



Australian Government

Department of the Environment and Water Resources



National Pollutant Inventory

Emission estimation technique manual for

**Intensive livestock - pig farming
Version 2.0
June 2007**

*First published in December 1999
Version 1.2 published 1 September 2003*

ISBN: 06425 48137

© Commonwealth of Australia 2007

This manual may be reproduced in whole or part for study or training purposes subject to the inclusion of an acknowledgment of the source. It may be reproduced in whole or part by those involved in estimating the emissions of substances for the purpose of National Pollutant Inventory (NPI) reporting. The manual may be updated at any time. Reproduction for other purposes requires the written permission of the Department of the Environment and Water Resources, GPO Box 787, Canberra, ACT 2601, e-mail: npi@environment.gov.au, web: www.npi.gov.au, phone: 1800 657 945.

Disclaimer

The manual was prepared in conjunction with Australian states and territories according to the National Environment Protection (National Pollutant Inventory) Measure.

While reasonable efforts have been made to ensure the contents of this manual are factually correct, the Australian Government does not accept responsibility for the accuracy or completeness of the contents and shall not be liable for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance on, the contents of this manual.

**EMISSION ESTIMATION TECHNIQUES
FOR
PIG FARMING
TABLE OF CONTENTS**

DISCLAIMER	I
1 INTRODUCTION.....	1
1.1 Process for NPI reporting	1
1.2 Information required to produce an annual NPI report	2
1.3 Additional reporting materials	2
2 PROCESS DESCRIPTION.....	3
2.1 Pig housing.....	3
3 EMISSION SOURCES	4
3.1 Emissions to air	4
3.2 Emissions to water	4
4 THRESHOLD CALCULATIONS	5
4.1 Ammonia.....	5
5 TECHNIQUES FOR ESTIMATING EMISSIONS	8
5.1 Emission factors	8
5.2 Mass balance	9
5.3 Engineering calculations	9
5.4 Approved alternative	9
6 NEXT STEPS FOR REPORTING	10
7 REFERENCES.....	11
APPENDIX A: DEFINITIONS AND ABBREVIATIONS	12
APPENDIX B: AMMONIA EMISSION FACTORS	13
APPENDIX C: MODIFICATIONS TO THE INTENSIVE LIVESTOCK - PIG FARMING EMISSION ESTIMATION TECHNIQUE (EET) MANUAL (VERSION 2.0 JUNE 2007)	14
APPENDIX D: SIMPLIFIED REPORTING FORM	15
Step 1 – Does your farm exceed the reporting threshold?.....	15
Step 2 – Provide your farm details	16

INTENSIVE LIVESTOCK- PIG FARMING

LIST OF FIGURES, TABLES AND EXAMPLES

Figure 1: Pig raising- inputs and emissions	3
Table 1: Number of pigs required to trip the reporting threshold for ammonia.....	5
Example 1: Calculating total ammonia production for a conventional piggery	6
Example 2: Calculating total ammonia production for a deep-litter piggery with stockpiling/composting	7

1 Introduction

The purpose of this is to assist Australian pig farming facilities to report emissions of listed substances to the National Pollutant Inventory (NPI). This manual describes the procedures and recommended approaches for estimating emissions that result from pig farming activities.

The manual covers pig farming activities:

