



**Australian Government**

---

**Comcare**

**Notification of a Commonwealth potential  
major hazard facility**

Notification pack

## Table of Contents

<b>1. Purpose and scope</b>	<b>3</b>
<b>2. Terminology used in this notification pack</b>	<b>3</b>
<b>3. The types of facilities requiring notification</b>	<b>4</b>
<b>4. Information required for notification of a potential major hazard facility</b>	<b>5</b>
4.1 Before completing the notification form	5
4.2 How to complete the notification form	7
4.3 Notification form Part B – schedule 9 Materials	10
4.4 Notification Form Part C – Consequence Matrix	11
4.5 Where to send the Notification Form and attachments	12
<b>5. Timeframes for notification</b>	<b>12</b>
<b>6. Determination of schedule 9 quantities for notification</b>	<b>13</b>
6.1 How to identify individual schedule 9 materials	13
6.2 How to identify maximum quantities of schedule 9 materials	14
6.3 How to apply the aggregation rule	15
6.4 Excluding isolated amounts of materials of 2% or less of the individual threshold quantities	17
<b>Notification Form</b>	<b>22</b>

## 1. Purpose and scope

This notification pack has been produced to provide employers with information on how to notify as a potential Major Hazard Facility (MHF) under Part 9 Major Hazard Facilities of the *Occupational Health and Safety (Safety Standards) Regulations 1994* (the regulations). The regulations principal legislation is the *Occupational Health and Safety Act 1991* (the OHS Act) administered by the Safety, Rehabilitation and Compensation Commission (the Commission).

The Commission has delegated many of its functions and powers under Part 9 Major Hazard Facilities regulations to Comcare. For practical purposes, powers and functions undertaken by Comcare on behalf of the Commission will be referred to in this guidance as duties undertaken by Comcare.

This notification pack applies to any employer in the Commonwealth jurisdiction for occupational health and safety, who operates a facility that is a potential MHF, as defined by the MHF regulations.

This notification pack provides detailed information to employers regarding:

- a) the type of facilities that meet the definition of a potential MHF and must notify Comcare;
- b) information required for notification;
- c) timeframes for notification; and
- d) determining schedule 9 quantities for notification.

The notification form approved by Comcare is provided at the end of this pack. This notification pack provides guidance only. An employer who has responsibility for submitting a notification should refer to, and be familiar with the specific requirements of the MHF regulations.

## 2. Terminology used in this notification pack

Terms provided in this section are to assist readers of this notification pack. Definitions of many terms in this section can be found in the MHF regulations or principal Act.

**Aggregation rule:** is a formula used to calculate the ratio of two or more quantities of schedule 9 material (present or likely to be present) at the facility relative to the threshold quantity of the materials.

**Aggregate quantity ratio (AQR):** is the resultant ratio of the aggregation rule used to determine if notification is necessary. The ratio is a proportion of materials measured against the threshold quantity for the materials and categories of material in schedule 9.

**Employer:** has the same meaning as defined in the OHS Act.

**Facility:** has the ordinary dictionary meaning of a facility, but it may be used as a contraction of “potential major hazard facility” or “major hazard facility” (that is a facility classified by Comcare as a major hazard facility).

**In control:** as defined by the MHF regulations, in relation to an employer and a facility, means having responsibility for the day to day operations at the facility.

**National Security information:** as defined by the MHF regulations, is information held at the facility, the disclosure of which is likely to prejudice Australia's national security. Such information may include the disclosure of the location, type and quantity of schedule 9 material held at the facility.

**Notification:** for the purposes of this notification pack, is the requirement under the MHF regulations for an employer in control of a potential MHF to provide Comcare with information about the facility.

**Nuclear installation:** has the same meaning as Section 13 of the Australian Radiation Protection and Nuclear Safety Act 1998.

**Prescribed radiation facility:** is a facility or installation prescribed by Regulation 6 of the Australian Radiation Protection and Nuclear Safety Regulations 1999.

**Schedule 9 materials:** is the list of materials (including categories of materials) with corresponding threshold quantities, contained in schedule 9 of the Safety Standards regulations.

**Threshold quantity:** is the amount of material or category of materials listed in schedule 9 of the Safety Standards regulations if held at a facility would require the facility to be classified as a major hazard facility.

**Workplace:** has the same meaning under the OHS Act.

### 3. The types of facilities requiring notification

The MHF regulations require employers who are in control of, or intend to be in control of a potential MHF to notify Comcare.

A potential MHF is any of the following:

- a) a facility with at least one schedule 9 material at or over 10% of the threshold quantity specified in schedule 9 of the MHF regulations;
- b) a facility with more than one schedule 9 material at the facility and, through the application of the aggregate rule, the aggregate quantity ratio of schedule 9 materials is greater than 0.1;
- c) a nuclear installation or a prescribed radiation facility as described in the *Australian Radiation Protection and Nuclear Safety Act 1998* ("ARPANS Act") and *Australian Radiation Protection and Nuclear Safety Regulations 1999* ("ARPANS Regulations");
- d) a laboratory that deals with biological agents that requires physical containment level 3 or 4 within the meaning of AS/NZS 2243.3:2002; and
- e) a facility identified by Comcare that is not a potential MHF by definition under regulation 9.03, but where Comcare believes on reasonable grounds an activity undertaken at the facility may cause a major accident; and where Comcare has requested the facility to notify as a potential MHF.

