

## Guide 17

# Major hazard facilities

This guide has been prepared to assist applicants and local governments determine if an application is required to be assessed by The Department of Emergency Service (DES) in relation to a material change of use of premises for a Major Hazard Facility (MHF) or Possible Major Hazard Facility (PMHF) as defined under the *Dangerous Goods Safety Management Act 2001 (DGSM)*.

The DGSM is designed to prevent chemical accidents. Its objective is to protect people, property and the environment from harm from hazardous materials, such as petrol, liquefied petroleum gas or toxic industrial chemicals.

Consequently, the DGSM applies to situations involving -

- (a) the operation of large-scale high risk industrial facilities (such as oil refineries), known as MHFs and or PMHFs;
- (b) the storage and handling of dangerous goods and combustible liquids at smaller facilities, known as 'dangerous goods location' (DGLs); and
- (c) the provision of advice and assistance by scientific/technical advisers ('hazmat advisers') to the emergency services and Police at the scene of incidents involving hazardous materials.

However, it is important to note that the DGSM (other than Part 7) does not apply to -

- a coal mine to which the *Coal Act* applies;
- a mine to which the *Mines Act* applies; or
- land that is used for obtaining, mining or transporting petroleum under the *Petroleum Act 1923*; or
- pipes under the *Gas Act 1965* (other than pipes within the boundaries of a MHF or a DGL).

### How is a MHF or PMHF defined?

In broad terms, a PMHF is a facility that stores and/or handles a hazardous material in quantities close to or exceeding those prescribed in Schedule 2 of the *Dangerous Goods Safety Management Regulation 2001 (DGSM Reg)*. While an extract from Schedule 2 is provided at the end of this Guide, Schedule 2 must be read in its entirety to properly assess the MHF status of any given facility. For more information, refer to the DGSM Reg.

A PMHF may be classified as a MHF if the Chief Executive of the Department of Emergency Services (DES) considers it necessary due to the nature and location of the facility and the maximum quantities of hazardous materials that can be stored or handled at the facility. The classification process proceeds under the DGSM and is separate from the development approval process under the *Integrated Planning Act 1998 (IPA)*.

Facilities that are likely to be classified as MHFs include oil refineries, chemical plants and large fuel and chemical storage sites, where large quantities of hazard materials are stored or handled. (*The classification process and the grounds for classification are explained in more detail at the end of this Guide.*)

### How the assessment of MHFs and PMHFs has been integrated into IPA

Schedule 8 of the *Integrated Planning Act 1997 (IPA)* makes development involving a material change of use of premises, if the premises are for a MHF or PMHF, assessable development.

Schedule 8A of the IPA prescribes DES as the assessment manager for an application involving a material change of use of premises for a MHF or PMHF where the application involves no other assessable development and the development is not on Strategic Port Land.

When the MHF or PMHF is proposed on Strategic Port Land the Port Authority is the assessment manager for the application.

Schedule 2 of the IP Reg prescribes DES as a concurrence agency where the application involves other assessable development or the development is on Strategic Port Land.

### Level of assessment (Sch 1 of the IP Reg)

If DES is the assessment manager for the application, the application is **code** assessable.

### Applicable State Code for development application

When DES assesses a MHF or PMHF, the relevant sections of the DGSM are taken to be the applicable State IDAS code.

### Issues for consideration in the development application

When DES assesses the IDAS development application consideration will be given to the level of risk associated with the facility including -

- the nature of the facility (i.e. site activities, storage, production and auxiliary processes);
- the maximum quantities of and categories of dangerous goods to be stored or handled;
- site layout and details of the proposed storage and handling areas;
- the number of people (including contractors) normally located at the facility;
- surrounding land uses and the presence or likely presence of vulnerable populations;
- the close proximity of sensitive environmental areas such as wetlands and watercourses;
- the close proximity of major infrastructure such as railways, airports or freeways; and
- the off-site effects of a possible major accident.

### The IDAS Application Form

The IDAS Application Form 1, consisting of Parts A and L and the IDAS Assessment Checklist, must be completed for all applications for MHF and PMHF. Other Parts of Form 1 may also need to be completed depending on the complexity of the proposed development. The IDAS Assessment Checklist will assist in determining which Parts must be completed. The application forms are available from the IPA website at

<http://www.ipa.qld.gov.au/idas/idasFormsDevForm1.asp?title>

### Application fees

There are currently no fees for DES's assessment of a MHF or PMHS.