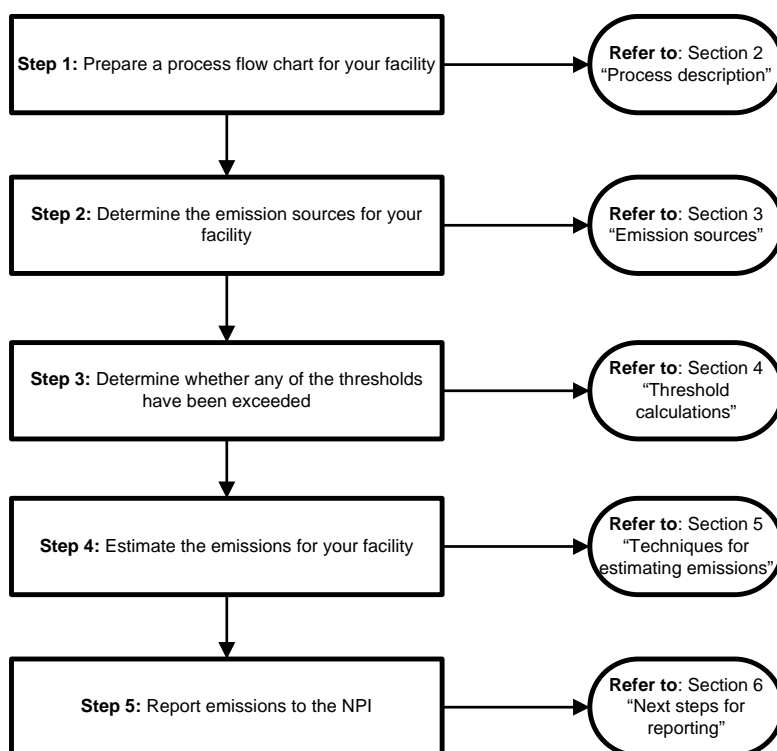
EET MANUAL		Intensive livestock- pig farming
ANZSIC CODE	1993	0151 (pig farming)
	2006	0192 (pig farming)

Note that the ANZSIC code is part of NPI reporting requirements. *The NPI Guide* contains an explanation of the ANZSIC code.

This manual has been developed through a process of national consultation involving state and territory environmental agencies and key industry stakeholders. Particular thanks are due to Australian Pork Limited, Feedlot Services Australia (FSA Consulting), and to the Queensland Environmental Protection Agency for their assistance in the development of this manual and for the simplified reporting form.

1.1 Process for NPI reporting

The process for NPI reporting can be seen in the following flow chart:



1.2 Information required to produce an annual NPI report

The following information is needed for the reporting period:

- the stock capacity of your facility in Standard Pig Units (SPU). The SPU is based on the amount of volatile solids that a 40 kg grower pig produces. SPU equivalents are shown in Appendix A.
- the piggery type (e.g. a deep-litter housed piggery (eco shed) or a conventional piggery).

If any fuel burning equipment has been used on the facility, including on-site vehicles, additional data will need to be collated:

- type and amount of fuel burned
- pollution control devices employed, *and*
- volume and throughput of fuels or organic liquids stored on site.

(It is expected that only very large piggeries will need to consider this aspect of reporting.)

1.3 Additional reporting materials

This manual is written to reflect the common practices employed in pig farming. In some cases it may be necessary to refer to other EET manuals to ensure a complete report of the emissions for the facility can be made. Other applicable EET manuals may include, but are not limited to:

- combustion in boilers
- combustion in engines
- fuel and organic liquid storage
- fugitive emissions, *and*
- meat processing.

The reporting threshold for combustion of fuels in boilers and/or engines are:

- 541 000 L petrol (equivalent to 400 tonnes)
- 478 000 L diesel (equivalent to 400 tonnes)
- 784 000 L LPG (equivalent to 400 tonnes)
- 17 800 000 MJ natural gas (equivalent to 400 tonnes) *or*
- 400 tonnes of coal or wood

If you burned 400 tonnes or more of fuel (total) in a reporting period (a year, usually from 1 July-30 June), you must consult the appropriate EET manual and report emissions of Category 2a substances. If you burned 2000 tonnes or more of fuel (total) you must report emissions of Category 2a and Category 2b substances.

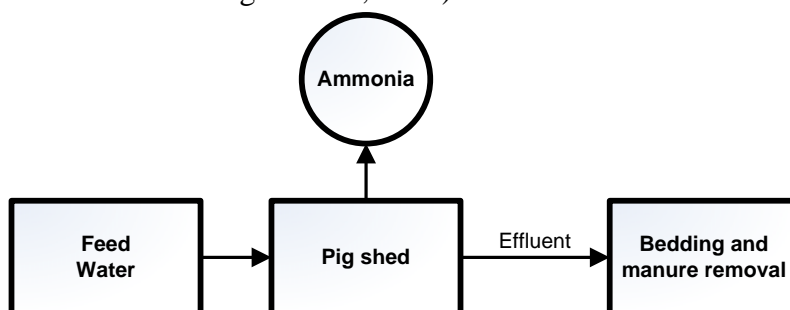
2 Process description

The first step in working out the emissions of NPI substances from your facility is creating a process flow diagram to highlight points in the process where emissions may occur.

