

Safety case concordance for major hazard facilities

Health and Safety at Work (Major Hazard Facilities) Regulations 2016

When submitting a new, amended or revised safety case, please complete this form and include it when submitting the safety case to indicate where the relevant information is located.

Email: hhu.mhf@worksafe.govt.nz Post: Major Hazard Facilities, High Hazards Unit, WorkSafe New Zealand, PO Box 105146, Auckland 1143, NZ

1. Operator details

Full legal name: (limited liability company/partnership, individual person, or other)

Trading name: (if different to legal name)

Other information:

Facility to which safety case refers: (address: street number, street name, suburb, town/city, postcode)

Nominated contact

Give details of the person whom WorkSafe may communicate in relation to the information that is contained in this form.

Name: (title, first name, surname)

Position:

Work phone:

Mobile phone:

Email:

Preferred contact method: Email Post

Postal address: Same as above facility

2. Safety case identification

Safety case identification number:

Type of safety case:

New safety case

Amended safety case

Revised safety case

Criteria for acceptance of safety case

In accordance with regulation 49 of the Health and Safety at Work (Major Hazard Facilities) Regulations 2016, WorkSafe must accept a safety case for the operation of an upper tier major hazard facility if satisfied that:

(a) the safety case contains all the information required under Schedule 7; and

(See **Information required in safety case for upper tier major hazard facility.**)

(b) when preparing the safety case, the operator has engaged with workers of the upper tier major hazard facility, in accordance with regulation 65; and

(c) based on the information included in the safety case, compliance with the safety case is likely to constitute compliance with the requirements of these regulations; and (This is an assessment based on the information contained in the safety case. It may require additional information broader than the Schedule 7 requirements. See **Regulations against which WorkSafe will assess a safety case related to schedule 7 topics.**)

(d) there is no reason to believe that the operator will not comply with the safety case; and

(e) the safety case is appropriate for the upper tier major hazard facility and for the activities to be conducted at that facility.

Safety case concordance for major hazard facilities

Regulation References

The following regulations indicate the requirements that must be addressed in the safety case and those that WorkSafe New Zealand will have regard to, when assessing the safety case.

Information required in safety case

The following table lists the information required under Schedule 7 of the Health and Safety at Work (Major Hazard Facilities) Regulations 2016 that must be addressed in the safety case. Please complete this by indicating the location of the relevant information in the safety case. The information provided in the safety case must satisfy regulation 49 'Criteria for acceptance of safety case'. Please also refer to WorkSafe Good Practice Guidelines Major Hazard Facilities: Safety Cases.

| REGULATION | REGULATION DESCRIPTION | SAFETY CASE REFERENCE |
|--------------------------------|--|-----------------------|
| Summary Information | | |
| Schedule 7 Clause 1 | A summary of the safety assessment, including: (a) the methodology used in the safety assessment | |
| Schedule 7 Clause 1 | A summary of the safety assessment, including: (b) a list of the major incidents identified in the safety assessment. | |
| Schedule 7 Clause 2 | A summary of the safety management system. | |
| Schedule 7 Clause 3 | A summary of the emergency plan. | |
| Descriptive information | | |
| Schedule 7 Clause 4 | A description of the engagement carried out with workers in the preparation of the safety case, including safety assessment as per Regs 38(3)(c), safety management system as per Regulation 39(3) and emergency plan as per Regulation 31(3)(a). | |
| Schedule 7 Clause 5 | A description of the nature of the facility and its operation, including a description of on-site activities and processes that involve specified hazardous substances. | |
| Schedule 7 Clause 6 | The particulars of all relevant New Zealand and international standards that have been applied, or will be applied, in relation to the facility or the plant used on or in connection with the facility. | |
| Schedule 7 Clause 7 | A description of the specified hazardous substances and any other hazardous substances that are expected to be present at the facility, including: (a) their identification by name and by any other means necessary for clear identification; and (b) their quantity; and (c) their physical, chemical, and toxicological characteristics (and any other hazardous characteristics); and (d) their physical and chemical behaviour under normal conditions of use or under foreseeable abnormal conditions. | |
| Schedule 7 Clause 8 | A description of the physical and chemical processes associated with the specified hazardous substances that are present at the facility. | |

