



Requirements for publishing pollution monitoring data

© 2012 State of NSW and Environment Protection Authority

The State of NSW and the Environment Protection Authority (EPA) 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.

The EPA has compiled these requirements in good faith, exercising all due care and attention. No representation is made about the accuracy, completeness or suitability of the information in this publication for any particular purpose. The EPA shall not be liable for any damage which may occur to any person or organisation taking action or not on the basis of this publication. Readers should seek appropriate advice when applying the information to their specific needs.

This document should also be read in conjunction with current versions of the NSW environment protection legislation, including the *Protection of the Environment Operations Act 1997*, as changes may have been made to that legislation affecting the information in this document since publication.

Published by:

Environment Protection Authority
59 Goulburn Street, Sydney NSW 2000
PO Box A290, Sydney South NSW 1232
Phone: (02) 9995 5000 (switchboard)

Phone: 131 555 (environment information and publications requests)

Phone: 1300 361 967 (national parks, climate change and energy efficiency information, and publications requests)

Fax: (02) 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.environment.nsw.gov.au

Report pollution and environmental incidents

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

See also www.environment.nsw.gov.au

ISBN 978 1 74293 560 7

OEH 2012/0263

March 2012

About this document

These requirements are designed to be used by the holders of environment protection licences issued under the *Protection of the Environment Operations Act 1997* (POEO Act). They have been issued by the Environment Protection Authority (EPA) and are the written requirements referred to in section 66(6) of the POEO Act.

They set out the general requirements for the publication of pollution monitoring data in accordance with section 66(6) of the POEO Act and include instructions on how this must be done, both for licensees that maintain a website and those that do not.

They aim to provide guidance on how to present monitoring data in a meaningful way to satisfy the community's right to know and improve understanding of a licensed premise's environmental performance, while minimising the burden on licensees to comply with this obligation.

There are a number of circumstances which are potentially complex, for example where the sample or data needs to be analysed by a laboratory or where monitoring is continuous. A number of options for presenting monitoring data have been included.

In the case of any inconsistency between these requirements and the POEO Act, the latter prevails to the extent of the inconsistency.

While the requirement to publish pollution monitoring data commences on 31 March 2012, licensees have a three-month transitional period to comply with this obligation.

This document is available on the EPA's website at www.environment.nsw.gov.au/legislation/poelegisamend2011.htm.

Copies of NSW legislation are available at www.legislation.nsw.gov.au.

Contents

1	Introduction	1
1.1	Background	1
2	Legislative requirements and status of these requirements	1
2.1	Obligations and transitional period for complying with requirements	1
2.2	Review of these requirements	2
3	General requirements for publishing monitoring data	2
3.1	Making the data publicly accessible	2
3.1.1	Corporate websites.....	2
3.2	Providing meaningful information	2
3.2.1	Monthly summaries and exceedances	3
3.2.2	Access to all pollution monitoring data – obtained data.....	3
3.2.3	Compliance with the requirements	3
3.3	What monitoring data must be published?	4
3.4	When the data needs to be published	4
3.4.1	Data quality.....	5
3.5	How the data should be published	5
3.6	How long must the pollution monitoring data be publicly available?	6
3.7	What other information must be published with the data?.....	6
3.7.1	Environment protection licence number and licensee’s name and address.....	7
3.7.2	Sampling or monitoring location	7
3.7.3	Licence condition limits.....	7
3.7.4	Units of measure	8
3.7.5	Date of sampling or monitoring.....	8
3.7.6	Date published.....	8
3.7.7	Meteorological data	8
3.7.8	Correction log	8
3.8	Examples of meaningful summaries and tables for publishing or providing obtained data	9
3.8.1	Meaningful summaries.....	9
3.8.2	Example tables for publishing and providing obtained data	11
4	Procedures for the publication or provision on request of obtained data collected continuously	14
4.1	Instrument downtime	14
4.2	Off-scale measurements	14
5	Monitoring data not required to be published	15
5.1	Load-based licensing	15
5.2	National Pollutant Inventory	15
5.3	National greenhouse and energy reporting	16
5.4	Suspended, revoked or surrendered licences.....	16
6	More information	16

1 Introduction

This document sets out the written requirements of the Environment Protection Authority (EPA) that holders of environment protection licences must follow to comply with the obligations introduced by the *Protection of the Environment Legislation Amendment Act 2011* (POELA Act) to publish or make pollution monitoring data available to members of the public.