Piggery operations consist of several activities such as feedstock storage, feeding systems, animal housing, disposal of biological matter, vehicle operation, waste removal/storage and waste treatment. Some facilities may generate their own power by fuel combustion or use biogas to produce power on site.

The following figure presents a brief description of a pig raising operation, and identifies the likely sources of emissions. This represents a typical facility in the industry, but you should develop a process flow diagram specific to your site.

Figure 1: Pig raising- inputs and emissions
(Adapted from FSA Consulting Review, 2007)



2.1 Pig housing

The housing systems used by the pig industry can be categorised as either conventional or deep-litter. They are:

1. conventional sheds - using water for cleaning, and collecting manure as effluent, *and*
2. deep-litter systems - pigs are housed on an absorbent bedding material that, with urine and manure, is cleaned out as pigs are removed from the sheds. The soiled bedding material may then be stockpiled, composted, removed directly from the farm, applied directly to land, or some combination of these.

A third category, outdoor piggeries, can also be used for pig farming. This sector of the pig farming industry is thought to comprise less than 50% of piggeries in Australia. As this is not considered an intensive form of raising pigs, reporting ammonia emissions from this type of farming is not required.

3 Emission sources

General information regarding emission sources can be located in *The NPI Guide*.

3.1 Emissions to air

Air emissions may be categorised as fugitive emissions or point source emissions.

3.1.1 Fugitive emissions

These are emissions not released through a vent or stack. Examples of fugitive emissions include dust from stockpiles and volatilisation of ammonia from stockpiled effluent. Emissions emanating from ridgeline roof-vents, louvers, and open doors of a building are also examples of fugitive emissions. Emission factors are the usual method for determining losses through fugitive emissions.

3.1.1.1 Ammonia emissions

Ammonia is released to air as a by-product of pig manure. Accurately estimating the quantities of ammonia can be difficult and/or expensive. In order to make it easier and less expensive for industry, standard emission factors for the release of ammonia from pig raising operations are listed in Appendix B.

3.1.2 Point source emissions

Point source emissions are exhausted into a vent or stack and emitted through a single point source into the atmosphere.

It is possible that in operating piggeries, fuel may be combusted in a boiler, space heater and/or an engine on site¹. Substances will be emitted from a stack as a result of fuel combustion. For determining emissions from burning fuel, refer to the NPI *Combustion in Boilers* and/or the *Combustion in Engines* manuals.

3.2 Emissions to water

Emissions of substances to water may be possible as a result of accidental spillage from effluent ponds. In the normal operation of a piggery, effluent and feed should NOT enter waterways.

If this does happen you are legally required to immediately contact your state or territory environment agency for guidance. Any such emissions are also reportable to the NPI.

¹ If the space heater is powered by electricity, obtained from the grid, reporting emissions is not required.

4 Threshold calculations

“Usage” of NPI substances is a determinant of whether NPI thresholds for Category 1 substances have been tripped.

The usage of each of the substances listed as Category 1 under the NPI must be estimated to determine whether the 10 tonnes reporting threshold is exceeded. If the threshold is exceeded, emissions of these Category 1 substances must be reported for all operations/processes relating to the facility, even if the actual emissions of the substances are very low or zero.

Usage is defined as meaning the handling, manufacture, import, processing, coincidental production or other uses of the substances.

The threshold for ammonia, present in the manure, may be tripped from pig farming activities. Larger facilities are more likely to trip the threshold due to the higher number of pigs. Conversely, smaller facilities are less likely.

The number of pigs of each type required to trigger the NPI threshold for ammonia is as follows:

Table 1: Number of pigs required to trip the reporting threshold for ammonia

Pig type	Number of SPU equivalents required to trigger reporting		
	Conventional piggery	Deep-litter piggery-stockpiling litter on farm	Deep litter piggery-removal of litter from farm
Gilt	865	1586	5435
Boar	711	1303	4465
Gestating sow	748	1371	4700
Lactating sow (with litter)	210	385	1317
Weaner	2674	4902	16807
Grower (1 SPU)	1137	2084	7143
Finisher	711	1303	4465

4.1 Ammonia

Ammonia use in piggeries is the co-production of ammonia as a by-product of the organic nitrogen in pig manure. Its level, therefore, is an estimation and is not based on actual usage levels. **Some facilities will trigger the 10 tonnes per year threshold for reporting ammonia emissions.**

To determine total ammonia production:

1. Determine the average number stock housed over the past 12 month reporting period.
2. Determine which type of piggery facility you operate.
 - Is your facility a conventional piggery or is it a deep-litter house piggery?
e.g. gilts in eco shelters.

