



Environmental Management Calculation Protocol

© 2014 State of NSW and Environment Protection Authority

The State of NSW and the Environment Protection Authority are pleased to allow this material to be reproduced in whole or in part for educational and non-commercial use, provided the meaning is unchanged and its source, publisher and authorship are acknowledged.

Published by:

The Environment Protection Authority

59 Goulburn Street, Sydney NSW 2000

PO Box A290, Sydney South NSW 1232

Phone: +61 2 9995 5000 (switchboard)

Phone: 131 555 (environment information and publications requests)

Fax: +61 2 9995 5999

TTY users: phone 133 677, then ask for 131 555

Speak and listen users: phone 1300 555 727, then ask for 131 555

Email: info@environment.nsw.gov.au

Website: www.epa.nsw.gov.au

Report pollution and environmental incidents

Environment Line: 131 555 (NSW only) or info@environment.nsw.gov.au

See also www.epa.nsw.gov.au

ISBN 978 1 74359 281 6

EPA 2014/0295

April 2014

Contents

About this document	iv
Glossary	v
1. Overview of EPA’s risk-based licensing system	1
2. Calculation of licence administrative fees	3
3. Determining the environmental management category	5
3.1 Calculating the environmental management score based on licensee compliance history/regulatory response	5
3.2 Calculating the total environmental management score reduction	8
3.2.1 Licensee environmental management systems and practices	8
3.2.2 Environmental improvement works	9
3.2.3 Environmental improvement programs	10
3.2.4 Calculation of total environmental management score reduction	11
3.3 Calculating the total environmental management score	11
3.4 Calculating the environmental management category	11
Tables	
Table 1 Environmental management categories and corresponding environmental management factors	4
Table 2 Regulatory actions, criteria considered and corresponding environmental management weightings	5
Table 3 Consideration of ‘trend’ in EPA regulatory actions over a 3-year period	7
Table 4 Licensee environmental management systems and practices and corresponding score reductions	9
Table 5 Score reduction for environmental improvement works	10
Table 6 Score reduction for environmental improvement programs	10
Table 7 Total environmental management score and corresponding environmental management category	11

About this document

This document is the Environmental Management Calculation Protocol (the Protocol) referred to in clause 10 of the Protection of the Environment Operations (General) Regulation 2009 (the General Regulation) from 1 July 2015. In April 2014, the Protection of the Environment (General) Amendment (Licensing Fees) Regulation 2014 (the Amendment Regulation) was made. The Amendment Regulation introduces changes to the General Regulation progressively from 1 July 2014. The Amendment Regulation also establishes the risk-based licensing framework, including the Protocol, commencing from 1 July 2015. Changes to licence fees apply from 1 July 2016. All references to the General Regulation mentioned in this document commence on 1 July 2015.

The Protocol sets out the matters and methods the Environment Protection Authority (EPA) will use to determine the environmental management category allocated to holders of environment protection licences issued under the *Protection of the Environment Operations Act 1997* (POEO Act).

The environmental management category will be used to calculate the administrative fee to be paid by environment protection licensees in accordance with clause 10 of the General Regulation.

The EPA may vary the Protocol from time to time by notice in the *NSW Government Gazette*.

The Protocol will commence on 1 July 2015.