By adhering to these requirements, licensees will ensure that the pollution monitoring data they publish is able to be both easily accessed and understood by members of the public.

1.1 Background

The POELA Act introduced several changes to the *Protection of the Environment Operations Act 1997* (POEO Act) including the new requirement under section 66(6) of the POEO Act that holders of an environment protection licence ('licensees') make their pollution monitoring data publicly available in a timely manner. The intention of this new requirement is to improve the general public's access to information about the environmental performance of licensed facilities. This is in addition to other information that the EPA includes on its public register.

2 Legislative requirements and status of these requirements

The specific requirements for the publication of monitoring results are set out in section 66(6) of the POEO Act. In summary, this provision requires that:

- licensees who undertake monitoring as a result of a licence condition must publish or make available monitoring data that relates to pollution within 14 days of obtaining the data and/or receiving a specific request for a copy of the data
- licensees who maintain a website must make the monitoring data related to pollution available in a prominent position on the website
- licensees who do not maintain a website must provide a copy of the monitoring data that relates to pollution at no charge to any person who requests a copy of the data
- the data must be published in accordance with requirements issued in writing by the EPA and this document constitutes those requirements.

There is a penalty for not publishing or making available the results of monitoring in accordance with section 66(6).

Section 66(7) of the legislation provides a penalty for making available or providing false or misleading results.

2.1 Obligations and transitional period for complying with requirements

The requirement to publish or provide pollution monitoring data commences on 31 March 2012. However, there is a transitional period for complying with this requirement which is set out in clause 35 of Schedule 5 of the POEO Act. Essentially:

- there is no requirement to publish or provide data for monitoring conducted before 31 March 2012 other than to meet the licensee's usual Annual Return reporting requirements

- data obtained for monitoring conducted from 31 March 2012 must be published or provided as specified in this document with licensees having until 1 July 2012 to comply (i.e. three months from the commencement date of the provision).

2.2 Review of these requirements

These requirements will be reviewed within 12 months of their release. Licensees can provide feedback in writing via email to pirmp@environment.nsw.gov.au. Where an issue is raised that can be addressed through simple questions and answers, the EPA will add to those already on its website at www.environment.nsw.gov.au/legislation/faqspublicdata.htm.

Any licence-specific issues that are not covered by these requirements should be discussed with an officer from the relevant EPA office in the first instance.

3 General requirements for publishing monitoring data

The following section sets out the requirements to be followed when publishing pollution monitoring data. Adherence to these requirements will help ensure that the data published is publicly accessible and understood in context.

3.1 Making the data publicly accessible

Licensees must either:

- make their pollution monitoring data available in a prominent location on their website (if they have one) by including a clear link to monitoring data on their homepage; the format of the information must be able to be viewed, printed, downloaded and analysed, or
- for those without a website, the licensee must provide the pollution monitoring data at no charge to members of the public who request it in writing in the form preferred by the requester if possible (including hard copy, CD, DVD, post, email, fax or in person).

3.1.1 Corporate websites

The requirement to publish monitoring data on websites applies to corporate or global websites that relate to the business or activity that is the subject of the licence.

3.2 Providing meaningful information

The primary objective of these requirements is that members of the public have access to the results of all pollution monitoring (which a licence specifies must be carried out) in a way that is meaningful to them. It is recognised that some licensees collect a large amount of monitoring data on a frequent basis and that providing all of this data could be a significant undertaking, especially where the licensee is required to publish that information on a website. It is also recognised that publishing large amounts of monitoring data will not necessarily provide meaningful information for the public and will often be very difficult to interpret.

For the purposes of these requirements, the following will assist in providing meaningful information.

3.2.1 Monthly summaries and exceedances

Licensees required to publish their data on a website must include:

- a meaningful summary of the monitoring data (for each monitoring location and pollutant) on at least a monthly basis (i.e. a summary of a month's worth of obtained data points – see sections 3.2.2 and 3.4 for a definition of obtained data), and
- information regarding when and to what extent the pollutant discharge or emission limits specified in the licence were not met and why.