3. Calculate the amount of ammonia produced from each stock group.
 - Determine the amount of ammonia production per year for your type of production unit (Appendix B).
 - Multiply the amount of ammonia production per year by the number of pigs in your production unit to determine total ammonia production.
4. Determine whether the threshold has been exceeded
 - If the quantity of your total ammonia produced exceeds 10 tonnes you will need to report ammonia production to the NPI.

Calculating ammonia emissions for conventional piggeries is shown in Example 1.

Example 1: Calculating total ammonia production for a conventional piggery

A pig farmer has housed an average of 154 lactating sows, 846 gestating sows and 71 gilts in the past 12 months. Is the Category 1 threshold for ammonia exceeded for the facility?

Step 1: Determine ammonia production per year for each grower type.

From Appendix B, the amount of ammonia produced each year is:

Lactating sow =	47.740 kg ammonia/sow/year
Gestating sow =	13.376 kg ammonia/sow/year
Gilt =	11.563 kg ammonia/gilt/year

Step 2: Calculate total ammonia production for all pigs.

Lactating sow = $154 \times$ amount ammonia produced per sow per year
 = 154×47.740
 = 7351.96 kg ammonia

Gestating sow = $846 \times$ amount ammonia produced per sow per year
 = 846×13.376
 = 11316.096 kg ammonia

Gilts = $71 \times$ amount ammonia produced per gilt per year
 = 71×11.563
 = 820.973 kg ammonia

Total ammonia production for this facility	=	ammonia production for lactating sows + ammonia production for gestating sows + ammonia production for gilts
	=	$7351.96 + 11316.096 + 820.973$
	=	19489.029 kg ammonia
	=	19.489 tonnes ammonia

Step 3: Determine whether the threshold has been exceeded

19.489 tonnes exceeds the Category 1 threshold, therefore this facility must report emissions of ammonia. The reported value will be 19,489 kg.

Example 2: Calculating total ammonia production for a deep-litter piggery with stockpiling/composting

A pig farmer has housed an average of 2400 growers, 2500 weaners and 3000 finishers in the past 12 months. Is the Category 1 threshold for ammonia exceeded for this facility?

Step 1: Determine ammonia production per year for each grower type.

From Appendix B, the amount of ammonia produced each year is:

Growers	=	4.800 kg ammonia/grower/year
Weaners	=	2.040 kg ammonia/weaner/year
Finishers	=	7.680 kg ammonia/finisher/year

Step 2: Calculate total ammonia production for all pig types.

Grower	=	2400 × amount ammonia produced per grower per year
	=	2400 × 4.800
	=	11,520 kg ammonia
Weaner	=	2500 × amount ammonia produced per weaner per year
	=	2500 × 2.040
	=	5,100 kg ammonia
Finisher	=	3000 × amount ammonia produced per finisher per year
	=	3000 × 7.680
	=	23,040 kg ammonia

Total ammonia production for this facility	=	ammonia production for growers
+ ammonia production for weaners + ammonia production for finishers		
	=	11,520 + 5,100 + 23,040
	=	39,660 kg ammonia
	=	39.66 tonnes ammonia

Step 3: Determine whether the threshold has been exceeded

39.66 tonnes exceeds the Category 1 threshold, therefore this facility must report emissions of ammonia. The reported value will be 39,660 kg.

5 Techniques for estimating emissions

The emissions to air, land and water for every NPI substance that trips a threshold must be reported from all point and fugitive sources on the facility. These are reported as “total point” and “total fugitive” emission sources. *The NPI Guide* outlines detailed information on thresholds and identifying emission sources.

There are five types of emission estimation techniques (EETs) that may be used to calculate emissions from your facility. These are:

- Sampling data or direct measurement
- Mass balance
- Fuel analysis or engineering calculations
- Emission factors, *or*
- An approved alternative

Generally, intensive pig farming activities report emissions for ammonia using the emission factor method, however some facilities report ammonia emissions using engineering calculations, mass balance calculations or by an approved alternative technique. The emission factor method, engineering calculation and mass balance calculations are briefly described in this section, but the other emission estimation techniques can be found in *The NPI Guide*.