Glossary

Amendment Regulation	is the Protection of the Environment Operations (General) Amendment (Licensing Fees) Regulation 2014.
Clean up notices	are as set out in Part 4.2 of the POEO Act.
Enforceable undertakings	as referred to in this Protocol are set out in section 253A of the POEO Act. Enforceable undertakings in relation to the <i>Waste Avoidance and Resource Recovery Act 2001</i> , <i>Environmentally Hazardous Chemicals Act 1985</i> and the <i>Ozone Protection Act 1989</i> are excluded from the operation of this Protocol.
Environmental improvement programs	are pollution reduction programs (under section 68 of the POEO Act) that have been initiated by the licensee by way of an application made to the EPA to vary their licence under section 58(3) of the POEO Act. The environmental improvement programs must be programs outside of those required to achieve compliance with legislative requirements under the POEO Act or Regulations or any existing conditions on the licence at the time that the environmental improvement program is added to the licence.
Environmental improvement works	are management measures or works voluntarily completed by the licensee that the EPA considers have led to a demonstrated environmental improvement. Environmental improvement works are described in section 3.2.2 of this Protocol. The environmental improvement works must be outside those works required to achieve compliance with licence conditions or legislative requirements under the POEO Act or Regulations. Environmental improvement works, if completed, are required to be reported in a licensee's annual return.
Environmental Management Calculation Protocol (this document)	sets out the matters and methods the EPA will use to determine the environmental management category allocated to holders of licences issued under the POEO Act.
Environmental management category (A, B, C, D or E)	is allocated to a licence holder based on the licence holder's environmental performance. From 1 July 2015 the environmental management category is used to calculate the administrative fee in accordance with clause 10 of the General Regulation.
Environmental management factors	are listed in the table in clause 10 of the General Regulation (and reproduced as Table 1 of this Protocol). Environmental management factors are the multipliers corresponding to each environmental management category and are used to calculate the licence administrative fee.

Environmental management score	based on licensee compliance history/EPA regulatory response is calculated using the methodology set out in section 3.1 of this Protocol. The environmental management score is the sum of the yearly regulatory score over 3 years.
Environmental management systems and practices	means an environmental management system certified to ISO 14001, and any other systems and practices listed in Table 4 of this Protocol.
Environmental management weighting	listed in Table 2 of this Protocol, is linked to regulatory actions taken over the past 3 years and reflects the significance of the regulatory action taken. The weighting is used to calculate the environmental management score.
Formal warnings	are formal warnings issued for any suspected or potential contravention of the POEO Act or Regulations, including the suspected or potential commission of an offence under the POEO Act or Regulations. Formal warnings issued for any suspected or potential contravention of the <i>Waste Avoidance and Resource Recovery Act 2001</i> , <i>Environmentally Hazardous Chemicals Act 1985</i> and the <i>Ozone Protection Act 1989</i> are excluded from the operation of this Protocol.
General Regulation	is the Protection of the Environment Operations (General) Regulation 2009 as in force from time to time.
Inspections – incident related	<p>are inspections in response to:</p> <ul style="list-style-type: none"> (a) an incident (b) a verified complaint (being a complaint that is verified by the EPA or the licence holder as being directly attributable to the licensed premises) or (c) non-compliance with licence conditions or legislative requirements under the POEO Act or Regulations. <p>It also includes follow up inspections determined by the EPA to be related to the incident, verified complaint or non-compliance</p>
Mandatory environmental audits	are as set out in Part 6.2 of the POEO Act.
Official cautions	are official cautions issued to a licensee for any offence in the POEO Act or Regulations. Official cautions issued for offences under the <i>Waste Avoidance and Resource Recovery Act 2001</i> , <i>Environmentally Hazardous Chemicals Act 1985</i> and the <i>Ozone Protection Act 1989</i> are excluded from the operation of this Protocol. Official cautions for late or non-submission of an annual return are not included in this regulatory action for the purposes of this Protocol.