## 4. Information required for notification of a potential major hazard facility

The above types of facilities (potential MHFs) are required to provide a notification in accordance with regulation 9.05 and 9.06. The notification must be provided to Comcare using the notification form included at the rear of this package.

### Security sensitive information

Employers in control of potential MHFs with security sensitive information will be required to complete the notification form to the extent where information provided to Comcare, is not classified information.

### 4.1 Before completing the notification form

Employers should consider the following requirements before completing the notification form.

#### Determine quantity of schedule 9 material

Before completing the notification form employers should refer to schedule 9 of the Safety Standards regulations and compare this list with materials held (or likely to be held) at the facility.

If any of these materials are held or likely to be held at the facility, the employer should read Section 6, *Determination of quantities for notification*, of this notification pack to assist the employer in determining the quantity of schedule 9 materials held or likely to be held at the facility.

#### Establishments with more than one potential MHF

Normally employers will be required to notify potential MHFs separately. However there may be situations where large establishments have a number of separate facilities that meet the definition of a potential major hazard facility.

If these facilities have the ability to cause a chain reaction with one another through a major accident, they should be considered and notified together.

Facilities may also be considered together if they do not impact on one another but have same Safety Management System (SMS) and management structure. This instance can be defined as two or more facilities in one large establishment, which:

- a) are controlled by the same management structure at the site, and
- b) are controlled by the same SMS.

If applicable, the employer in control of the entire establishment can provide one notification for all facilities that fit this description. The information contained within the notification will need to clearly demonstrate that the single safety management system is specifically configured to deliver a sound safety regime for all facilities.

**How to determine if notification as a potential MHF is required for a facility where biological or radiation materials are present or likely to be present at the facility**

Employers who are in control of a nuclear installation or a prescribed radiation facility should determine if that facility meets the definition within the meaning defined under the ARPANS Act and ARPANS Regulations.

Employers who are in control of a laboratory that deals with biological agents that requires physical containment level 3 or 4 should determine that the facility meets the definition within AS/NZS 2243.3:2002.

When a facility meets the definition within the above references, the employer in control of that facility, must notify Comcare that it is a Potential MHF.

**Schedule 9 materials in Intermediate temporary storage**

If notifiable amounts of schedule 9 materials are held at a facility for the purposes of intermediate temporary storage, the facility must be notified to Comcare. Employers should clearly state the periods of time which the notifiable schedule 9 materials are held at the facility.

Examples of a temporary storage facility could be rail yards, road transport depots or warehouses where there is a high throughput of these materials.

In order to make an assessment if the facility should be classified as a MHF, Comcare will consult with the employer to assess if the facility has the potential to cause a major accident.

Schedule 9 materials on a ship that is within the boundaries of the facility can be excluded from the notification. However, only the material actually held on the ship can be excluded, whereas any amounts transferred from the ship to the facility, must be included in calculations.

**Vehicles or vessels that carry schedule 9 materials**

The term “facility” does not include independently mobile transport vehicles or vessels such as trucks, aircraft and ships. The MHF regulations are concerned with fixed land based sites. However, schedule 9 materials in vehicles or vessels while at a facility can be a factor in calculating the total amount of schedule 9 materials at the facility.

**Actual or maximum storage and production capacity**

There may be circumstances where the employer’s report of quantities of schedule 9 materials present or likely to be present at the facility will be below the facility’s potential full capacity. If the employer has no intention of using that full capacity, an explanation of that intention should be included with the notification form.

In particular, for a facility that produces schedule 9 materials, the employer must include information about the actual maximum production rate undertaken at the facility. If the facility produces schedule 9 materials less than the design production rate and there is no intention to use the design production rate, the employer should provide reasons why the design production rate is not used in practice.

## **Monitoring compliance with notification requirements**

Employers should be aware of relatively minor changes in containment systems or quantities that could result in notification being necessary.

Comcare recommends employers maintain vigorous monitoring of procurement plans to ensure that, in the event of a proposed increase in schedule 9 materials to notifiable amounts. In the event of this or other relevant changes that may increase the possibility for a facility to have a major accident, employers must notify Comcare.

## **4.2 How to complete the notification form**

This section of the notification pack will describe what information should be provided under each section of the notification form.

Employers in control of facilities who feel the disclosure of specific information requested within the notification form, is likely to prejudice Australia's national security, should not complete that part of the form.

Where insufficient information is provided, Comcare may conduct on-site verifications to assist them in making a decision whether to classify the facility as a MHF.

### **Section 1: Employing agency details**

- **Principle Officer name and title** - is defined in section 5 of the OHS Act. For example, this would be the "Chief Executive Officer" (CEO) in a Commonwealth authority or in the case of a Department this would be the "Secretary".
- **Employer/agency** - refers to the department, agency or organisation.
- **Address, suburb/town, state, postcode** –street address of the Employer/agency.
- **Phone No., Fax, Email** – for the Principle Officer.

### **Section 2: Details of the facility and person in control**

- **Facility name** – the name of the facility.
- **Location or street address, suburb/town, state, postcode** – the street address of the location of the facility. If in a remote location, provide name of nearest place name/state and postcode.
- **Name and contact details of the person in control at the facility-** provide the contact details for the person at the facility who is responsible for the day to day operations at the facility. This should be the person Comcare can contact if they require additional information.