This will allow a comparison of pollution monitoring results with any relevant pollutant discharge or emission limits where they exist and hence is a meaningful way of informing members of the public about the environmental performance of their industrial neighbours.

The question of what is a meaningful summary will vary depending on the pollutant, the specifics of the monitoring requirement and any related limit conditions that specify the environmental performance the licensee is obliged to meet. This document provides a number of examples for common types of limits. An example is also provided for situations where the licensee is required to monitor, but with no corresponding limit. Licensees will need to use their own judgement and act in good faith to ensure that the information provided is meaningful.

3.2.2 Access to all pollution monitoring data – obtained data

'Obtained data' is the resulting value for each individually monitored sample following the relevant steps outlined in section 3.4 to get the data in the form required by the licence monitoring condition.

On written request, the licensee must provide copies of all the obtained data required to be collected under the licence (or a subset of this data which meets the request). This is in addition to the monthly summaries that must be provided in accordance with section 3.2.1.

Licensees may choose to publish all their obtained data on their website, in which case they are not required to respond to written requests because the public will have access to all of the relevant data. However, licensees should tell anyone requesting obtained data about the web address where the information is already available.

This approach is intended to reduce the costs of complying with section 66(6) of the POEO Act (especially for licensees with significant monitoring data sets) while meeting the objectives of the requirement to make monitoring information available.

If the licensee receives no written requests, they have no obligation to do more to allow access to obtained data as long as they have complied with the requirements to provide monthly summaries and information on exceedances specified in section 3.2.1.

3.2.3 Compliance with the requirements

Compliance with the requirements in sections 3.2.1 and 3.2.2 (and further specific requirements in this document) will be monitored. Consideration will be given to making these requirements more detailed and if necessary more prescriptive if the EPA finds that licensees are not providing obtained data on written request and/or monthly summaries are not providing meaningful information about the environmental performance of licensees.

3.3 What monitoring data must be published?

The monitoring data that must be published and/or made available on request is any data that is obtained as a result of a monitoring condition on a licence that relates to air, water, noise and/or land pollution. The data to be published or provided is limited to data that relates to pollutants generated, discharged or emitted from the licensed premises.

Monitoring conditions are generally set out in section 5 of an environment protection licence, although they may also be set in other sections of a licence. The licence will generally specify a sampling or monitoring point, location or area where pollutants are required to be measured. The pollution monitoring data published by a licensee must be based on the sampling or monitoring points identified in the licence. Monitoring conditions will generally include words or phrases to the effect:

- the licensee must monitor [or measure]
- [X] must be measured [or monitored].

The following sections set out when and how this data is to be published and what additional information should be included with the data to ensure it is given appropriate context.

Note that in cases where an environment protection licence is issued for an activity that is subject to load-based licensing requirements, any pollution data collected solely for the purpose of calculating the actual load of assessable pollutants is not required to be published in accordance with section 66(6) of the POEO Act. See section 5.1 for further information.

3.4 When the data needs to be published

'Obtained data' (discussed in section 3.2.2) is usually the product of the licensee following some or all of the steps below to obtain the data for a specific monitoring record:

- the pollutant is sampled (e.g. a physical sample of the air emission/water discharge is taken in accordance with any standard/specified sampling methods)
- the sample is analysed (e.g. by a laboratory, using hand-held devices or via automated in-line monitoring equipment) producing a numeric result
- the licensee receives the sample monitoring results (e.g. from an analytical laboratory situated either on-site or off-site, or once the results are downloaded from a data storage unit connected to a remote monitor)
- the monitoring results are standardised where required (e.g. to adjust for temperature, oxygen concentrations or other parameters in the gas stream that is being sampled) and/or otherwise analysed so that they are expressed in the form required by the monitoring condition.

It is acknowledged that completing the necessary steps above will take time to get the data in the form required by the licence

The monthly summary must be published within 14 days of the data being obtained for the last sample for that period. This allows 14 days for all of the results to be collated into a meaningful summary where the information is to be published on a website.

Licensees without a website who have received a written request for monitoring data from a member of the public must prepare the requested data within 14 days of:

- obtaining the data (if the request is received prior to the data being obtained), or
- the request (if the request is received after obtaining the data that is the subject of the request).

The same requirements for responding to requests apply to those licensees whose website does not currently display all of the obtained data available.