### Classifying a facility as a MHF

The occupier of a PMHF must notify the Chief Executive of DES about the facility to allow the Chief Executive to decide whether the facility should be classified as a MHF. After consultation with the occupier of a facility the Chief Executive will make a decision under s 33 of the DGSM whether or not to classify the facility as a MHF. The decision will be notified by gazettal notice in the Queensland Government Gazette.

*Note: The development approval and classification processes are separate. For new facilities, notification of and possible classification as a MHF would typically occur after the IDAS development approval for the proposed facility is issued.*

*For existing facilities, development approval for a material change of use may be concurrent with classification*

### Grounds for classification

The Chief Executive of DES **must** classify a facility as a MHF if reasonably satisfied that -

- the quantity of hazardous materials stored or handled, or that is likely to be stored or handled, at the facility is more than the quantity prescribed under the DGSM Reg; and
- a hazardous materials emergency at the facility could pose a risk to persons, property or the environment outside the facility.

In addition, the Chief Executive of DES **may** classify a facility as a MHF if reasonable satisfied that, having regard to both the following matters, the requirements applying under the DGSM for MHFs should apply to the facility -

- the potential for a hazardous materials emergency to come into existence at the facility;
- the extent to which a hazardous material emergency at the facility would pose a risk to persons, property or the environment.

### For More Information

For more information about declared or possible major hazard facilities, please call the CHEM Unit within the Department of Emergency Services on (07) 3247 8444, or visit the CHEM Unit Web site at

<http://www.emergency.qld.gov.au>

**Extract From Schedule 2 of the *Dangerous Goods Safety Management Regulation 2001*****TABLE 1**

<b>Hazardous material</b>	<b>UN nos included under name</b>	<b>Prescribed quantity (tonnes)</b>
Acetone Cyanohydrin	1541	20
Acetylene	1001	50
Acrolein	1092	200
Acrylonitrile	1093	200
Allyl Alcohol	1098	20
Allylamine	2334	200
Ammonia, Anhydrous, Liquified or Ammonia Solutions, relative density less than 0.880 at 15°C in water, with more the 50% ammonia	1005	200
Ammonium Nitrate Fertilisers	2067, 2068, 2069, 2070	5000
Ammonium Nitrate, with not more than 0.2% combustible substances, including any organic substance calculated as carbon, to the exclusion of any other added substance	1942	2500
Arsenic Pentoxide, Arsenic (V) – Acid and other salts	1559	10
Arsenic Trioxide, Arsenious (III) – Acid and other salts	1561	0.10
Arsine	2188	0.01
Bromine or Bromine Solution	1744	100
Carbon Disulfide	1131	200
Chlorine	1017	25
Dioxins		0.10
Diphenylmethane 4,4 – Diisocyanate	2489	200
Ethyl Nitrate	-	50
Ethylene Dibromide	1605	50
Ethylene Oxide	1040	50
Ethyleneimine	1185	50
Fluorine	1045	25
Formaldehyde	1198, 2209	50
Hydrofluoric Acid Solution (with concentration greater than 50%)	1790	50
Hydrogen	1049	50
Hydrogen Chloride - Anhydrous - Refrigerated liquid	1050 2186	250 250
Hydrogen Cyanide	1051, 1614	20
Hydrogen Fluoride	1052	50
Hydrogen Sulfide	1053	50
LP Gas	1011, 1012, 1075, 1077, 1978	200
Methyl Bromide	1062	200
Methane or Natural Gas	1971, 1972	200
Methyl Isocyanate	2480	0.15
Oxides of Nitrogen, including nitrous oxide, nitrogen dioxide and nitrogen trioxide	1067, 1070, 1660, 1975, 2201, 2421	50
Oxygen	1072, 1073	2000
Phosgene	1076	0.75
Propyleneimine	1921	200
Propylene Oxide	1280	50
Sodium Chlorate, solid	1495	200
Sulfuric Anhydride (alt: sulfur trioxide)	1829	75
Sulfur Dichloride	1828	1
Sulfur Dioxide, Liquified	1079	200
Toluene Diisocyanate	2078	200