If you estimate your emissions by using any of these EETs, your data will be displayed on the NPI database as being of “acceptable reliability”. Similarly, if your environmental agency has approved the use of EETs that are not outlined in this manual, your data will also be displayed as being of acceptable reliability.

This manual seeks to provide the most effective emission estimation techniques for the NPI substances relevant to the pig farming industry. The absence of an EET for a substance in the manual does not imply that an emission should not be reported to the NPI. The obligation to report on all relevant emissions remains if reporting thresholds have been exceeded.

You should note that the EETs presented in this manual relate principally to average process emissions. Emissions resulting from non-routine events are rarely discussed in the literature, and there is a general lack of EETs for such events. However, it is important to recognise that emissions resulting from significant operating excursions and/or accidental situations (e.g. spills) will also need to be estimated. Emissions to land, air and water from spills must be estimated and added to process emissions when calculating total emissions for reporting purposes. The emission resulting from a spill is the net emission, i.e. the quantity of the NPI reportable substance spilled, less the quantity recovered or consumed immediately (within 24 hours) during clean up operations.

5.1 Emission factors

An emission factor is a tool that is used to estimate emissions to the environment. In this manual, it relates to the quantity of ammonia emitted from pig urine and manure associated with pig farming. Emission factors are usually expressed as the weight of

a substance emitted multiplied by the unit weight, volume, distance or duration of the activity emitting the substance (e.g. kilograms of ammonia per pig).

Emission factors applicable to this manual are listed in Appendix B: Ammonia emission factors. You must ensure that you estimate emissions for all substances relevant to your process if a threshold for the substance is exceeded.

The examples given in section 4 of this manual use the emission factors emission estimation technique. For the purposes of NPI reporting, “usage” and an emission are considered identical.

5.2 Mass balance

A description of the mass balance method is given in the *NPI Guide*.

Calculating emissions from intensive livestock (pig farming) facilities using mass balance appears to be a straightforward approach to emissions estimation. However, it is likely that few Australian facilities consistently track material usage and waste generation with the overall accuracy needed for application of this method. Inaccuracies associated with individual material tracking, or other activities inherent in each material handling stage, can result in large deviations for total facility emissions. As emissions from specific materials are typically below 2% of gross consumption, and error of only $\pm 5\%$ in any one step of the operation can significantly affect emission estimations.

5.3 Engineering calculations

An engineering calculation is an estimation method based on physical/chemical properties (e.g. vapour pressure) of the substance and mathematical relationships. A more complete discussion of this method is given in the *NPI Guide*.

5.4 Approved alternative

You are able to use emission estimation techniques that are not outlined in this document. You must, however, seek the consent of your state or territory environmental agency. For example, if your company has developed site-specific emission factors, you may use these if they have been approved by your local environmental agency.

6 Next steps for reporting

This manual has been written to reflect the common processes employed in pig farming activities. To ensure a complete report of the emissions for your facility, it may be necessary to refer to other EET manuals. These include:

- combustion in boilers
- combustion in engines
- fuel and organic liquid storage
- fugitive emissions, *and*
- meat processing.

When you have a complete report of substance emissions from your facility, report these emissions according to the instructions in *The NPI Guide*.

7 References

ANZSIC: Australian and New Zealand Standard Industrial Classification, Australian Bureau of Statistics and Statistics New Zealand 2006, ABS Catalogue 1292.0

FSA Consulting, Reviewing Ammonia Emissions for Deep Litter Piggeries, April 2007, and references contained therein.

Gardner E.A., & Casey K.D, 1995, *Sustainable Reuse of Feedlot Manure on Agricultural Lands*, Queensland Department of Primary Industries – Intensive Livestock Environmental Management Services, Toowoomba, QLD.

Kruger, I., Taylor, G., Ferrier, M., 1995, *Effluent at Work*, Australian Pig Housing Series, NSW Agriculture, Tamworth, NSW

Perry, R. and Green, D., 1997, *Perry's Chemical Engineers' Handbook*, 7th Ed., McGraw-Hill, New York, USA.