Official cautions for late or non-submission of an annual return	are official cautions issued to a licensee for the late or non-submission of an annual return, the requirement of which is included as a licence condition under section 64 of the POEO Act.
Penalty notices	are all penalty notices issued by the EPA for offences prescribed by schedule 6 of the General Regulation, with the exception of penalty notices in relation to offences under the <i>Environmentally Hazardous Chemicals Act 1985</i> and the <i>Ozone Protection Act 1989</i> . Penalty notices for late or non-submission of an annual return are not included in this regulatory action for the purposes of this Protocol.
Penalty notices for late or non-submission of an annual return	are penalty notices that are issued for the late or non-submission of an annual return, the requirement of which is included as a licence condition under section 64 of the POEO Act.
POEO Act	is the <i>Protection of the Environment Operations Act 1997</i> .
Pollution reduction programs	are, for the purposes of this Protocol, programs initiated or directed by the EPA to carry out works or to install plant for the purposes of preventing, controlling, abating or mitigating pollution. Pollution reduction programs are imposed on a licensee by the EPA by way of a licence condition under section 68 of the POEO Act.
Prevention notices	are as set out in Part 4.3 of the POEO Act.
Regulations	are any Regulations made under the POEO Act, as in force from time to time.
Successful prosecutions	are where a licensee has been convicted of an offence under the POEO Act 1997 and Regulations. Tier 1 prosecutions are as set out in Part 5.2 of the POEO Act and for the purposes of this Protocol do not include prosecutions for offences under the <i>Ozone Protection Act 1989</i> . Tier 2 prosecutions are as defined in section 114 of the POEO Act, and for the purposes of this Protocol do not include prosecutions for offences under the <i>Waste Avoidance and Resource Recovery Act 2001</i> , <i>Environmentally Hazardous Chemicals Act 1985</i> and the <i>Ozone Protection Act 1989</i> .
Suspension of licence	is as set out in section 79 of the POEO Act.
Total environmental management score	is calculated using the methodology set out in section 3.3 of this Protocol. The total environmental management score is the environmental management score minus the total environmental management score reduction. The total environmental management score is compared to threshold values set out in Table 5 at section 3.4 of this Protocol to determine the environmental management category.

Total environmental management score reduction	is calculated using the methodology set out in section 3.2 of this Protocol. The environmental management score reduction is based on environmental management systems and practices a licensee has in place, environmental improvement programs initiated by the licensee and completed environmental improvement works. The total environmental management score reduction is deducted from the environmental management score.
Year 1	is the most recent licence reporting period (this is generally a 12-month period).
Year 2	is the licence reporting period prior to year 1.
Year 3	is the licence reporting period prior to year 2.
Yearly regulatory score	is calculated using the methodology set out in section 3.1 of this Protocol. The yearly regulatory score is based on a licensee's compliance history for each year considered as part of the risk assessment. The yearly regulatory score is used in calculating the environmental management score.

1. Overview of EPA's risk-based licensing system

The EPA's risk-based licensing system aims to ensure that all licensees receive an appropriate level of regulation based on the level of risk they pose.

The EPA will assess the site-specific risks posed by licensed premises and identify any environmental issues that a licensee needs to address and where the EPA needs to focus its regulatory attention.

The risk assessments will consider three components:

1. the day-to-day operations at the site, assessing the types of environmental media relevant to the premises (air, odour, water and noise emissions)
2. the pollutant incident risk at the premises and
3. the environmental management performance of the licensee.

During the assessment of the first two components, the EPA will take into account:

- the type and nature of emissions from the premises
- pollution control measures used at the premises
- proximity to sensitive environments and receptors (including residences) and
- level of sensitivity of environment and receptors.