If the EPA suspects that licensees are not publishing or providing monitoring data within a reasonable period of time, consideration will be given to further defining the term 'obtained data' when the EPA reviews these requirements.

Records to demonstrate compliance

- For monitoring samples that need to be analysed by a laboratory, licensees should keep records of the date of monitoring or sampling, the date the sample was supplied to the laboratory and the date the results were received from the laboratory. This will be especially important where there is a significant period of time involved in the analysis and receipt of the results. It will allow the licensee to demonstrate that apparent delays in results being made publicly available were unavoidable.
- For data that needs to be physically downloaded from remote monitoring locations, the data is not 'obtained' until it is downloaded from the location (and the other required steps outlined above are carried out). Licensees should keep records of the date the data was downloaded from the remote location.

3.4.1 Data quality

Monitoring data (obtained data points) must *not* be published or provided, where a licensee *knows* that the obtained data points are incorrect. In these cases, licensees must include a note next to the sample date for the specific obtained data point (where a set of obtained data is provided) stating why the data point has not been included and take action to rectify the problem (where possible) whether it be a sampling issue or otherwise.

Where a licensee *suspects* that an obtained data point may be incorrect and is undertaking a review of that data or re-testing it, they must still publish/provide the obtained data points but include an accompanying note that the data is under review and the reason why.

Correction logs (see section 3.8.2) should be used in the case where a licensee only becomes aware that obtained data is incorrect after it has already been published (e.g. via notification from the laboratory that analysed the data or some other method).

3.5 How the data should be published

The data must be published or provided in a format that is easy for the general public to understand. Table formats must be used to publish monitoring data as they allow a clear and definitive display of values. Visual methods of representing the data (graphs and charts) by themselves are not sufficient. However, the pollution monitoring data can also be provided in graph or chart form to complement the tabulated information. The data provided on the website must be exportable to common programs like Excel or Word.

Examples of presenting data in tables are provided in section 3.8.

3.6 How long must the pollution monitoring data be publicly available?

Where available, up to four years of pollution monitoring data must be provided. This is consistent with licence requirements that monitoring and other data used to prepare annual returns is retained for four years. This does not apply to data obtained from monitoring conducted prior to 31 March 2012.

3.7 What other information must be published with the data?

The following information must also be published or provided with the pollution monitoring data to provide appropriate context and ensure the data can be understood and correctly interpreted by the general public. This information may be either included in the tables or provided in a separate document accompanying the data. Where a separate document is used, it should be clearly titled and referenced in such a way that members of the public can easily identify and access the additional supporting information.

The following information *must* accompany each data set (whether published or provided on request):

- environment protection licence number
- link to the full licence on the EPA website
- licensee's name
- licensee's address
- location of monitoring point/area
- pollutant
- unit of measure
- monitoring frequency required by the licence (as a minimum – actual monitoring frequency can also be provided where this is more frequent)
- any other relevant requirements of the monitoring condition
- any relevant limit imposed by the licence
- for monthly summaries (and summaries for other periods) –
 - sampling/monitoring period
 - date published
- for obtained data –
 - date sampled/monitored
 - date obtained
 - date published/provided.

More detail on some of this information is provided in the following subsections.

3.7.1 Environment protection licence number and licensee's name and address

The environment protection licence number of the facility, the licensee's name and the address of the facility (as they appear on the licence) must be published or provided with the pollution monitoring data. This information should be included on each table of published or provided data to minimise the potential for error of misquoting a licensee's data.

A link to the full licence on the EPA website should be provided.

3.7.2 Sampling or monitoring location

The location of each sampling or monitoring point to which the pollution monitoring data applies (including the point numbers identified in the licence) must be published or provided with the data.

Where available a site map showing the location of the sampling/monitoring points should also be published or provided. A simple *Google Earth* style image with the relevant points identified could be used.

For privacy reasons, specific locations of monitoring undertaken at residential receivers should not be disclosed. In these cases, monitoring locations should be noted as 'Residential receiver X to the [insert compass direction with respect to site]' and licensees should keep internal records of these locations.

3.7.3 Licence condition limits

Conditions of an environment protection licence usually impose a discharge or emission limit for a pollutant, such as a pollutant concentration limit (e.g. in milligrams per litre, kilolitres per day or tonnes per year) or a noise or vibration limit (e.g. 15-minute equivalent continuous sound pressure level, decibels or millimetres per second).