Qld DPI, 1999. Communication between Matt Scholl (PAE) and Ken Casey from the Queensland Department of Primary Industries - Intensive Livestock Environmental Management Services.

Appendix A: Definitions and abbreviations

Term	Definition
ANZSIC	Australian and New Zealand Standard Industrial Classification
APL	Australian Pork Limited
Biogas	A gas (produced from decomposition of waste) comprising methane and carbon dioxide that can be used as a fuel
Boar	A mature male pig
DLH	deep-litter housed
EET	emission estimation technique
EFR	emission factor rating
Emission	substances being released to the environment
Facility	any building or land from which a substance may be emitted, together with any machinery, plant, appliance, equipment, implement, tool or other item used in connection with any activity carried out at the facility
Farrow	A litter of pigs
Finisher	A pig aged between 16-24 weeks
Gilt	A mature female pig that has not yet reproduced
Grower	A pig aged between 10-16 weeks
kg	kilogram
SPU	Standard Pig Unit- the SPU is based on the amount of volatile solids that a 40 kg grower pig produces
Sucker	An unweaned piglet of less than 4 weeks of age
tonnes	1 000 kilograms
Volatilisation	the process by which a substance evaporates to a gas at room temperature
VS	Volatile solids: predicted from the dry matter digestibility of a diet for each class of pig and production is used as a function of waste output
Weaner	A weaned pig aged less than 10 weeks

Standard Pig Unit (SPU) equivalent for each class of pig:

Pig class	Weight range (kg)	Age range (weeks)	Volatile solid (VS) production (kg/year)	SPU equivalent ¹
Gilt	100-160	24-30	162	1.314
Boar	100-300	24-128	151	1.600
Gestating sow	160-230		151	1.520
Lactating sow and litter (10 piglets)	230-160		215	5.425
Weaner	8-25	4-10	47	0.425
Grower	25-55	10-16	90	1.000
Finisher	55-100	16-24	149	1.600

Sources: National Environmental Guidelines for Piggeries, Australian Pork Limited, Canberra, and Reviewing Ammonia Emissions Factors for Deep Litter Piggeries, FSA Consulting.

Notes:

1. SPU equivalent listed is the SPU as per the APL Guidelines multiplied by a multiplier factor. This is undertaken to improve the accuracy of nitrogen excretion rates based on the SPU for each pig class. Multipliers have been developed for pig classes where the ratio of nitrogen excretion to volatile solids production differs by more than 5%.

Appendix B: Ammonia emission factors

Pig class	Conventional Piggery (kg/year) ¹	Deep-litter piggery (kg/year) ¹	
		Stockpiling on farm ²	Manure removed from farm upon pig removal ³
Gilt	11.563	6.307	1.840
Boar	14.080	7.680	2.240
Gestating sow	13.376	7.296	2.128
Lactating sow and litter (10 piglets)	47.740	26.040	7.595
Weaner	3.740	2.040	0.595
Grower	8.800	4.800	1.400
Finisher	14.080	7.680	2.240
<p>Calculations for the ammonia EFs are based on multiplying the modified SPU (as seen in Appendix A) by an emission factor of:</p> <ol style="list-style-type: none"> 1. 8.8 kg/SPU/year if all the litter is stockpiled and/or composted and used on farm, 2. 4.80 kg/SPU/year if all the litter is stockpiled/composted and used on farm, <i>or</i> 3. 1.40 kg/SPU/year if the manure is sold directly from the sheds upon removal. 			

Appendix C: Modifications to the intensive livestock - pig farming emission estimation technique (EET) manual (Version 2.0 June 2007)

Update (from version 1.2)

Page	Outline of alteration
Throughout	Removed references to Category 2a, 2b and 3 substances and associated calculations. This includes discussions relating to total nitrogen. Discussion now relates to ammonia emissions only.
4	Included ANZSIC 2006 code.
4	Inserted a flow chart to show the NPI reporting process.
5	Included sections on information required to produce an annual NPI report and additional reporting materials.
6	Simplified flow chart for pig farming: process inputs and emissions. Included section describing the difference between deep-litter piggeries and conventional piggeries.
7	Removed section on transfers. Brief discussion on air (point and fugitive) and water emissions.
8-10	Reworked section on threshold calculations, provided simpler examples for determining ammonia emissions.
11-12	Made brief mention of emission estimation techniques.
13	Included brief section on reporting for other substances.
15	Appendix A: Value for a SPU has changed from 50 kg to 40 kg in line with APL National Environmental Guidelines for Piggeries
17	Emission factors have been reworked for conventional piggeries. New emission factors for deep litter piggeries.
20-21	Included simplified reporting forms for estimating ammonia emissions for conventional piggeries and deep litter piggeries.

