

Guidelines on recovering monetary benefits from environmental offenders

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The NSW EPA has been granted a licence by EPA Victoria to use a tool owned by the EPA Victoria known as the “Non-Compliance Economic Assessment Tool” (“NEAT” or “the Model”) and the associated User Guide, which are referred to in this document (© Environment Protection Authority Victoria 2019). EPA Victoria owns the intellectual property (IP) rights to the NEAT Model and User Guide.

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Definitions

Monetary benefits	Monetary, financial or economic benefit (section 249 POEO Act)
NEAT Model	Non-compliance Economic Assessment Tool Model
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
The Protocol	Protocol for calculating monetary benefits

1. Introduction

Monetary benefits are the financial advantage that an offender gains from committing an offence.

For example, additional funds may be available to the business that should have been used to comply with environmental legislation; or additional profits may have been made from illegal operations. These offenders gain a financial advantage over their compliant competitors who have done the right thing.

Under several acts that the NSW Environment Protection Authority (EPA) administers, the EPA can seek a court order requiring an offender to pay back the monetary benefits they obtained from committing the offence. The monetary benefit order is treated as part of the total penalty package that the court can impose on the offender (e.g. in addition to any fine, publication order, order to pay legal costs). Monetary benefit orders can be made in prosecutions commenced in the Land and Environment Court or Supreme Court (not the local court).

Recovering monetary benefits is about 'levelling the playing field'. It ensures operators who comply with the law are not at a competitive disadvantage relative to those who do not. It also ensures that fines cannot be treated as a cost of doing business.

There has been no change to the EPA's regulatory powers to recover monetary benefits. These guidelines reflect a more consistent, transparent and efficient approach to recovering monetary benefits.

This guideline addresses:

- why monetary benefits should be recovered
- when the EPA will seek monetary benefit orders
- how the EPA determines what should have been done to comply
- how the EPA investigates and calculates monetary benefits
- how non-accountants can calculate monetary benefits
- how the EPA reconcile requests for monetary benefit orders with other court orders
- how you can provide feedback on the Protocol for calculating monetary benefits and the NEAT Model.

Ultimately, it is the court's decision whether it imposes a monetary benefit order once an offender has been convicted. This decision will always depend on the specific facts and circumstances of the case and available evidence.

2. Scope and application

This guideline applies to any offender who has been successfully prosecuted by the EPA in the Land and Environment Court for a criminal offence under the following legislation¹:

- *Protection of the Environment Operations Act 1997* (POEO Act) (section 249)
- *Contaminated Land Management Act* (section 95A)
- *Dangerous Goods (Road and Rail) Transport Act 2008* (section 51)
- *Environmentally Hazardous Chemicals Act 1985* (section 213(2) of POEO Act)
- *Ozone Protection Act 1989* (section 213(2) of POEO Act)
- *Pesticides Act 1999* (section 98)
- *Petroleum (Onshore) Act 1991* (section 125ZG)
- *Radiation Control Act 1990* (section 23A)
- *Waste Avoidance and Resource Recovery Act 2001* (section 213(2) of POEO Act).

3. Monetary benefits

Operators often need to spend money to allow them to comply with environmental legislation. This can include resources to implement precautions (i.e. installing filtration units, building a bund) or to meet obligations (i.e. the cost of obtaining an environment protection licence, preparing mandatory Pollution Incident Response Management Plans).

Monetary benefits are the financial advantage that an offender gains from:

- avoiding or delaying spending money on complying with environmental legislation or
- earning profits that are a direct result of breaching environmental legislation.

Monetary benefits are the financial advantage an offender gains over their compliant competitors who have done the right thing.

Monetary benefits are defined in the legislation to include monetary, financial or economic benefits.

Real life examples

Monetary benefits can be costs that have been **avoided** (never spent) or **delayed** (spent later than they should have been).

Monetary benefits can be in the form of:

Capital costs: For example, costs of equipment (i.e. filtration units, monitoring equipment), infrastructure (i.e. bunds, dust control fencing, stormwater management systems, dam walls), machinery (i.e. noise attenuated vehicles).

Operational costs: For example, labour costs, costs of materials and inputs, energy costs, consultant fees, costs of delivering training, costs of maintaining equipment, costs of taking samples and completing laboratory analysis.

¹ The monetary benefit provisions in all these Acts are based on the original POEO Act provisions. For ease of reference, the remainder of this document cites the POEO Act provisions if a specific section is referred to.