### **Section 3: Reason for notification**

In this section of the notification form employers are to tick only one box relating to the reason the potential MHF is being notified.

- **Existing potential major hazard facility** – is a potential MHF that is in operation at the time of commencement of the MHF regulations.
- **Existing facility, but proposed modifications will cause the facility to become a potential major hazard facility** – is a facility that presently does not meet the definition of a potential MHF, however, planned modification to the facility will cause the facility to become a potential MHF. The expected date when the modification will be in operation is to be provided.
- **Proposed potential major hazard facility** – is a facility that is currently under construction that once in operation, will be a potential MHF. The expected date of commencement of operation is to be provided.
- **Potential major hazard facility that Comcare has requested notification from** – is a facility that is either under construction or in operation that Comcare has identified s having the potential to cause a major accident and has asked the employer to notify as a potential MHF.

### **Section 4: Type of potential Major Hazard Facility**

Before completing this section of the notification form employers with schedule 9 materials will need to have an accurate account of all materials held or likely to be held at the facility. Employers should read Section 6, *Determination of quantities for notification*, of this document.

This section requires employers to tick only one box relating to the type of potential MHF that are either in existence or proposed. The options are:

#### **Facilities with schedule 9 materials:**

- schedule 9 materials present or likely to be present in a threshold quantity or aggregate quantity equal to or greater than 100%
- schedule 9 materials present or likely to be present in a threshold quantity or aggregate between 10% and 100%.

#### **Facilities without schedule 9 materials:**

- Nuclear Installation
- Prescribed Radiation Facility
- Physical Containment Laboratory 3
- Physical Containment Laboratory 4

## **Section 5: Attachments**

Employers must provide attachments to the notification form for all items listed below:

- a) a brief description of the:
  - nature of the facility, including general site activities;
  - storage, production and auxiliary processes. The description should emphasise sections of the facility which involve schedule 9 materials or radiation or biological materials.
  - if a temporary storage area, what is the frequency that notifiable amounts of schedule 9 goods are stored there;
  - the number of people (including contractors) working at the facility and an indication of their distribution between day work and shift work;
  - the distance between the facility and any surrounding population and the size of that population; and
  - the distance between the facility and essential community services such as water, electricity and gas supply facilities.
- b) details of any incident(s) within the last 5 years which, but for mitigation effects, actions or systems, could have escalated to a major accident. Details should include:
  - information related to the death or serious personal injury to persons that may have occurred in or outside of the facility;
  - information pertaining to any significant damage to the environment that may have occurred;
  - the date of incident;
  - the type of materials and quantities involved in the incident;
  - the description of the particular area of the workplace where the incident occurred; and
  - the likely cause of the incident and impact on people, property and the environment outside of the facility.

## **Section 6: Declaration**

The declaration should be signed by the employer in control of the day to day operations at the potential MHF.

### 4.3 Notification form Part B – schedule 9 Materials

For each schedule 9 materials present or likely to be present at the facility employers must complete the table at Part B.

**Note:** If the notification is for biological, nuclear installations or radiation facilities then Part B of this notification pack is not required to be completed. However relevant information on substances used at the facility should be provided in accordance with Section 5. The following information provides additional guidance for completing Part B of the notification form.

Column heading	Comment
Row / Ser Number	This is an identifier in this table.
Schedule 9 material Item No. & name	Provide the item number and the name of the material as it appears in schedule 9 of the regulations.
CAS No. Un No. Class. Packing group.	Provide the Chemical Abstract Service number "CAS No.", UN number, Dangerous Goods Classification and packing group numbers.  This information is available from the <i>Australian Dangerous Goods Code</i> .
Physical form - Type	Specify the form in which the schedule 9 material is present or likely to be present, e.g. solid, liquid, gas, mixture, formulation, liquefied gas under pressure.
Containment - Type	Provide the type of storage, e.g. tank, process vessel, cylinder and distillation column.
Quantity on-site (tonnes) - Storage - In process - Total	Provide the total quantity of schedule 9 material on-site at the facility. This should be broken up into quantities held in storage and processing.
Threshold quantity (tonnes)	Obtain this quantity from schedule 9 column 4 of the regulations. If a material has 2 threshold quantities (i.e. for the specific material and the category of material) only include the lowest value.
AQR	Aggregate Quantity Ratio. Express the total quantity at the facility as a fraction of the of the threshold quantity.

## 4.4 Notification Form Part C – Consequence Matrix

Employers in control of a potential MHF are required to complete the consequence matrix at Part C of the notification form. The matrix will assist Comcare in determining the impact of a major accident on persons and the environment in and outside of the facility.

The matrix should be completed based on the most credible catastrophic event possible at the potential MHF. Employers should consider that preventive or mitigation controls that may fail will fail (including redundant controls) and that the event will happen (likelihood =1).

The intention of this exercise is to evaluate the consequence of the most feared accident possible at the facility (worst case scenario). For the purposes of this exercise the causes of the accident are not relevant. Employers are asked to rank the consequence of such a major accident from minor through to catastrophic for voluntary persons, involuntary persons, community services and utilities and the off site environment.