Update (from version 1.1) - 1 September 2003 erratum

Page	Outline of alteration
7	Example 1 added to simplify estimation of ammonia emissions.
7	Table 1- Correction of column headings in table and the number of pigs to exceed the ammonia threshold based on the different types of pigs produced.
8	Addition of column showing total ammonia production (tonnes/year).
8	Addition of Example 2- Calculating total ammonia production.
12	Biogas added as a fuel type in Example 4.
13	Manganese and compounds deleted for Category 2b substances in Table 4.
19	Example 6 simplified.

Update (from version 1.0) - January 2000 erratum

Page	Outline of alteration
Table 2	Correction of column headings in table and number of pigs to exceed the ammonia threshold based on the different types of pigs produced.
7	Addition of an explanation of how the different levels of pigs were determined.

Appendix D: Simplified reporting form

Step 1 – Does your farm exceed the reporting threshold?

If the average number of animals in a year is more than that listed in Table 1 (page 5) you need to report emissions of ammonia to the NPI. For NPI reporting purposes “year” is a financial year.

Below is a simplified form for calculating ammonia emissions from piggeries:

Pig type	Housing Type (Conventional/Deep Litter, stockpiling/Deep Litter, litter removal)	Average number of animals		Emission Factor						Ammonia emissions (kg/year)
				Conventional		Deep-litter, stockpiling on farm		Deep-litter, removal of litter		
Number of gilts			×	11.563	OR	6.307	OR	1.840	=	
Number of boars			×	14.080	OR	7.680	OR	2.240	=	
Number of gestating sows			×	13.376	OR	7.296	OR	2.128	=	
Number of lactating sows (do not include the number of suckers)			×	47.740	OR	26.040	OR	7.595	=	
Number of weaners			×	3.740	OR	2.040	OR	0.595	=	
Number of growers			×	8.800	OR	4.800	OR	1.400	=	
Number of finishers			×	14.080	OR	7.680	OR	2.240	=	
Total									=	

The following is a simplified reporting form that is intended for smaller operations that only expect to report emissions of ammonia. Larger operations, and/or those with a requirement to report additional substances (such as a result of combustion or fuel storage), should estimate their emissions using the worksheets in this manual, and the standard reporting form available from the NPI web site (or the NPI reporting tool).

Once you have completed this form you should forward it to the NPI office in your state or territory. Contact details are available from the NPI web site, or phone free-call 1800 657 945 for advice.

Step 2 – Provide your farm details

Please complete the following. **Information marked with an * will appear on the NPI public web site**

Facility details	
Registered details (as per company or business registration)	
Registered name* ₁	
Registered address Street address	
City, State, Postcode	
Australian Company Number (ACN)*	
Australian Business Number (ABN)	
Piggery details	
Physical location of the farm	
Name of farm* ₁	
Farm address* Street Address	
City, State, Postcode	
Contact details for piggery	
Public contact name* ₂	
Position title* ₂	
Phone* ₃	
Fax	
Email address* ₄	
Web address*	
Postal address Street or Postbox	

City, State, Postcode	
If you are an owner-occupier: 1 – and your registered name or farm name is the name of the owner-occupier, you may use an alternative descriptive name (such as the name of the property). 2 – you may use a generic term such as “Manager” or “Environmental Manager”. 3 – you may use the phone number of your industry association if you have received their approval to do so. 4 – you may use the email address of your industry association if you have received their approval to do so.	
Technical contact – the person who completes this form	
Technical contact name	
Position title	
Phone	
Fax	
Email address	
Number of employees working at this farm	
Description of main activities	
Pollution control/emission reduction activities – please note anything you do at the farm to reduce emissions	

Step 3 - Certification

I hereby certify that to the best of my knowledge the information on this form has been provided using all due care and diligence.

Name Position

Signature Date