Illegal profits: For example, profits earned by a licensed quarry operator extracting over its licence limit or profits earned from operating an unlawful waste facility.

Illegal competitive advantage: For example, using economic savings from avoiding costs of compliance to under-cut competitors' prices to capture more market share.

The EPA is focusing its efforts on the first three types of monetary benefit listed above. It is more straightforward for the EPA to obtain reliable and straightforward evidence relating to these types of monetary benefits. It is a much more complex process to obtain evidence of illegal competitive advantage.

Similarly, other jurisdictions also focus on the first three categories of monetary benefits in their work in this area.

An example of a hypothetical monetary benefit case is provided in section 14. It illustrates the types of costs or profits that may be a monetary benefit, the sort of information that is needed to calculate a monetary benefit and the possible results of running a basic preliminary assessment calculation using the NEAT Model.

4. Why monetary benefits should be recovered

The EPA wants to recover monetary benefits from offenders because:

- It is fair and levels the playing field. It ensures that operators who comply with the legislation are not at a competitive disadvantage relative to those who do not.
- It could improve the specific and general deterrence effect of penalty packages. Obtaining a monetary benefit order increases the likelihood that the value of penalty packages imposed by the courts is greater than the benefit gained and therefore offenders cannot treat fines as a cost of doing business.
- It is a fundamental principle of society and our current legal system that an offender should not profit from their crime.

5. When the EPA will seek monetary benefit orders

Monetary benefits arise in most cases the EPA prosecutes. However it is the court's decision whether it imposes a monetary benefit order once an offender has been convicted. This decision will always depend on the specific facts and circumstances of the case and available evidence.

The EPA's decision about whether to seek a monetary benefit order from the courts will be determined by considering the nature of the offence, the subjective factors of the offender, and the relative significance of monetary benefits in the broader regulatory context of the case.

This table sets out the circumstances in which the EPA is **more likely** to seek a monetary benefit order in a sentencing hearing.

Factor	The EPA is more likely to pursue monetary benefits when:
Nature of the breach	<ul style="list-style-type: none"> - the offence was not an accident that occurred despite reasonable precautions being in place to prevent it - the cause/s of the offence was a result of intent, recklessness or negligence - the offence was serious - the offence could have been prevented - the cause/s of the offence was within your control or reasonably within your responsibilities - you had information that advised you what was required to be compliant
Environmental impact of the breach	<ul style="list-style-type: none"> - environmental harm was caused or likely to be caused - there was potential for significant harm
Environmental performance of the offender	<ul style="list-style-type: none"> - you have been previously advised about similar or related non-compliances - you have a history of non-compliance (e.g. warning letters, penalty notices, previous convictions) - your operations have a low level of environmental risk management
Environmental performance of the industry	<ul style="list-style-type: none"> - what you were required to do to comply with the legislation is generally accepted and understood
Nature of wrongdoer	<ul style="list-style-type: none"> - you hold or should hold an environment protection licence to operate lawfully

6. How the EPA determines what should have been done to comply

In cases where the EPA intends to request that the court make a monetary benefit order, it will generally gather evidence and engage an independent expert(s) to calculate the monetary benefit gained. The EPA will not expect or require the 'gold standard' of compliance from offenders. It will be satisfied with a straightforward and cost-effective means of compliance that was available at the relevant time; the time the offender should have been compliant. This is called the 'least cost mode of compliance'.

In many cases the steps required for compliance will be uncontroversial; for example, installing a bund around a tank that leaked and caused a water pollution incident. In more complicated cases, the EPA may need expert advice on what was the least cost mode of compliance or what was an appropriate mode of compliance where there was more than one option.

The EPA will consider all the relevant available evidence.

7. How the EPA investigates monetary benefits

Once the EPA determines that monetary benefits are a factor in a case, it will begin investigating this element as soon as possible. It is possible the EPA will be investigating the cause of the offence and details of any monetary benefit obtained at the same time.

If you have been prosecuted and convicted of an offence by the court, the EPA will advise you prior to sentencing if it will be requesting the court to make a monetary benefit order. You will be able to prepare your case in response to the EPA's request for the order.

The timing of notification will vary in each case. It will depend on when the EPA determines that monetary benefits are relevant and appropriate for the case. This could be during the investigation when the EPA begins collecting evidence relevant to the monetary benefit order.