**Voluntary person** is a person under the control of the employer who is in direct support of the hazardous operation.

**Involuntary person** is any person under the control of the employer who is not in direct support of the hazardous operations or any other person not under the control of the employer (including the community).

**Community services / utilities** is the disruption of essential community services such as the supply of water, electricity and gas or damage to private property (including dwellings).

### **Off-site environment:**

Off-site environment is the area outside of the major hazard facility perimeter. Three variables should be considered for matters related to environmental impact, they are as follows:

- the affected area;
- the time it will take the area to recover; and
- if it is an area of national environmental significance.

Matters of national environmental significance are classified under the *Environmental Protection Biodiversity Conservation Act 1999* (EPBC Act). The Act defines seven matters of national environmental significance, these are:

- World Heritage Properties;
- National Heritage places;
- Wetlands of international importance;
- Threatened species or ecological communities;
- Migratory species;
- Commonwealth Marine areas; and
- Nuclear action.

A complete list of protected matters can be found on the Department of Environment and Heritage web site at:  
<http://www.deh.gov.au/epbc/matters/index.html>

**Completing the matrix:**

Employers must tick a consequence box for the most likely consequences of the major accident on involuntary persons, voluntary persons, community disruption and the surrounding off-site environment.

## 4.5 Where to send the Notification Form and attachments

The notification form and all supporting documentation should be returned to the MHF Contact Officer at Comcare, either:

In person: Level 1, 14 Moore St  
Canberra, ACT 2600

Mail: HAZMAT Policy Team  
GPO Box 9905  
Canberra City, ACT 2601

Email: [HAZMAT-HelpDesk@comcare.gov.au](mailto:HAZMAT-HelpDesk@comcare.gov.au)

## 5. Timeframes for notification

This section briefly describes the timeframes for notification. In general employers have 3 months in which to provide a notification to Comcare once the MHF Regulations come into force.

Summary of timeframes for notification of a potential MHF to Comcare:

- a) for a potential major hazard facility— within 3 months after the commencement of the Regulations; or
- b) for an existing facility that, because of a modification to the facility, will become a potential major hazard facility—at least 3 months before the modification is made; or
- c) for a facility identified as a MHF by Comcare and where Comcare has written to the employer requesting the employer to notify as a potential MHF – within 3 months after Comcare has requested the employer to notify; or
- d) for a proposed potential major hazard facility— at least 3 months before the operation commences at the facility; or
- e) employers in control of a facility that is not a potential MHF at the commencement of these regulations but because of modification in the future may become a potential MHF must notify Comcare at least 3 months prior to the modification being made.

## 6. Determination of schedule 9 quantities for notification

The notification obligations in the MHF regulations require employers to review the operations at the facility and evaluate the quantities of schedule 9 materials present or likely to be present at the facility.

Quantities of substances need to be assessed, both individually and in aggregation against defined threshold amounts. A formula must be used for calculating a threshold quantity ratio for aggregated quantities of different schedule 9 material - this formula is described as the "aggregation rule".

There are a number of important factors to be considered when calculating quantities of schedule 9 materials for notification. These factors are listed below and further guidance on applying these factors follows the list:

- a) how to identify individual schedule 9 materials;
- b) how to identify maximum quantities of schedule 9 materials;
- c) how to apply the aggregation rule;
- d) excluding isolated amounts of material less than 2% of the individual threshold quantities; and
- e) schedule 9 materials in Intermediate temporary storage.

### 6.1 How to identify individual schedule 9 materials

Almost all materials listed in schedule 9 are dangerous goods, and therefore a dangerous goods manifest is a good starting point for identifying schedule 9 materials that are held on site. However, some materials in schedule 9 do not have dangerous goods classification; e.g. "goods too dangerous to transport" (such as uninhibited ethylene oxide). Therefore, a careful check should be made that all relevant materials are included in the evaluation.

Part 2 within schedule 9 of the Safety Standards regulations divides materials into two groups – individual materials and categories of materials:

- a) individual materials are listed in items 1 to 43; and
- b) categories of materials are listed in items 44 to 65.

Each item in Part 2 has a corresponding threshold quantity, which applies to the material or category of materials respectively.

Where an individual material also falls within a category of material, the lowest threshold quantity applicable is to be used to determine quantities.

Identifying the individual materials in Part 2 of the schedule is straightforward, as described above.

To identify categories of materials, it is necessary to determine the category of the material by assessing:

- a) the flammability of the substance;
- b) its flash point; and
- c) its packing group.

In order to determine the applicable category of schedule 9 material, additional material property data may be required. Some useful references are:

- a) the Australian Code for the Transport of Dangerous Goods (ADG Code), which lists the Class, Packing Group, HazChem Code and flash point (as applicable) for all designated dangerous goods; and
- b) The Designated List of Hazardous Substances produced by the Australian Safety and Compensation Council (formerly the National Occupational Health and Safety Commission – the NOHSC) is a useful additional reference, as it specifies the concentrations of each material that would cause it to meet the definition of “toxic” and “very toxic”.

The ADG Code will not provide all necessary information. Part 2 of schedule 9 includes categories of material that are “toxic” and “very toxic” (items 64 and 65) and the criteria for defining these degrees of toxicity are included in Part 3 of the schedule. The categories are unique to schedule 9. Therefore, employers should refer to the list of hazardous substances to make a determination.