Safety case concordance for major hazard facilities

| REGULATION | REGULATION DESCRIPTION | SAFETY CASE REFERENCE |
|---|--|-----------------------|
| Diagram of facility | | |
| Schedule 7 Clause 9 | A diagram of the facility's general layout, showing: <ul style="list-style-type: none"> (a) the main process units; and (b) the main storage areas; and (c) the control rooms; and (d) the administrative buildings. | |
| Pipelines | | |
| Schedule 7 Clause 10 | A description of any pipeline connected to the facility that has the potential to cause or contribute to a major incident, including details of: <ul style="list-style-type: none"> (a) the substances that it conveys; and (b) its dimensions and layout; and (c) its contained volume at declared maximum allowable operating pressure; and (d) any equipment intended to ensure safety; and (e) the design pressure (maximum allowable operating pressure) and temperature of its contents. | |
| Scale plans | | |
| Schedule 7 Clause 11 | A detailed scale plan of the facility and its surrounding area that shows: <ul style="list-style-type: none"> (a) topographical information; and (b) land use, occupancy, and activities, and other major hazard facilities and hazardous substance storage sites that are known to the operator, within a 2 km radius of any point on the perimeter of the upper tier major hazard facility; and (c) the location of any identified external conditions that could affect the safety of the major hazard facility. | |
| Operating and environmental conditions | | |
| Schedule 7 Clause 12 | The particulars of the design or operational limits associated with environmental conditions in which the facility has been designed to operate. | |
| Demographic information | | |
| Schedule 7 Clause 13 | Demographic information about the local community, including surrounding land uses, within a 2 km radius of any point on the perimeter of the upper tier major hazard facility, that are permitted by the local authority. | |
| Meteorological data | | |
| Schedule 7 Clause 14 | Meteorological data relevant to the estimation of the effects of any major incident. | |

Safety case concordance for major hazard facilities

| REGULATION | REGULATION DESCRIPTION | SAFETY CASE REFERENCE |
|--|--|-----------------------|
| Control and verification measures | | |
| Schedule 7 Clause 15 | A detailed description of the equipment, processes, and procedures that are the major incident control measures and the performance standards for the major incident control measures. | |
| Schedule 7 Clause 16 | A list of roles, responsibilities, and any resources (internal and external) able to intervene in the event of any failure of a control measure. | |
| Schedule 7 Clause 17 | A detailed description of the arrangements in place for independent and competent persons to verify that safety-critical elements are or will be suitable and will remain in good repair and condition throughout the life cycle of the facility, including a description of: <ul style="list-style-type: none"> (a) the nature and frequency of examination and testing; and (b) review and revision arrangements; and (c) arrangements for the making and preservation of records. | |
| Proposed facilities | | |
| Schedule 7 Clause 18 | In relation to a proposed facility, a description of the steps that have been taken to ensure that safety has been incorporated into the design and construction of the upper tier major hazard facility. | |
| Officer's statement | | |
| Schedule 7 Clause 19 | A statement signed by the officer of the operator (in the case of an operator who is an individual), or the most senior officer of the operator in New Zealand (in the case of any other operator), that: <ul style="list-style-type: none"> (a) the information provided under this schedule is accurate and up to date; and (b) all persons to be involved in the implementation of the safety management system have the knowledge and skills necessary to enable them to carry out their role safely and competently; and (c) the control measures to be implemented by the operator will: <ul style="list-style-type: none"> (i) eliminate the risk of a major incident occurring, to the extent that is reasonably practicable; or (ii) if it is not reasonably practicable to eliminate the risk of a major incident occurring, minimise the risk to the extent that is reasonably practicable; and (d) in the event of a major incident occurring, the control measures to be implemented by the operator will minimise the incident's magnitude and the severity of health and safety consequences to the extent that is reasonably practicable. | |

Safety case concordance for major hazard facilities

Regulations against which WorkSafe will assess a safety case related to Schedule 7 topics

WorkSafe strongly advises that the safety case includes evidence of the following regulatory requirements to assist assessment and acceptance of the safety case. This information supports the requirements of Schedule 7.