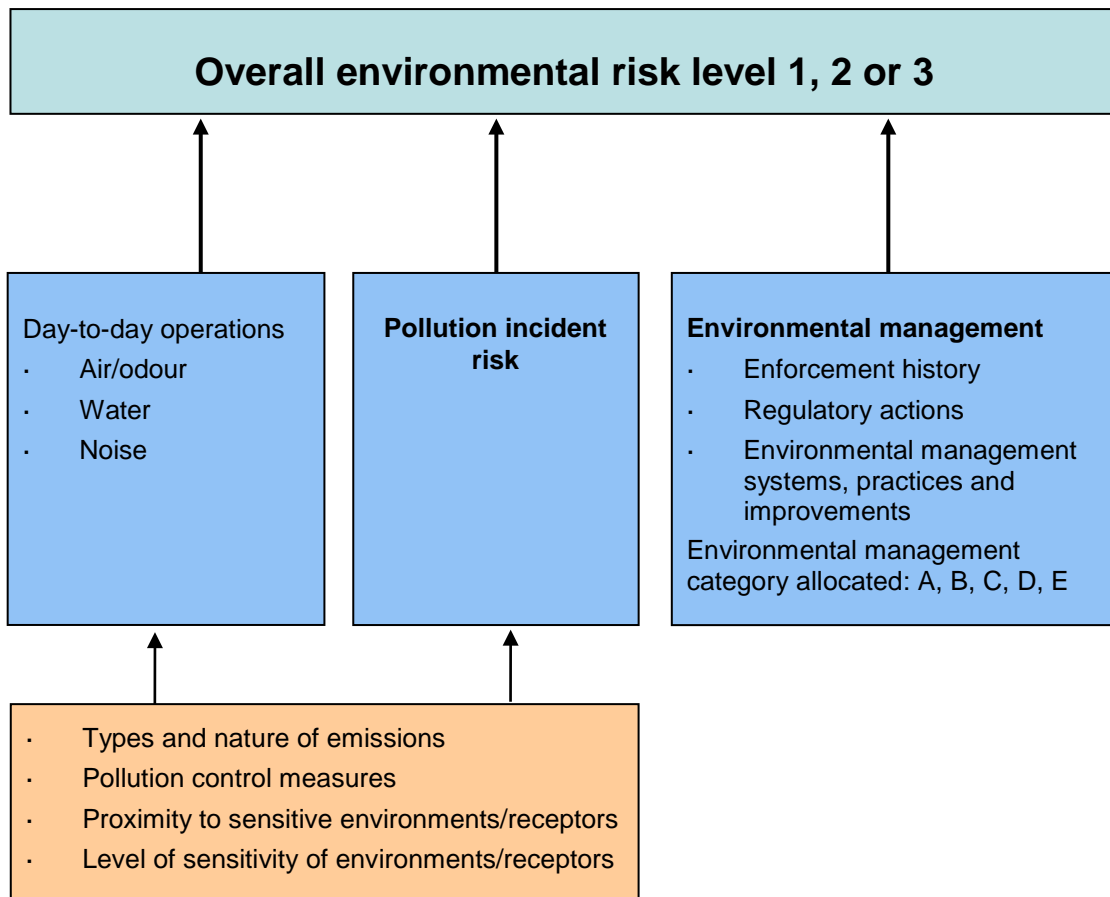
The third component of the assessment examines the environmental management performance of the licensee. The EPA will take into account:

- a licensee's environmental performance based on their compliance history
- the regulatory actions the EPA has taken to respond to incidents and non-compliances
- environmental management systems and practices the licensee has in place to control and mitigate environmental risks and
- environmental improvement programs initiated by the licensee and completed environmental improvement works.

Based on this assessment each licensee will be allocated an environmental management category: A, B, C, D or E.

The results from each of the three components of the risk assessment will be used to determine the environmental risk level for each licence, and each licence will be allocated to one of three risk levels: levels 1, 2 or 3 (with level 3 being the highest risk).

The risk assessments will inform the level and type of EPA regulatory intervention required; for example, a higher risk level may result in more intensive monitoring and reporting obligations on the licence.



The environmental management categories (A, B, C, D or E) allocated to the licensees as part of the third component of the risk assessment process will also be used to calculate the licence administrative fees.

The EPA will determine environmental management categories in accordance with this Protocol.

.

2. Calculation of licence administrative fees

The General Regulation prescribes licence administrative fees for holders of environment protection licences. Clause 10 in combination with schedule 1 of the General Regulation prescribes these fees based on the type of activity (fee-based activities) and the scale of these activities.

Under clause 10 of the General Regulation licence administrative fees will be calculated based on the type of activity (fee based activities), the scale of these activities, and the environmental management category determined for each licensee. The environmental management category allocated to a licensee corresponds with an environmental management factor. These factors are set out in the table to clause 10 (and in Table 1 of this Protocol). The environmental management factor acts as a multiplier to the administrative fee, resulting in a decrease, increase or no change to the licence administrative fee.

Licensees who perform well and minimise environmental risk will be rewarded with a reduction of their administrative fees. Poor performing licensees will pay licence fees that provide them with an incentive to improve their performance.

Clause 10 of the General Regulation sets out a three-step process for calculating the administrative fee:

Step 1: Calculation of administrative fee units

Multiply the amount of one administrative fee unit for the relevant licence fee period by:

- the number of administrative fee units specified in schedule 1 to the Regulation for the activity authorised or controlled by the licence or
- if the licence authorises or controls more than one activity, the greatest number of administrative fee units specified in schedule 1 for those activities.