The ADG Code is primarily concerned with dangerous goods. Some materials are considered to be too dangerous to transport and therefore not considered to be a dangerous good in accordance with the ADG Code. These types of materials are listed in Appendix 5 of the ADG Code. The ADG Code does not provide any detailed data on these substances.

There are some materials in schedule 9 that are “goods too dangerous to transport”. For these materials, reference should be made to material safety data-sheets (MSDS) and laboratory test data to determine what category they are.

The ADG Code may not include all mixtures encountered at a facility. This is another case where reference should be made to supplementary information such as MSDS.

Once the appropriate category has been determined, the relevant threshold quantity then applies. However, some materials may have properties corresponding to two or more of the categories in items 44 to 65, for example they are both oxidising and toxic, and therefore the lowest applicable threshold quantity applies.

## 6.2 How to identify maximum quantities of schedule 9 materials

The notification form must include the identification of maximum quantities of schedule 9 materials present or likely to be present. This sub-section explains the factors to be considered when determining maximum quantities.

The amount of any material present or likely to be present at the facility should include the:

- a) maximum quantities of the material normally present in process vessels and interconnecting pipeline systems;
- b) maximum capacity of storage tanks and vessels;

- c) maximum quantities of the material that is likely to be present in packaged storage areas; and
- d) maximum quantities of the material contained in pipelines outside process areas; or the maximum quantity of the material that could escape from a pipeline in the event of its catastrophic failure.

The maximum quantity should be determined, taking into account possible daily, seasonal or other variations related to the storage and use of these substances.

For materials stored in tanks or other storage vessels, the quantity selected should be the maximum capacity of the tank or vessel. Where the maximum capacity differs from the maximum practical working capacity, this should be clearly explained in the notification. Similarly, for process vessels, the quantity should be the maximum quantity normally present in process vessels and connecting piping.

For packaged stores, the quantity selected should be the maximum likely to be present at any time. Where this differs from the maximum capacity of the store that might be achieved by the use of greater stack heights or alternative racking arrangements, it should be clearly explained in an attachment to the notification.

### ***Aggregate Amounts***

The largest aggregate amount should be selected when the range of materials present may vary during operation of the facility. Employers should take into consideration instances where materials are present in constant quantities, are continuously present but in quantities that vary, and other materials which are present intermittently. When considering these issues, the calculation should be based on the largest aggregate amount likely to be present.

For example, suppose a facility normally stores 500 tonnes of X and 200 tonnes of Y, but for short periods may store 500 tonnes of X, 50 tonnes of Y and 200 tonnes of Z. The aggregate must be calculated for the two periods separately, and the higher value is the one that must be included in the notification.

## **6.3 How to apply the aggregation rule**

This section is divided into 3 sub-sections:

- a) the first sub-section gives examples of how to apply the aggregation rule without considering the exclusion of isolated quantities of materials amounts 2% or less than the threshold quantity;
- b) the second sub-section gives simplified examples of how to apply the “2% or less rule”; and
- c) the final sub-section provides examples of possible notification and classification outcomes if the aggregation rule is applicable at a facility.

### *Applying the aggregation rule*

If a facility stores, handles or processes a number of different schedule 9 materials, the employer must apply the following aggregation rule to the quantities of schedule 9 materials present or likely to be present:

$$\begin{array}{ccc} \text{Quantity of material X} & & \text{Quantity of material Y} \\ \text{(present or likely to be} & & \text{(present or likely to be} \\ \text{present at the facility)} & & \text{present at the facility)} \\ \hline & + & \hline \text{threshold quantity of X} & & \text{threshold quantity of Y} \end{array} = \text{aggregate quantity ratio}$$

If the aggregate quantity ratio obtained from the calculation exceeds 0.1, the employer must notify Comcare.

If the aggregate quantity ratio exceeds 1.0, the employer must notify and Comcare must classify the facility as a MHF. If the ratio is less than 0.1 the employer has no obligation to notify Comcare.

#### *Example 1*

An employer stores 10 tonnes of hydrogen and 180 tonnes of flammable liquids. The threshold quantities for the two materials are 50 tonnes and 200 tonnes respectively. Because the facility stores two types of material, each below the corresponding threshold quantity, the aggregation rule should be applied:

$$\frac{10}{50} + \frac{180}{200} = 0.2 + 0.9 = 1.1$$

Since the aggregate quantity ratio is more than 1, the employer must notify Comcare and the facility will be classified as a MHF.

#### *Example 2*

A facility handles 10 tonnes of acrylonitrile and 40 tonnes of ethylene oxide. The threshold quantities for the two materials are 200 tonnes and 50 tonnes respectively. In this case the aggregation rule gives:

$$\frac{10}{200} + \frac{40}{50} = 0.05 + 0.8 = 0.85$$

Since the aggregate quantity ratio is over 0.1, the employer must notify Comcare. Comcare may classify the facility as a MHF.

### Example 3

A facility consists of 2 storage areas (A and B) that from time to time hold five schedule 9 materials as follows:

Material	Inventories (tonne)		Schedule 9 threshold quantity (tonne)	Aggregate quantity ratio
	A	B		
Acrolein	Up to 2	Up to 2	200	0.02
Sodium chlorate	Up to 8	Up to 8	200	0.08
Formaldehyde	Up to 2	Up to 10	50	0.24
LPG	Up to 2	Up to 2	200	0.02
Methyl isocyanate	Up to 0.1	None	0.15	0.67
Total	-	-	-	1.03

The employer would have to notify Comcare and the facility would be classified as a MHF, as the aggregate quantity ratio greater than 1.0.