Discharge or emission limits can also be imposed by statute, primarily the Protection of the Environment Operations (Clean Air) Regulation 2010 (or an approved exemption under that Regulation).

The limit conditions can be specified in a variety of ways (e.g. maximum value, minimum value or a percentile value).

The relevant pollutant limits imposed by statute or conditions of an environment protection licence must also be published with the meaningful summary or provided with the pollution monitoring data in the same form that it appears on the licence or in the statute. The format of that information must allow an easy-to-read direct comparison with the data being recorded. This must include the actual pollution limit specified in the licence as well as any further information that provides adequate context around its comparison with the pollution monitoring data. For example:

- a limit condition may be specified as a 90th percentile value over a year whereas the corresponding monitoring condition may require weekly monitoring. In this case, the monitoring results must not exceed the specified limit for only 90% of the specified period, not all the time. For weekly monitoring this means that at most five samples of the 52 samples taken over the year may be above the specified limit. The 47 remaining samples must have results below the limit.
- a limit condition may specify a noise level not to be exceeded, but this usually only applies under certain and specific meteorological conditions.

To avoid incorrect interpretation of data, the limit that is published or provided with the monitoring data must also be accompanied by additional information that explains how the limit relates to the monitoring data or vice versa including, where appropriate, why a particular apparent exceedance of the limit is not a breach of the condition if this is the case (e.g. unusual one-off events, sampling errors, etc).

3.7.4 Units of measure

The pollution monitoring data published or provided by a licensee must include the units of measure, metric, scale or descriptor prescribed in the relevant licence condition. Any abbreviations used should be noted in full.

3.7.5 Date of sampling or monitoring

The date of sampling as well as the date when the pollution monitoring data was obtained by the licensee (where this differs from the sampling date) must also be published or provided with the pollution monitoring data, where 'obtained' has the same meaning as described in sections 3.2.2 and 3.4. That is, the licensee has obtained the data once it is in the form required by the licence.

This will allow the EPA to identify instances where an unreasonable amount of time has been taken to obtain the data and the licensee is not acting in good faith. This information will assist the EPA to refine the meaning of obtained data where necessary in future versions of these requirements and/or take any other regulatory action that may be necessary.

3.7.6 Date published

The date when the pollution monitoring data is published or provided must also accompany the pollution monitoring data. This requirement will allow compliance with section 66(6) of the POEO Act to be monitored.

3.7.7 Meteorological data

Weather conditions can be important when complaints are received about emissions from a facility (such as noise, odour and dust). Some holders of environment protection licences are required to collect and store meteorological data. Meteorological data is not considered to be pollution data and therefore does not have to be published. However licensees may wish to include meteorological data and/or comments with published pollution monitoring data to provide additional context, for example 'High dust emissions (PM₁₀) were measured during wind conditions >5 m/s'.

3.7.8 Correction log

From time to time incorrect data may be published in good faith.

Licensees must publish a correction log to correct any data which has been found to be incorrect or misleading as soon as practicable after the licensee becomes aware that the published pollution monitoring data is incorrect or misleading. See section 3.8.2 for an example of a correction log table.

3.8 Examples of meaningful summaries and tables for publishing or providing obtained data

The following examples are intended to assist licensees develop tables that are best suited to their specific pollution monitoring data sets. This includes information the EPA expects to see in published summaries for various monitoring scenarios to ensure that the summary is meaningful. Note that the examples are not exhaustive and do not cover the full range of monitoring regimes in licences.

The examples below will need to be supplemented with additional information to ensure they comply with section 3.7.

3.8.1 Meaningful summaries

Where no pollutant limit exists

The following header row (or something similar as applicable to the specific monitoring condition) can be used for monthly summaries where there is no limit associated with a specific pollutant and monitoring point.

Include a table for each point where monitoring requirements apply, and use the monitoring location numbering specified in the licence.