Step 2: Determination of the environmental management category

Determine the environmental management category in accordance with this Protocol.

Step 3: Calculation of administrative fee

Multiply the amount calculated in step 1 by the environmental management factor for the applicable environmental management category (step 2).

Table 1 Environmental management categories and corresponding environmental management factors *

Environmental management category	Environmental management factor
A	0.95
B	1
C	1.3
D	1.6
E	2

* Environmental management factors prescribed in clause 10 of the Protection of the Environment Operations (General) Regulation 2009

For a new licence application (section 53(2) of the POEO Act) and for the transport of trackable wastes, only step 1 will apply for the purposes of calculating the administrative fee.

The change in licence administrative fees as set out in the General Regulation and outlined in this document will apply from 1 July 2016.

3. Determining the environmental management category

The EPA will determine the environmental management category for each licensee in accordance with this Protocol based on the following criteria and methodology.

3.1 Calculating the environmental management score based on licensee compliance history/regulatory response

Table 2 sets out the regulatory actions that may be undertaken by the EPA in relation to a licensee's operations, and the environmental management weighting corresponding to that regulatory action based on how long ago the regulatory action occurred. The environmental management weighting is based on a licensee's performance over the past three years.

Regulatory actions taken in the most recent reporting period (i.e. in the past 12 months) will be weighted more heavily than those actions taken in the two years prior. This is reflected in the environmental management weighting, where it is reduced by 50 per cent and 90 per cent where the action occurred in the second and third years, respectively.

Table 2 Regulatory actions, criteria considered and corresponding environmental management weightings

Regulatory actions	Criteria considered	Environmental management weighting
Successful prosecutions Tier 1	Number in year 1	500
	Number in year 2	250
	Number in year 3	50
Successful prosecutions Tier 2	Number in year 1	360
	Number in year 2	180
	Number in year 3	36
Enforceable undertakings	Number in year 1	150
	Number in year 2	75
	Number in year 3	15
Suspension of licence	Number issued in year 1	130
	Number issued in year 2	65
	Number issued in year 3	13
Mandatory environmental audits	Number required in year 1	130
	Number required in year 2	65
	Number required in year 3	13
Penalty notices	Number issued in year 1	120
	Number issued in year 2	60
	Number issued in year 3	12
Penalty notices for late or non-submission of an annual return	Number issued in year 1	60
	Number issued in year 2	30
	Number issued in year 3	6

Regulatory actions	Criteria considered	Environmental management weighting
Official cautions	Number issued in year 1	60
	Number issued in year 2	30
	Number issued in year 3	6
Official cautions for late or non-submission of an annual return	Number issued in year 1	30
	Number issued in year 2	15
	Number issued in year 3	3
Formal warnings	Number issued in year 1	40
	Number issued in year 2	20
	Number issued in year 3	4
Clean-up notices	Number issued in year 1	90
	Number issued in year 2	45
	Number issued in year 3	9
Prevention notices	Number issued in year 1	90
	Number issued in year 2	45
	Number issued in year 3	9
Pollution reduction programs	Number required in year 1	70
	Number required in year 2	35
	Number required in year 3	7
Site inspections – incident related	Number in year 1	20
	Number in year 2	10
	Number in year 3	2

Note: The scheme commences on 1 July 2015 and the calculation of a licensee's environmental management score will initially only consider the licensee's performance in year 1. For the first year of the scheme, year 1 will be the licence reporting period that commences between 1 July 2014 and 30 June 2015. In the second year of the scheme, the licensee's performance in years 1 and 2 will be considered in the calculation of environmental management score. Year 2 will be the licence reporting period that commences between 1 July 2015 and 30 June 2016. For all subsequent years of the scheme a licensee's performance in years 1, 2 and 3 will be used to determine their environmental management category.