One exception to this would be if some of the quantities are never present concurrently and the exclusion of one quantity reduces the aggregate to below 1.0. The procedures that control this would need to be demonstrably robust and clearly explained in the notification information.

## 6.4 Excluding isolated amounts of materials of 2% or less of the individual threshold quantities

Quantities of schedule 9 materials that are 2% or less of the individual threshold quantity for the material can be excluded from the calculation of the aggregate quantities of materials at a facility if they are isolated from other more significant quantities.

Examples of isolation are:

- a release from the isolated quantity cannot interact or cause any additional release of substances that are stored within the facility. This requires the distance between the isolated substance and other substances to be greater than the maximum effect radius of an incident involving the isolated quantity.
- substances are sufficiently isolated in process controls and shutdown systems that any release of a substance from the equipment is restricted and no further quantities are released through the same location. This requires a process shutdown system to provide automatic, rapid and positive isolation of that equipment from other inventories in the system.

- c) depending on the nature of the material, storage may be sufficiently isolated if contained in a separate compound, behind a fire-rated barrier, or in a transport container.

When formulating the notification, an employer must clearly justify cases where isolated quantities have been excluded from the aggregate rule. If the nature of the isolation is not obvious, employers should provide results of a risk assessment to justify the exclusion of the isolated quantities.

### **Examples of applying the isolated quantities of the 2% or less rule**

*Figure 1: Isolated small quantities (2% or less rule): Example 1*

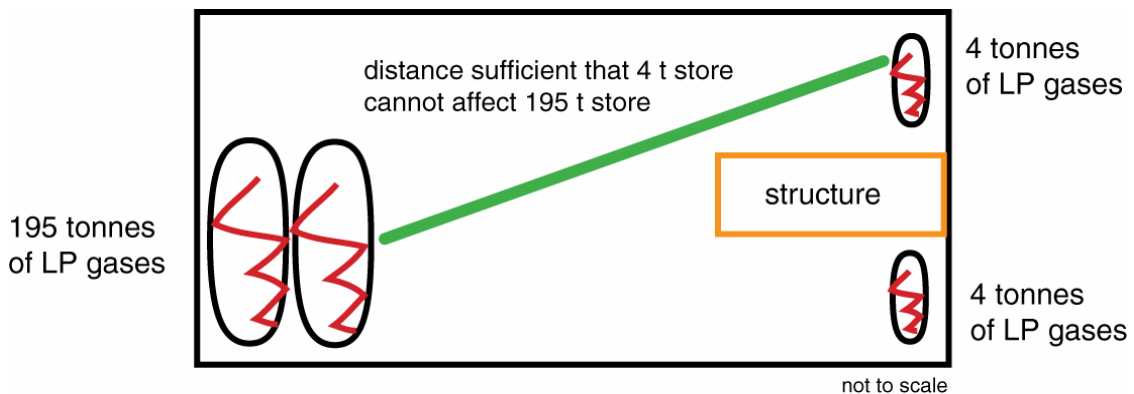


Figure 1 shows two large tanks containing in total 195 tonnes of LP gases and two small tanks each containing 4 tonnes of LP gases.

Each small tank comprises 2% of the threshold quantity (200 tonnes). They can be considered separately, as they are segregated from each other. Each is located such that, on its own, it cannot initiate a major accident. Therefore both small tanks can be excluded under the 2% rule. The result is that, even though the total quantity of LP gases is 203 tonnes, the relevant quantity is only 195 tonnes.

Therefore the employer must notify Comcare since the quantity is greater than 10% of threshold quantity and Comcare may classify the facility as a MHF. In the notification the employer should justify the exclusion of the two small tanks from the aggregation calculations.

*Figure 2: Isolated small quantities (2% or less rule): Example 2*

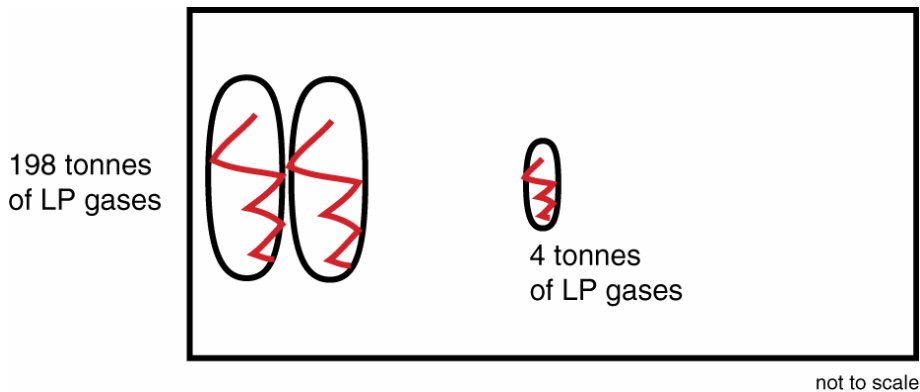


Figure 2 shows two large tanks containing 198 tonnes of LP gases and a small tank containing 4 tonnes of LP gases.