Pollutant	Units of measure	Monitoring frequency required by licence	No. of times measured during month	Min. value	Mean value	Median value	Max. value
Insert a new row for each pollutant required to be monitored at that monitoring location			Record 'continuous' if measured continuously (unusual for water discharges)				

Where relevant limit conditions relate to the monitoring location

Some licences specify a number of different limit conditions (which generally relate to different monitoring periods) for a specific monitoring location, for example:

- an absolute pollutant concentration limit which must be met at all times; these are normally expressed as 100 percentile limits (i.e. maximum values not to be exceeded), and/or
- percentile limits for a specified period (e.g. yearly, 50, 80 or 90 percentile limits).

Where limits relate to a monthly period or less, a column (or columns) should be included in the monthly summary table to record the relevant limit for the monitoring location and pollutant in question. Example header rows are provided below.

Pollutant	Units of measure	Monitoring frequency required by licence	No. of times measured during month	Min. value	Max. value	100 percentile limit	Exceedance (yes/no) *
Insert a new row for each pollutant required to be monitored at that monitoring point			Record 'continuous' if measured continuously (unusual for water discharges)				

* Where an exceedance occurs during the month, information regarding the monitoring point, the pollutant, when and to what extent the relevant limit was not met and why must be detailed in an exceedance table for the period.

Yearly tables (and other periods)

Where the limit relates to a period longer than a month (generally yearly percentile limits), an additional table which summarises the data relevant for that period (once it has been collected) must also be included to allow comparison with the performance limit. This is in addition to the monthly tables. Yearly summaries will not be required until after 31 March 2013. Example header rows are shown below.

Include whichever of these tables is required, depending on what sort of limits are on the licence.

Pollutant	Units of measure	Monitoring frequency required by licence	No. of times measured during year	Min. value	Max. value	50 percentile value	50 percentile limit	Exceedance (yes/no)
-----------	------------------	--	-----------------------------------	------------	------------	---------------------	---------------------	---------------------

Pollutant	Units of measure	Monitoring frequency required by licence	No. of times measured during year	Min. value	Max. value	80 percentile value	80 percentile limit	Exceedance (yes/no)
-----------	------------------	--	-----------------------------------	------------	------------	---------------------	---------------------	---------------------

Pollutant	Units of measure	Monitoring frequency required by licence	No. of times measured during year	Min. value	Max. value	90 percentile value	90 percentile limit	Exceedance (yes/no)
-----------	------------------	--	-----------------------------------	------------	------------	---------------------	---------------------	---------------------

Licences with occasional/intermittent discharge sampling conditions

Premises with stormwater controls or some other form of occasional discharge to water or air may have licence conditions requiring sampling only during a discharge or emission event. These licensees need to publish monthly and yearly summaries of monitoring data only for those times when discharge occurs. For those months or years when no discharge occurs, a note stating that no discharge has occurred is sufficient.

3.8.2 Example tables for publishing and providing obtained data

The following tables are examples only and are relevant to publishing or providing obtained data in accordance with section 3.2.2.

Obtained data by publication date – annual monitoring

Published: 9 January 2015					
Published: 8 January 2014					
Published: 7 January 2013			Licensee: XXX P/L		
Sampled: 31 December 2012			EPL No. 5555		
Obtained: 5 January 2013					
Sampling point	Monitoring frequency required by licence	Pollutant	Measurement	Limit	Unit
1	Annually	Turbidity	0.06	1.0	NTU
		Salinity	3.9	4	dS/m
		pH	6.9	6.2–7.8	–
2	Annually	Turbidity	0.09	1.0	NTU
		Salinity	4.0	4	dS/m
		pH	6.7	6.2–7.8	–
3	Annually	Turbidity	0.12	1.0	NTU
		Salinity	3.5	4	dS/m
		pH	6.7	6.2–7.8	–

Obtained data by sample date – monthly monitoring

Sampled: 28 February 2013					
Sampled: 30 January 2013					
Sampled: 31 December 2012			Licensee: XXX P/L		
Obtained: 31 December 2012			EPL No. 5555		
Published: 5 January 2013					
Sampling point	Monitoring frequency required by licence	Pollutant	Measurement	Limit	Unit
1	Monthly	Turbidity	0.06	1.0	NTU
		Salinity	3.6	4	dS/m
		pH	6.9	6.2–7.8	–
2	Monthly	Turbidity	0.09	1.0	NTU
		Salinity	4.0	4	dS/m
		pH	6.7	6.2–7.8	–
3	Monthly	Turbidity	0.8	1.0	NTU
		Salinity	3.9	4	dS/m
		pH	6.7	6.2–7.8	–