8. How the EPA calculates monetary benefit amounts

The *Protocol for calculating monetary benefits (the Protocol)* outlines a standard method for calculating monetary benefits. The Protocol is prescribed under clause 101A of the Protection of the Environment Operations (General) Regulation 2009. It is available on the [EPA website](#).

The EPA engaged appropriate experts to produce the Protocol. It is a technical document written by financial accountants for other financial accountants. It contains the calculation method and outlines step-by-step the equations and relationships to be applied to calculate a monetary benefit.

The method takes information on the size and timing of cash flows and then calculates the monetary benefit a business gained from being able to retain and reinvest those benefits from non-compliance. The calculation accounts for tax impacts and inflation.

In prosecutions, the EPA will generally rely on:

- Evidence of the inputs to the calculation. For example, evidence of the avoided or delayed cost, the tax status of the offender and other inputs required by the Protocol. This sort of evidence will be needed in every case.
- Expert evidence for any complicated inputs to the calculation. For example, the rate of return for the offender, the least cost mode of compliance where the offender has a complex operation. The extent to which this sort of expert evidence is required will depend on the facts of the case.
- Expert evidence of an independent financial accountant to prove the calculated monetary benefit amount and that they calculated that amount by correctly applying the method in the Protocol to the facts of the case. This sort of evidence will be required in every case.

The method contained in the Protocol has been successfully peer reviewed twice.

9. How non-accountants can calculate monetary benefits – the NEAT Model

The EPA has also released the **Non-Compliance Economic Assessment Tool** (the NEAT Model) (© Environment Protection Authority Victoria (EPA Victoria) 2019), which is accompanied by the **NEAT Model User Guide** (the User Guide) (© EPA Victoria 2019)². They are available on the [EPA website](#).

The NEAT Model is an Excel-based calculator tool which uses the method set out in the Protocol to calculate monetary benefits. It is a user-friendly tool which enables EPA officers, the regulated community, other EPA stakeholders and interested members of the public to run calculations without the help of a financial accountant.

The User Guide is a plain English manual that will help you navigate the NEAT Model. It contains step-by-step instructions on how to use the NEAT Model. It is also a useful starting point for understanding what monetary benefits are and the information used to calculate them.

The EPA can use the NEAT Model to make preliminary assessments of monetary benefits in a case. This can help it decide whether they are worth pursuing or not. An example of a NEAT Model preliminary assessment case report is included in the case study in section 14 (Figure 2).

10. How the EPA reconciles requests for monetary benefit orders with other court orders

Monetary benefit orders and achieving clean up or remediation

One of the EPA's primary objectives is to ensure the best environmental outcome is achieved. The EPA will always prioritise completion of timely clean-up and remediation. In most cases, this is achieved out-of-court (e.g. issuing clean-up notices) and is completed or largely complete by the time a sentencing hearing occurs. Seeking a monetary benefit order should rarely conflict with these objectives because monetary benefit orders are made at a sentencing hearing.

The most likely scenario where a monetary benefit order has the potential to conflict with an environmental outcome is where the cost of clean-up or remediation is ongoing, and a significant monetary benefit order would affect the offender's capacity to continue to pay for the clean-up or remediation. In those cases, the EPA will consider the relative benefit of pursuing a monetary benefit order at the potential cost of environmental outcomes. In this scenario, factors that may weigh in favour of the EPA pursuing a monetary benefit order include: the seriousness of the breach; whether the offender committed the breach intentionally; whether the offender attempted to re-arrange their finances to avoid exposure to penalties; and the significance of specific and general deterrence to the case.

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Monetary benefit orders and other court orders

At a sentencing hearing, the EPA can ask the court to make a range of orders in addition to imposing a fine (e.g. publication orders, environmental service orders, orders for payment of costs).

In each case, the EPA's submissions on the package of court orders it is seeking will consider the different purposes of different orders and the specific facts and evidence of the case.

Ultimately, it is for the court to decide the appropriate penalty package.

11. Feedback on the Protocol or the NEAT Model

If you have any feedback on the method outlined in the Protocol or embodied in the NEAT Model please send it in writing to the EPA at:

Regulatory Practice and Reform Section
Regulatory Reform and Advice Branch
EPA
PO Box A290
Sydney South NSW 1232

or email: MBO@epa.nsw.gov.au

Since the Protocol is a technical document, please include details of your expertise (i.e. academic qualifications and work experience) which enable you to provide your informed opinion and the reasoning that supports any of your comments.