The small tank comprises 2% of the threshold quantity (200 tonnes), but is located in a position where it may initiate a major accident involving the large tanks. The 2% rule therefore, does not apply and the 4 tonne tank must be included. Since the total amount of LP gases is 202 tonnes, compared to the threshold quantity of 200 tonnes, the employer must notify Comcare and Comcare must classify the facility as a MHF.

Figure 3: Isolated small quantities (2% or less rule): Example 3

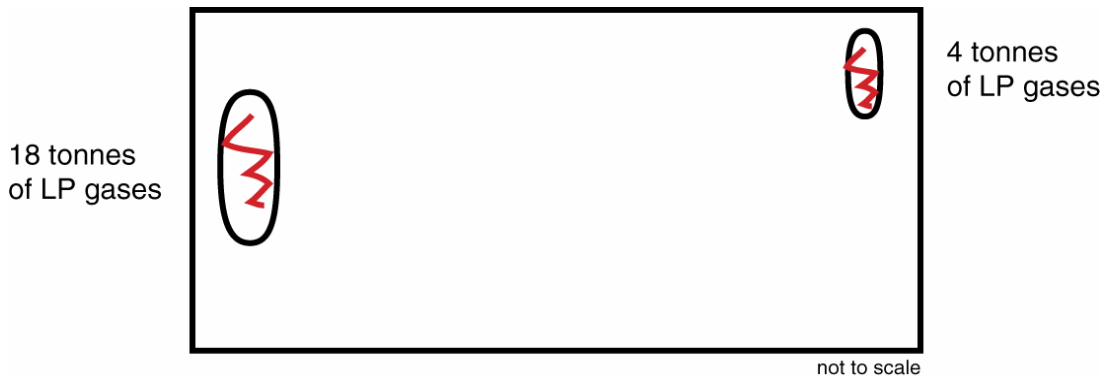


Figure 3 shows a tank containing 18 tonnes of LP gases and a small tank containing 4 tonnes of LP gases.

The small tank comprises 2% of the threshold quantity (200 tonnes), but its location means that the small tank cannot, on its own, initiate a major accident. It can therefore be excluded under the 2% rule. The result is that, even though the total quantity of LP gases is 22 tonnes (i.e. over 10% of the threshold quantity) the relevant quantity is only 18 tonnes and the employer does not need to notify Comcare since the relevant amount of material is less than 10% of the threshold quantity.

*2% or less rule: Example 4*

Material	Inventories (tonne)		Schedule 1 Threshold (tonne)	Aggregate quantity ratio
	A	B		
Acrolein	Up to 2	Up to 2	200	0.02
Sodium chlorate	Up to 8	Up to 8	200	0.08
Formaldehyde	Up to 2	Up to 10	50	0.24
LPG	Up to 2	Up to 2	200	0.02
Methyl isocyanate	Up to 0.1	None	0.15	0.67
Total	-	-	-	1.03

Example 4 above uses the same combination of materials and quantities as example 3 for the explanation of the aggregation rule earlier in this subsection. There are 4 items that, individually, are at or below 2% of the corresponding threshold: the two stores of acrolein and the two stores of LPG. If each of these can be justified as isolated from all other items the aggregate will be below 100% of the threshold quantity.

If all items can be justified as isolated, the aggregate will be below 100%. In this situation notification is required but Comcare may not classify the facility as a MHF, as the AQR will be between 10% and 99%. However, if only 3 or fewer of the small quantities can be considered isolated Comcare must classify the facility as an MHF.



**Notification Form – Part A**

Potential Major Hazard Facility  
Occupational Health and Safety (Safety Standards)  
Regulations 1994 - Part 9

<b>Notification number:</b> ..... (Comcare use only)	<b>Workplace Number</b> ..... (Comcare use only)
---	---

**1. Employing agency details**

Principle Officer Name and Title:.....

Employer / Agency:.....

Address:.....

Suburb/town:..... State:..... Post code:.....

Phone No.:..... Fax:.....

Email:.....

**2. Details of the Facility and person in control**

Facility Name: .....

Location or Street Address:.....

Suburb/town: ..... State:..... Post code: .....

(Note) If facility is, or will be in a remote location, provide name of nearest place name/ State and postcode

**The name and contact details of person in control of the facility**

Name of Contact: .....

Position title: .....

Address: .....

Suburb/town: ..... State:..... Post code: .....

Phone No.:..... Fax:.....

Email:.....

**3. Reason for the notification** *(please tick (✓) the appropriate box)*

Existing potential major hazard facility

Proposed potential major hazard facility. Expected operational date: \_\_\_\_/\_\_\_\_/\_\_\_\_

Existing facility, but modification proposed that will cause the facility to become a potential major hazard facility. Expected operational date: \_\_\_\_/\_\_\_\_/\_\_\_\_

Potential major hazard facility that Comcare has requested notification from



**Notification Form – Part A**

Potential Major Hazard Facility  
Occupational Health and Safety (Safety Standards)  
Regulations 1994 - Part 9

**4. Type of potential major hazard facility** (please tick (✓) the appropriate box)

Schedule 9 materials present or likely to be present in a threshold quantity or aggregate quantity equal to or greater than 100% (please also complete Parts B of this notification form)

Schedule 9 materials present or likely to be present between 10% and 100% of threshold quantities (please also complete Parts B of this notification form)

Nuclear Installation

Prescribed Radiation Facility

Physical Containment Laboratory 3

Physical Containment Laboratory 4

Other (explain) .....