| RELATED SCHEDULE 7 ITEM | REGULATION REQUIREMENT | DESCRIPTION OF REGULATORY REQUIREMENT | TOPIC | SAFETY CASE REFERENCE |
|--------------------------|------------------------|--|--|-----------------------|
| - | 46(4) | If WorkSafe requires the coordinated preparation of safety cases, each operator must provide the other operators with information concerning any circumstances at the operator's facility that could cause or contribute to a major incident hazard in relation to any of the other upper tier major hazard facilities. | Coordination of safety cases for multiple facilities | |
| Safety Assessment | | | | |
| Schedule 7 Clause 1 | 38(2) | A safety assessment must involve a comprehensive and systematic investigation and analysis of all aspects of risks to health and safety associated with all major incidents that could occur in the course of the operation of the facility, including the following: (a) the identification of hazards and conditions that could lead to a major incident. | Safety assessment | |
| | | A safety assessment must involve a comprehensive and systematic investigation and analysis of all aspects of risks to health and safety associated with all major incidents that could occur in the course of the operation of the facility, including the following: (b) the nature of each hazard and potential major incident | | |
| | | A safety assessment must involve a comprehensive and systematic investigation and analysis of all aspects of risks to health and safety associated with all major incidents that could occur in the course of the operation of the facility, including the following: (c) the risk associated with each of those hazards, including the likelihood and consequences (including the potential magnitude and the severity of the potential health and safety consequences) of each potential major incident | | |
| | | A safety assessment must involve a comprehensive and systematic investigation and analysis of all aspects of risks to health and safety associated with all major incidents that could occur in the course of the operation of the facility, including the following: (d) the range of control measures considered | | |
| | | A safety assessment must involve a comprehensive and systematic investigation and analysis of all aspects of risks to health and safety associated with all major incidents that could occur in the course of the operation of the facility, including the following: (e) the control measures that the operator decides to implement (see regulation 30). | | |

Safety case concordance for major hazard facilities

| RELATED SCHEDULE 7 ITEM | REGULATION REQUIREMENT | DESCRIPTION OF REGULATORY REQUIREMENT | TOPIC | SAFETY CASE REFERENCE |
|---------------------------------|------------------------|--|--|-----------------------|
| Schedule 7 Clauses 1 | 38(3) | In conducting a safety assessment, the operator must: (a) consider major incident hazards and potential major incidents cumulatively as well as individually | Safety assessment | |
| | | In conducting a safety assessment, the operator must: (b) use assessment methods (including quantitative or qualitative methods, or both) that are suitable for assessing the major incident hazards and potential major incidents being considered | | |
| Schedule 7 Clause 1 | 38(4) | The operator must document all aspects of the safety assessment, including: (d) any conditions, including conditions external to the facility (for example, natural events occurring anywhere, or other events occurring in an area outside the facility), under which the hazards might give rise to major incidents | Safety assessment | |
| | | The operator must document all aspects of the safety assessment, including: (e) the reasons for deciding which control measures to implement; and (f) the other control measures that were considered but not implemented; and (g) the reasons for not implementing the other control measures that were considered. | | |
| Schedule 7 Clause 1 | 30(1) | The operator of a major hazard facility must implement control measures that: (a) eliminate, so far as is reasonably practicable, the risk of a major incident occurring; or (b) if it is not reasonably practicable to eliminate the risk of a major incident occurring, must minimise that risk so far as is reasonably practicable. | Control measures | |
| Safety management system | | | | |
| Schedule 7 Clause 2 | 39(2) | The safety management system must: (d) state the operator's specific safety objectives and describe the systems and procedures that will be used to achieve those objectives | | |
| Schedule 7 Clause 2 | Schedule 5 Clause 2 | As a part of the safety management system, the operator must develop a safety policy that: (a) includes a statement of the operator's commitment, intentions, and principles in relation to the facility's overall health and safety performance; and (b) provides a framework for action and for setting the facility's health and safety objectives and targets. | Safety policy and specific safety objectives | |
| Schedule 7 Clause 2 | Schedule 5 Clause 4 | The safety management system must identify the personnel involved in the implementation of the safety management system, including: (a) the position description and location of those personnel; and (b) the roles and responsibilities of those personnel. | Organisation and personnel | |