12. Related policies and other documents

[EPA Compliance Policy](#)

[EPA Prosecution Guidelines \(2013\)](#)

[Environmental court order guidelines](#)

13. Accountabilities

Guideline review

The EPA's Regulatory Practice and Reform Section is responsible for coordinating reviews of this guideline. Review of this guideline will occur at the earlier of:

- the EPA completing three cases in Land and Environment Court where it seeks monetary benefit orders, or
- changes in legislation, policies or other areas requiring the amendment of this guideline.

14. Case study using the NEAT Model

As discussed in section 9, the EPA has released the NEAT Model on its [website](#), which enables non-accountants to run monetary benefit calculations. The NEAT Model can be used by EPA officers (and other interested parties) to make a preliminary assessment of monetary benefits in a case. The NEAT Model uses the calculation method set out in the Protocol.

The following case study provides a hypothetical example of a monetary benefit case and shows the results of running a simple calculation using the NEAT Model. It illustrates the types of profits, costs and assumptions that can be used to run a monetary benefits calculation using the Model. **Figure 2** provides the preliminary assessment case report that was generated by the NEAT Model for this case study.

A more detailed, plain English user guide for the NEAT Model is also available on the [EPA website](#). This guide provides an overview on how the Model operates and step-by-step instructions for using it.

Case Study – Quarry operating over extraction limits

Black Rock Pty Limited (Black Rock) holds an environment protection licence (licence) that permits it to extract 40,000 tonnes of sand from its quarry in Albury. Between 1 July 2015 and 30 June 2016, Black Rock extracted 70,000 tonnes of sand and sold it at \$25/tonne. Black Rock disclosed the extraction limit breach in its annual return submitted to the EPA.

For the breach period, Black Rock had equipment costs of \$150,000, labour costs of \$200,000 and paid a licence fee of \$5,000. Investigations revealed that these costs were evenly incurred over each unit of production, so they can be simply apportioned to the proportion of illegal revenue.

After detection, Black Rock obtained a development approval variation that permitted the higher level of extraction and then a licence variation for the higher extraction amount. This process cost \$45,000 in application and consultant fees. This was paid on 1 September 2016. As part of the development approval variation, Black Rock was required to install dust protection measures which cost \$40,000 and this was done on 1 December 2016. Black Rock's new licence fee increased to \$25,000 p.a.

Outline of NEAT Model calculations for the preliminary assessment

The NEAT Model calculates the change in value that accrues to a business from avoided and delayed expenditure and illegal profits ('additional sales margin' or 'gross margin') that are attributable to non-compliance. In simple terms, the Model determines the monetary benefits of the non-compliance by taking the sum of the following cash flows:



Figure 1: Simple illustration of how the NEAT Model calculates monetary benefits

Inputs for the preliminary assessment

To carry out a preliminary assessment of the monetary benefits in the Black Rock case you would determine and enter the following values into the NEAT Model.

1. Illegal profits (the 'additional sales margin' or 'gross margin')

To determine the illegal profits made by the company, you need to establish the revenue that was earned from the non-compliant sales; and then subtract the costs associated with making those non-compliant sales.

(a) Revenue from non-compliant sales:

- 30,000 of the 70,000 tonnes of sand were illegally extracted and sold during the licence period (between 1 July 2015 and 30 June 2016).
- 30,000 tonnes x \$25/tonne
= \$750,000

(b) Costs attributable to making those non-compliant sales (direct cost of sales):

- The additional (apportioned) labour and equipment costs over this period were:
- Labour: \$200,000 x 3/7 = \$85,714, plus
- Equipment: \$150,000 x 3/7 = \$64,286
= \$150,000

Note: In this case you need to apportion the costs of the company, to isolate the costs spent to earn the illegal revenue. 70,000 tonnes were extracted (40,000 tonnes lawfully; 30,000 tonnes unlawfully). The EPA has evidence that the costs were the same for each unit of production. So, 3/7 of the total costs were spent to earn the unlawful revenue.

The illegal profits (the 'additional sales margin' or 'gross margin') for the period **1 July 2015 to 30 June 2016** are \$750,000 (revenue) minus \$150,000 (expenditure) = **\$600,000**. These values are entered into the Model.

2. Avoided operational expenditure

- The avoided operational expenditure was:
- Licence fee for one year: for the period 1 July 2015 to 30 June 2016 = **\$20,000**
- This cost should have been incurred prior to the commencement of the licence period (**1 July 2015**), but was avoided (i.e. never paid).