**5. Attachments**

For further instructions refer to section 4 of this notification pack. Check that the following information is attached to this Notification Form (✓) Please number all attachments with the reference letter provided.

a) A brief description of the nature of the facility that describes how the schedule 9 material(s), radiation or biological materials are used, stored or handled at the facility

b) Details of incidents during the previous 5 years which could have led to a major accident.

**6. Declaration of the employing agency or authority that operates ( or intends to operate) the facility**

I declare that the details provided on this form are true and correct to the best of my knowledge and belief. I am empowered by valid and express power, delegation in writing or authorisation in writing, to act as, for or on behalf of, the employing agency/authority that operates / intends to operate the facility to which the information on this notification form applies.

Name:.....Position title.....

Signature:..... Date:.....



Notification Form – Part B

Ser	Schedule 9 material item no. (s) & name & category <sup>1</sup>	CAS No. <sup>2</sup>	UN Nos	Class	Packing Group	Physical Form <sup>3</sup>	Container Type <sup>4</sup>	Quantity on-site (tonnes) <sup>5</sup>			Threshold quantity <sup>6</sup> (tonnes)	AQR
								Storage	In-process	Total		
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
											<b>TOTAL AQR</b>	

- 1: Include all these details where applicable. For "category" only include generic description in schedule 9 eg explosive materials, compressed and liquefied gases, etc.
- 2: CAS No. - Chemical Abstract Service number: Class - Dangerous goods class as per ADG code: GTDDT-"goods too dangerous to transport" i.e. a schedule 9 material not included in the ADG code: AQR-Aggregate quantity ratio
- 3: Specify the form in which the material is present, e.g. solid, liquid, gas, mixture, etc.
- 4: The type of storage e.g. tank, process vessel, cylinder, distillation column, etc.
- 5: Storage or in process.
- 6: If a material has 2 threshold quantities (i.e. for the specific material and the category of material) only include lowest value.



## Consequences Matrix

## Notification Form – Part C

Consequences to	Insignificant	Minor	Severe	Major	Catastrophic
<b>Involuntary persons</b>	First aid treatment. <input type="checkbox"/>	Medical treatment – immediate recovery. Hospitalisation less than 24 hours. <input type="checkbox"/>	Multiple injuries – impairment of several persons Hospitalisation over 24 hours Delayed symptoms <input type="checkbox"/>	1 to 3 fatalities <input type="checkbox"/>	More than 3 fatalities <input type="checkbox"/>
<b>Voluntary persons</b>	First aid treatment. <input type="checkbox"/>	Medical treatment – immediate recovery. Hospitalisation less than 24 hours. <input type="checkbox"/>	Multiple injuries – impairment of several persons Hospitalisation over 24 hours Delayed symptoms <input type="checkbox"/>	Up to 10 fatalities <input type="checkbox"/>	More than 10 fatalities <input type="checkbox"/>
<b>Community services and utilities</b>	No disruption to essential community utilities. <input type="checkbox"/>	Disruption to essential community utilities for up to 7 days. <input type="checkbox"/>	Disruption to essential community utilities for up to 30 days <input type="checkbox"/>	Disruption to essential community utilities for up to 90 days Major damage to off-site private property (up to AUS 1 million) Private dwellings off-site damaged <input type="checkbox"/>	Disruption to essential community utilities for more than 90 days Major damage to off-site private property (over AUS 1 million) Private dwellings off-site damaged and uninhabitable <input type="checkbox"/>
<b>Off-site Environment</b>	The damage: <b>Is not</b> environmentally significant. Extends to <b>less</b> than a 500 m radius around the facility. Will recover in <b>less</b> than 20 years. <input type="checkbox"/>	The damage: <b>Is not</b> environmentally significant Extends to <b>less</b> than a 500 m radius around the facility Will recover in <b>more</b> than 20 years OR The damage: <b>Is not</b> environmentally significant Extend to <b>more</b> than a 500 m radius around the facility Will recover in <b>less</b> than 20 years <input type="checkbox"/>	The damage: <b>Is</b> environmentally significant Extends to <b>less</b> than a 500 m radius around the facility Will recover in <b>less</b> than 20 years OR The damage: <b>Is not</b> environmentally significant extend to <b>more</b> than a 500 m radius around the facility Will recover in <b>more</b> than 20 years <input type="checkbox"/>	The damage: <b>Is</b> environmentally significant Extends to <b>less</b> than a 500 m radius around the facility Will recover in <b>more</b> than 20 years OR The damage: <b>Is</b> environmentally significant Extend to <b>more</b> than a 500 m radius around the facility Will recover in <b>less</b> than 20 years <input type="checkbox"/>	The damage: <b>Is</b> environmentally significant Extends to <b>more</b> than a 500 m radius around the facility Will recover in <b>more</b> than 20 years <input type="checkbox"/>

**Notes:**

- Employers must tick (✓) 1 box within each row to indicate the “worse case scenario” consequence if a major accident were to occur at the facility.
- Employers should assume all controls put in place to prevent and/or mitigate the major accident at the facility have failed.