the information	13		1,137.5	1.0	50.0	56,875.0	1,137.5	1.0	60.0	68,250.0
Calculation and preparation	12.5		1,093.8	1.0	50.0	54,687.5	1,093.8	1.0	60.0	65,625.0
Collate supporting technical information										
Gather the information	19		1,662.5	1.0	50.0	83,125.0	1,662.5	1.0	60.0	99,750.0
Calculation and preparation	17.5		1,531.3	1.0	50.0	76,562.5	1,531.3	1.0	60.0	91,875.0
Undertake client liaison meetings										
Gather the information	7.5		656.3	1.0	50.0	32,812.5	656.3	1.0	60.0	39,375.0
Calculation and preparation	7.5		656.3	1.0	50.0	32,812.5	656.3	1.0	60.0	39,375.0
Undertake an environmental audit										
Gather the information	5	7.5	1,562.5	1.0	50.0	78,125.0	1,562.5	1.0	60.0	93,750.0
Calculation and preparation	5	7.5	1,562.5	1.0	50.0	78,125.0	1,562.5	1.0	60.0	93,750.0
Finalise the application										
Finalisation and transmission	20		1,750.0	1.0	50.0	87,500.0	1,750.0	1.0	60.0	105,000.0
Pay the application fee										
Finalisation and transmission	1	100	15,087.5	1.0	50.0	754,375.0	15,087.5	1.0	60.0	905,250.0
Sub-total						1,335,000.0				1,602,000.0
Licence reporting										
Undertake annual performance review										
Gather the information	40		3,500.0	1.0	732.0	2,562,000.0	3,500.0	1.0	876.0	3,066,000.0
Calculation and preparation	30		2,625.0	1.0	732.0	1,921,500.0	2,625.0	1.0	876.0	2,299,500.0
Reaching agreement	30		2,625.0	1.0	732.0	1,921,500.0	2,625.0	1.0	876.0	2,299,500.0
Prescribed waste report										
Finalisation and transmission	10		875.0	1.0	732.0	640,500.0	875.0	1.0	876.0	766,500.0
Greenhouse gas report										
Finalisation and transmission	12		1,050.0	1.0	732.0	768,600.0	1,050.0	1.0	876.0	919,800.0
Review inspection and maintenance procedures										
Gather the information	5		437.5	1.0	732.0	320,250.0	437.5	1.0	876.0	383,250.0
Calculation and preparation	5		437.5	1.0	732.0	320,250.0	437.5	1.0	876.0	383,250.0
Review incident procedures										
Gather the information	5		437.5	1.0	732.0	320,250.0	437.5	1.0	876.0	383,250.0
Calculation and preparation	5		437.5	1.0	732.0	320,250.0	437.5	1.0	876.0	383,250.0
Review waste acceptance, management, treatment and / or storage procedures										
Gather the information	5		437.5	1.0	732.0	320,250.0	437.5	1.0	876.0	383,250.0
Calculation and preparation	5		437.5	1.0	732.0	320,250.0	437.5	1.0	876.0	383,250.0
Finalise reporting obligations										
Calculation and preparation	10		875.0	1.0	732.0	640,500.0	875.0	1.0	876.0	766,500.0
Finalisation and transmission	10	15	3,125.0	1.0	732.0	2,287,500.0	3,125.0	1.0	876.0	2,737,500.0
Sub-total						12,663,600.0				15,154,800.0
TOTAL						13,998,600.0				16,756,800.0

REVISED STANDARD COST MODEL OF THE ENVIRONMENT PROTECTION
(SCHEDULED PREMISES AND EXEMPTIONS) REGULATIONS 2007

Table A.2: The results sheet for small businesses

Environment Protection (Scheduled Premises and Exemptions) Regulations 2007 Results sheet for small businesses										
	Standardised time		Burden under new regulations				Burden under former regulations			
	Internal time	External time	Price (\$)	Frequency	Population	Cost of new burden (\$)	Price (\$)	Frequency	Population	Cost of former burden (\$)
Works approval application										
Collate plans & specifications for control equipment										
Gather the information	6.5		455.0	1.0	7.0	3,185.0	455.0	1.0	8.0	3,640.0
Calculation and preparation	6.3		437.5	1.0	7.0	3,062.5	437.5	1.0	8.0	3,500.0
Collate supporting technical information										
Gather the information	9.5		665.0	1.0	7.0	4,655.0	665.0	1.0	8.0	5,320.0
Calculation and preparation	8.75		612.5	1.0	7.0	4,287.5	612.5	1.0	8.0	4,900.0
Undertake client liaison meetings										
Gather the information	3.75	7.5	262.5	1.0	7.0	1,837.5	262.5	1.0	8.0	2,100.0
Calculation and preparation	3.75	7.5	262.5	1.0	7.0	1,837.5	262.5	1.0	8.0	2,100.0
Undertake an environmental audit										
Gather the information	2.5		737.5	1.0	7.0	5,162.5	737.5	1.0	8.0	5,900.0
Calculation and preparation	2.5		737.5	1.0	7.0	5,162.5	737.5	1.0	8.0	5,900.0
Finalise the application										
Finalisation and transmission	10		700.0	1.0	7.0	4,900.0	700.0	1.0	8.0	5,600.0
Pay the application fee										
Finalisation and transmission	0.5	100	7,535.0	1.0	7.0	52,745.0	7,535.0	1.0	8.0	60,280.0
Sub-total						86,835.0				99,240.0
Licence reporting										
Undertake annual performance review										
Gather the information	20		1,400.0	1.0	100.0	140,000.0	1,400.0	1.0	120.0	168,000.0
Calculation and preparation	15		1,050.0	1.0	100.0	105,000.0	1,050.0	1.0	120.0	126,000.0
Reaching agreement	15		1,050.0	1.0	100.0	105,000.0	1,050.0	1.0	120.0	126,000.0
Prescribed waste report										
Finalisation and transmission	5		350.0	1.0	100.0	35,000.0	350.0	1.0	120.0	42,000.0
Greenhouse gas report										
Finalisation and transmission	6		420.0	1.0	100.0	42,000.0	420.0	1.0	120.0	50,400.0
Review inspection and maintenance procedures										
Gather the information	2.5		175.0	1.0	100.0	17,500.0	175.0	1.0	120.0	21,000.0
Calculation and preparation	2.5		175.0	1.0	100.0	17,500.0	175.0	1.0	120.0	21,000.0
Review incident procedures										
Gather the information	2.5		175.0	1.0	100.0	17,500.0	175.0	1.0	120.0	21,000.0
Calculation and preparation	2.5		175.0	1.0	100.0	17,500.0	175.0	1.0	120.0	21,000.0
Review waste acceptance, management, treatment and / or storage procedures										
Gather the information	2.5		175.0	1.0	100.0	17,500.0	175.0	1.0	120.0	21,000.0
Calculation and preparation	2.5		175.0	1.0	100.0	17,500.0	175.0	1.0	120.0	21,000.0
Finalise reporting obligations										
Calculation and preparation	5		350.0	1.0	100.0	35,000.0	350.0	1.0	120.0	42,000.0
Finalisation and transmission	5	15	1,475.0	1.0	100.0	147,500.0	1,475.0	1.0	120.0	177,000.0
Sub-total						714,500.0				857,400.0
TOTAL						801,335.0				956,640.0