Obtained data by sample point – monthly monitoring

		Sampling point: 3		EPL No. 5555	Licensee: XXX P/L
		Sampling point: 2		EPL No. 5555	Licensee: XXX P/L
		Sampling point: 1		EPL No. 5555	Licensee: XXX P/L
		Pollutant	Measurement	Limit	Units
Sampled	6/6/12	Pollutant X	1.8	2	mg/kL
Obtained	10/6/12				
Published	12/6/12				
Monitoring frequency required by licence	Monthly				
Sampled	6/6/12	Pollutant Y	0.5	2	mg/kL
Obtained	10/6/12				
Published	12/6/12				
Monitoring frequency required by licence	Monthly				

Example table for publishing noise monitoring data

Published: 31 July 2012									
Licensee: XYZ Quarry									
EPL No: XXXX									
Qualifications related to noise limits									
The noise limits do not apply when wind speed is greater than 3 m/s at 10 m above ground or in temperature inversion conditions up to 3°C/100 m with wind speeds greater than 2 m/s at 10 m above ground level or in temperature inversion conditions greater than 3°C/100 m.									
Location	Date	Start time	Measurement period	Measured levels – dB(A)		Limit(s)	Weather	Comments	
				L _{max}	L _{eq, 15 min}			Observations	(Potential) non-compliance/breach
A	6 July 2012	15:00	15 min	48	43	Day-time (07:00–18:00) L _{max} : 50 dB(A) L _{eq, 15 minute} : 45 dB(A)	Cloud cover: 2/8 Wind at 10 m: <1.5 m/s, east Inversion: N/A	Unattended monitoring – not interpreted Contribution of subject source uncertain	N/A

B	6 July 2012	21:00	15 min	51	42	Evening (18:00–22:00) L _{max} : 50 dB(A) L _{eq, 15 minute} : 45 dB(A)	Cloud cover: 4/8 Wind at 10 m: <1.5 m/s, south-east Inversion: N/A	Unattended monitoring – interpreted: Contribution of subject source not entirely certain, but as no other potential noise sources in the vicinity identified, likely the measured L _{max} level of 51 dB(A) can be attributed to quarry	Measured L _{max} of 51 dB(A) within 2 dB of limit of 50 dB(A)
C	7 July 2012	01:00	15 min	43	39	Night-time (22:00–07:00) L _{max} : 45 dB(A) L _{eq, 15 minute} : 35 dB(A)	Cloud cover: 0/8 Wind at 10 m: <0 m/s Inversion: 4°C/100 m	Attended monitoring. Nomination of noise sources: quarry, vehicles on highway, plane, dog barking Estimate of contribution of subject noise source: L _{Amax} of 43 dB(A) attributed to vehicle noise at quarry: L _{eq, 15 minute} estimated at approximately 38 dB(A)	Although measured L _{eq, 15 min} of 39 dB(A) and estimated contribution of quarry of 38 dB(A) greater than 2 dB above limit of 35 dB(A), temperature inversion of 4°C/100 m recorded and thus no non-compliance
D	7 July 2012	03:00	15 min	49	35	Night-time (22:00–07:00) L _{max} : 45 dB(A) L _{eq, 15 minute} : 35 dB(A)	Cloud cover: 1/8 high cloud Wind at 10 m: <1 m/s, south Inversion: 1°C/100 m	Attended monitoring. Nomination of noise sources: quarry Estimate of contribution of subject noise source: L _{Amax} of 49 dB(A) attributed to vehicle noise at quarry.	L _{Amax} of 49 dB(A) is 4 dB above limit. Vehicle operations ceased immediately. Vehicle responsible identified and its exhaust emission control equipment replaced. Vehicle fleet maintenance schedule revised and upgraded to avoid recurrence. Non-compliance an isolated event that was addressed and rectified

Correction log

XXX P/L
EPL No. 5555
Sample Point 3
Instrument B
Pollutant pH

Sample date and time	Original data	Corrected data	Date corrected	Date originally published	Reason
15/12/2011 06:00	7.50	7.40	28/02/2012	21/12/2011	Calibration error
15/12/2011 07:00	8.32	8.22	28/02/2012	21/12/2011	Calibration error
15/12/2011 08:00	7.59	7.49	28/02/2012	21/12/2011	Calibration error
15/12/2011 09:00	7.02	6.92	28/02/2012	21/12/2011	Calibration error
15/12/2011 10:00	7.84	7.74	28/02/2012	21/12/2011	Calibration error

4 Procedures for the publication or provision on request of obtained data collected continuously

There are special requirements regarding the publication of pollution monitoring data that has been collected continuously. Any relevant sampling and analysis methods are prescribed in the licence.