The 'trend' in EPA regulatory actions and a licensee's performance over a 3-year period is also considered when determining the environmental management score for licensee compliance history/EPA regulatory response. Where there is a history of poor environmental performance, all regulatory actions for the previous 3 years will be included in the environmental management category calculation. Conversely, where regulatory action is taken in year 3 only (for example), this is not considered to be indicative of a pattern of poor performance – therefore that regulatory action is not included in the environmental management category calculation.

Table 3 specifies when regulatory actions will be included in the environmental management category calculation.

Table 3 Consideration of ‘trend’ in EPA regulatory actions over a 3-year period

Regulatory action taken			Circumstances in which regulatory action is included in the environmental management category calculation
Year 1	Year 2	Year 3	
X	X	X	Regulatory action taken in each of the past 3 years. This indicates a history of poor environmental management performance. All regulatory actions taken in years 1, 2 and 3 are included in the environmental management category calculation.
X	X		Regulatory action taken in each of the past 2 years. This indicates a trend to poor environmental management performance. All regulatory actions taken in years 1 and 2 are included in the environmental management category calculation.
X			Regulatory action taken in most recent reporting period indicating poor environmental management performance. This is not considered to be indicative of a pattern of poor performance. All regulatory actions taken in year 1 are included in the environmental management category calculation.
X		X	Regulatory action taken in the most recent reporting period but no action taken in the period immediately prior to that. This is not considered to be indicative of a pattern of poor performance. Only the regulatory actions taken in year 1 are included in the environmental management category calculation. The regulatory action in year 3 is not included in the environmental management category calculation.
	X	X	No regulatory action taken in the most recent reporting period but actions taken in the two periods immediately prior to that. This indicates improving environmental management performance. All regulatory actions taken in years 2 and 3 are included in the environmental management category calculation.
	X		No regulatory action taken in the most recent reporting period but actions taken in the period immediately prior to that. This is not considered to be indicative of a pattern of poor performance. No regulatory actions taken in year 2 are included in the environmental management category calculation.
		X	No regulatory action taken in the two most recent reporting periods but action taken in the period immediately prior to those. This indicates improved environmental management performance. No regulatory actions taken in year 3 are included in the environmental management category calculation.
			No regulatory action taken in the past 3 years. This indicates good environmental management performance.

For each year considered the yearly regulatory score will be calculated based on the criteria and weightings outlined in Tables 2 and 3 as follows:

$$\text{Number of regulatory action(s)} \times \text{Environmental management weighting} = \text{Yearly regulatory score}$$

Each yearly regulatory score will then be added to determine the environmental management score for a licensee's compliance history and EPA regulatory response in accordance with Table 3.

$$\text{Yearly regulatory score for year 1} + \text{Yearly regulatory score for year 2} + \text{Yearly regulatory score for year 3} = \text{Environmental management score}$$

3.2 Calculating the total environmental management score reduction

The total environmental management score reduction is based on the:

- environmental management systems and practices a licensee has in place (listed in Table 4)
- environmental improvement works completed in the past 12 months and
- environmental improvement programs specified in the licence.

3.2.1 Licensee environmental management systems and practices

Where a licensee has implemented environmental management systems and practices they will receive a reduction from their total environmental management score. The environmental management systems and practices form one component of the total environmental management score reduction.

The calculation method for determining this score reduction is set out in Table 4. Where a 'No' response is recorded, a nil score is applied. The score reduction is applied for every year in which environmental management systems and practices are in place.

Table 4 Licensee environmental management systems and practices and corresponding score reductions

Licensee environmental systems and practices	Score reduction for 'Yes' response
Does the licensee have an environmental management system (EMS) certified to ISO 14001 or any other demonstrated equivalent system? If yes:	
Has the licensee conformed to their EMS or have licensees rectified all environmental related non-conformances with the EMS?	80
Has the licensee had environmental related non-conformances with the EMS that have not been rectified?	60
If the licensee does not have an environmental management system certified to ISO 14001 or any other demonstrated equivalent system, the following questions should be answered:	
Has the licensee assessed the aspects of their operations and the potential environmental impacts that may result?	18
Does the licensee have any preventative maintenance programs?	12
Are there records of regular inspections and maintenance of pollution control equipment and structures?	6
Does the licensee conduct regular site audits?	7
Are the audits undertaken by a third party?	2
Does the licensee have an environmental improvement or management plan?	12
Are there any records of regular environmental training for staff?	3

3.2.2 Environmental improvement works

If the licensee has voluntarily completed environmental improvement works in the past 12 months that have led to a demonstrated environmental improvement at the licensed premises, the licensee is eligible for their environmental management score to be reduced by 40 for each environmental improvement work completed.