Notes:

- (a) Black Rock paid a \$5,000 licence fee but if it had obtained a licence with the appropriate extraction capacity, the licence fee would have been \$25,000. So Black Rock avoided \$20,000 in licence fees.
- (b) It is assumed that all operational costs were 'one-off' costs, incurred in full at a single point in time.

3. Delayed operational expenditure

- The delayed operational expenditure was:
- Development consent and licence variations: **\$45,000**

- This cost should have been incurred prior to the commencement of the licence period (**1 July 2015**), but it was not incurred until **1 September 2016**.

Notes:

- (a) When this money was spent is a matter of evidence.
- (b) It is assumed that all operational costs were ‘one-off’ costs, incurred in full at a single point in time.

4. Delayed capital expenditure

In this case, there were no avoided operational expenditure. However, the delayed capital expenditure was:

- Dust protection measures: **\$40,000**.
- It is assumed that the tax life of a dust protection fence is **20 years**.³
- This cost should have been incurred prior to the commencement of the licence period (**1 July 2015**), but it was not incurred until **1 December 2016**.

Note: Notice the different type of costs that are classified as operational or capital costs. When this money was spent is a matter of evidence.

5. Other relevant inputs

- Marginal tax rate: 28.5%

Black Rock Pty Limited is a small business so paid the reduced company tax rate.

Note: A business will receive a direct monetary benefit from avoiding and delaying expenditure. However, in so doing, it will also avoid the benefit of tax deductions on that expenditure. So, the Model calculates the benefits that accrue to a business both before and after taxation. To do this, the Model calculates the marginal tax cash flow changes which arise from changes in expenditure and sales margin.

- Rate of return: 9%

The rate of return varies from business to business. In this case, the Accountant advised that the rate of return is 9% based on the financial records of Black Rock Pty Limited.

Note: This is one of the methods a financial accountant can use, in appropriate circumstances, to determine the applicable rate of return for the offender.

- Date for assessment: 30 June 2017

The ‘date for assessment’ is the date when the monetary benefits of the non-compliance ceased; it can be a known or deemed date. In this case, the date for assessment was deemed to be 30 June 2017.

Note: Note that the ‘date for assessment’ is not necessarily the date that the non-compliance itself ended; rather, it is the date that the monetary benefit to the offender ceased. This date could be the current date, or more commonly, a future date (such as the court hearing date or the expected sentencing date).

³ The Model provides a link to ATO guidance on standard asset lives.

Results of preliminary assessment

The NEAT Model provides the user with a case report that outlines the key inputs and assumptions used to run the monetary benefits calculation, along with the result. The case report for the Black Rock example is at Figure 2 below. In this case, the **monetary benefit** was \$717,100 before tax and \$537,700 after tax.

Case Report

1. Overview

Case name:
 Report prepared by:

2. Key Assumptions

Key inputs and assumptions in \$'000

Input Category	Base Case	Scenario 1	Scenario 2	Scenario 3
Region (for Inflation)	NSW			
Timing of Analysis	Financial Year			
Date of Earliest Benefit	1/07/2015			
Date for Assessment	30/06/2017			
Nominal rate of return	9.00%			
Inputs (in actual \$'000 entered)				
Total Avoided Capital Expenditure				
Total Delayed Capital Expenditure	\$40.0			
Total Avoided Operating Expenditure	\$20.0			
Total Delayed Operating Expenditure	\$45.0			
Total Additional Sales Margin	\$600.0			

3. Summary

The present value of the expenditure avoided or delayed (and additional sales margin gained) by non-compliance for the period:

to is:

after taxation and
 before taxation (in \$'000).

4. Scenario Analysis

Net present value of economic benefits of cash flows in \$'000

Cost Category	Base Case	Scenario 1	Scenario 2	Scenario 3
Total Avoided Capital Expenditure				
Total Delayed Capital Expenditure	\$5.5			
Total Avoided Operating Expenditure	\$23.8			
Total Delayed Operating Expenditure	\$5.1			
Total Additional Sales Margin	\$682.7			
Tax	-\$179.4			
Total Present Value of Economic Benefit at Date for Assessment after Tax	\$537.7			

Scenario Descriptions:

Base Case Quarry operating over licence limit
 Scenario 1 -
 Scenario 2 -
 Scenario 3 -

Figure 2: NEAT Model preliminary assessment case report for the Black Rock example