4.1 Instrument downtime

On-line instrumentation may be used to measure pollution continuously (or very frequently – e.g. every minute or 15 minutes). To ensure the required level of accuracy and precision, instrumentation may require cleaning, daily zero and span checks, or calibration at intervals. Short-term breakdowns may also be considered as instrument downtime.

During these downtime periods the position in the table where data would otherwise be recorded must be left blank – do not record zero (0) where there is no data, as this is misleading. Include the reason for each downtime as calibration, cleaning or breakdown.

A licence condition requiring continuous monitoring may specify a minimum percentage of time on-line (i.e. 90%) or procedures that require frequent manual sampling and testing if the instrument is off-line for a set minimum period.

4.2 Off-scale measurements

In some circumstances, on-line instruments are unable to measure the concentration of a pollutant or flow or other parameters because these are outside the standard operating range. Some instruments will display and record error messages when the data cannot be measured appropriately.

In these circumstances, the data must be reported as '<' (for low scale) or '>' (for high scale) along with the appropriate number of the low/high-scale limit of detection, coupled with the supporting explanatory text.

5 Monitoring data not required to be published

Some data which is required to be gathered and held by the holder of an environment protection licence is not required to be published in accordance with the new section 66(6) provision of the POEO Act.

This includes some data that is required to be collected and recorded by a licence condition which may be used by EPA officers to establish baseline conditions or when investigating noise, odour and dust issues (such as background, weather, complaint data).

Other data or information collected by licensees which may not require publication is monitoring required by a Regulation.

Other data or information that is not required to be published under the new provision includes:

- load-based licensing data
- National Pollutant Inventory (NPI) data
- national greenhouse and energy reporting data
- information that was collected for a premises that has had its licence surrendered and is no longer operational, unless the licence surrender approval includes a condition or conditions that specify that the information must still be made available and the period that the requirement applies for.

5.1 Load-based licensing

Environment protection licensees that are subject to load-based licensing pay licensing fees based on the quantity of pollution released to the environment and are required to demonstrate compliance with the load limits specified in their licence. These licensees provide data on production output (tonnes produced, kilolitres stored or gigawatt hours produced) as well as quantity of pollutants generated (kilograms per year) in each annual return.

The requirement to collect, store and report data regarding load-based licensing is set out in the Protection of the Environment Operations (General) Regulation 2009. Load-based licensing data does not have to be published or provided under section 66(6) as it is already published annually on EPA's public register at www.environment.nsw.gov.au/prpoeo/index.htm.

5.2 National Pollutant Inventory

Environment protection licensees may be required to collect and report annually on emissions of over 90 chemicals that are released to air, water or land, or disposed of as waste.

The requirement to collect, store and report data in the National Pollutant Inventory (NPI) is set out in the Protection of the Environment Operations (General) Regulation 2009 and other Commonwealth publications.

NPI data does not have to be published or provided. Data on emissions is published annually and can be accessed via the NPI website www.npi.gov.au.

5.3 National greenhouse and energy reporting

Any data required to be monitored and reported under the *National Greenhouse and Energy Reporting Act 2007* does not have to be provided or published.

5.4 Suspended, revoked or surrendered licences

Section 81(1) of the POEO Act states:

- (1) A licence may be suspended or revoked, or the surrender of a licence may be approved, unconditionally or subject to such conditions as the appropriate regulatory authority imposes.

The requirement to publish or provide monitoring data does not automatically apply to suspended, revoked or surrendered licences, but can be applied by conditions where appropriate. Such data would need to be published in accordance with these requirements.

6 More information

More information about the requirements and answers to frequently asked questions are available on the EPA website at www.environment.nsw.gov.au/legislation/faqspubpmdata.htm and these will be updated on a regular basis as needed.

The POEO Act may be accessed at www.legislation.nsw.gov.au/.