The environmental improvement works undertaken by a licensee must be in addition to those measures or works required to achieve compliance with licence conditions or legislative requirements under the POEO Act or its regulations. In order to receive the score reduction, each environmental improvement work must be reported in a licensee's annual return.

If the EPA subsequently determines that the environmental improvement works:

- have not been undertaken or
- have not been undertaken in the manner reported in the annual return or
- have not lead to a demonstrated environmental improvement

the EPA may add 40 to the environmental management score for the current licence fee period for each incorrectly reported environmental improvement work, and may adjust the administrative fee accordingly if required.

The calculation method for determining the reduction in environmental management score for environmental improvement works is set out in Table 5.

Table 5 Score reduction for environmental improvement works

Action	Criteria considered	Score reduction
Environmental improvement works	Number completed in the past 12 months	40

3.2.3 Environmental improvement programs

The licensee may choose to enter into an environmental improvement program. The agreed environmental improvement program details are attached as a condition to the licence and must be programs outside of those required to achieve compliance with legislative requirements or any existing conditions on the licence as applying at the time the environmental improvement program is entered into.

The licensee must apply to the EPA for a licence variation in order for the programs to be included on the licence, and provide the following information:

- description of program including costs
- proposed completion date
- key reporting milestones and
- details of expected environmental improvements.

The calculation method for determining the reduction to the environmental management score for environmental improvement programs is set out in Table 6. The score reduction is applied in the next licence fee period. The score reduction applies for each environmental improvement program entered into, in accordance with Table 6, below.

The EPA may remove the environmental improvement program from the licence if the key milestones or any other conditions of the environmental improvement program are not met.

If the environmental improvement program is removed from the licence the EPA will add an amount equivalent to the total score reduction received for the environmental improvement program, on to the environmental management score for the following licence fee period.

Table 6 Score reduction for environmental improvement programs

Action	Criteria considered	Score reduction
Environmental improvement programs	Number put in place in year 1	70
	Number put in place in year 2	35
	Number put in place in year 3	7

3.2.4 Calculation of total environmental management score reduction

The total environmental management score reduction is calculated as follows:

$$\begin{array}{l} \text{Licensee} \\ \text{environmental} \\ \text{management} \\ \text{systems and} \\ \text{practices score} \\ \text{reduction} \end{array} + \begin{array}{l} \text{Completed} \\ \text{environmental} \\ \text{improvement} \\ \text{works score} \\ \text{reduction} \end{array} + \begin{array}{l} \text{Environmental} \\ \text{improvement} \\ \text{programs score} \\ \text{reduction} \end{array} = \begin{array}{l} \text{Total} \\ \text{environmental} \\ \text{management} \\ \text{score} \\ \text{reduction} \end{array}$$

3.3 Calculating the total environmental management score

The total environmental management score for each licensee will be calculated by deducting the licensee's total environmental management score reduction from the licensee's environmental management score as follows:

$$\begin{array}{l} \text{Environmental} \\ \text{management score} \end{array} - \begin{array}{l} \text{Total environmental} \\ \text{management score} \\ \text{reduction} \end{array} = \begin{array}{l} \text{Total environmental} \\ \text{management score} \end{array}$$

3.4 Calculating the environmental management category

The total environmental management score will determine a licensee's environmental management category as follows:

Table 7 Total environmental management score and corresponding environmental management category

Total environmental management score	Environmental management category
0-5	A
6-60	B
61-180	C
181-400	D
401+	E

The environmental management category will then be used by the EPA as part of calculating the annual licence administrative fee in accordance with clause 10 of the General Regulation.