Safety case concordance for major hazard facilities

| RELATED SCHEDULE 7 ITEM | REGULATION REQUIREMENT | DESCRIPTION OF REGULATORY REQUIREMENT | TOPIC | SAFETY CASE REFERENCE |
|-------------------------|-------------------------|---|----------------------------|-----------------------|
| Schedule 7 Clause 2 | Schedule 5 Clause 5 | The safety management system must describe the means of ensuring that those personnel: (a) have the necessary knowledge and skills to enable them to undertake their allocated tasks and discharge their allocated responsibilities; and (b) retain that knowledge and those skills. | Organisation and personnel | |
| Schedule 7 Clause 2 | Schedule 5 Clause 6 | The safety management system must include the arrangements for ensuring contractors and subcontractors are aware of their roles and responsibilities under the safety management system. | Organisation and personnel | |
| Schedule 7 Clause 2 | Schedule 5 Clause 8 | The safety management system must include the arrangements for the adoption and implementation of procedures and instructions for: (a) the safe operation and maintenance of plant; and (d) maintaining equipment | Operational Control | |
| Schedule 7 Clause 2 | Schedule 5 Clause 8 | The safety management system must include the arrangements for the adoption and implementation of procedures and instructions for: (b) plant processes (e) temporary stoppages (for example, start-up and shutdowns) | Operational Control | |
| Schedule 7 Clause 2 | Schedule 5 Clause 8 | The safety management system must include the arrangements for the adoption and implementation of procedures and instructions for: (c) permit-to-work systems | Operational Control | |
| Schedule 7 Clause 2 | Schedule 5 Clause 10 | The safety management system must include the arrangements for the development and implementation of procedures for ensuring that changes in organisation, personnel, procedures, practices, plant, and equipment are analysed to identify: (a) any new major incident hazards; or (b) the impact of the changes on: (i) control practices; or (ii) safety-critical elements; or (iii) previously identified major incident hazards. | Operational Control | |
| Schedule 7 Clause 2 | Schedule 5 Clause 12 | The safety management system must include the arrangements for the adoption and implementation of procedures for: (a) routinely checking that activities under the safety management system are being conducted to a suitable standard (b) investigating and taking corrective action in the case of non-compliance (c) monitoring the performance of control measures designed to minimise risks from major incidents. | Monitoring and performance | |

Safety case concordance for major hazard facilities

| RELATED SCHEDULE 7 ITEM | REGULATION REQUIREMENT | DESCRIPTION OF REGULATORY REQUIREMENT | TOPIC | SAFETY CASE REFERENCE |
|-------------------------|------------------------|--|----------------------------|-----------------------|
| Schedule 7 Clause 2 | Schedule 5 Clause 13 | The safety management system must include a system for reporting: (a) major incidents and near misses; and (b) failure of protective measures; and (c) investigations and follow-up actions on the basis of lessons learnt. | Monitoring and performance | |
| Schedule 7 Clause 2 | Schedule 5 Clause 14 | The safety management system must include the arrangements for the adoption and implementation of procedures for: (a) checking that the safety management system is understood and is being complied with; and (b) ensuring that the safety management system (in particular, the control measures and ongoing review) is being implemented and maintained in an effective state. | Audit and review | |
| Schedule 7 Clause 2 | Schedule 5 Clause 15 | The safety management system must include provisions for: (a) the documented review of performance of the safety management system; and (b) the updating of the safety management system by senior management following the review. | Audit and review | |
| Emergency plans | | | | |
| Schedule 7 Clause 3 | 31(1) | The operator of a major hazard facility must prepare an emergency plan for the facility that: (a) effectively addresses all potential health and safety consequences of a major incident; and (b) is specific to the facility and the major incident hazards identified in the safety assessment; and (e) provides for the testing, review, and updating of emergency procedures, including the frequency of any testing, review, and updating. | Emergency plan | |
| Schedule 7 Clause 3 | 31(3) | The operator must, when developing and revising the emergency plan: (b) consult: (i) the emergency services organisations that have responsibility for the area in which the facility is located; and (ii) the local authority within whose district the facility is located, in relation to the potential off-site health and safety consequences of a major incident; and (iii) the operators of any other nearby major hazard facilities. | Emergency plan | |
| Schedule 7 Clause 3 | Schedule 3 Clause 6 | The emergency planning assumptions, including emergency measures planned for identified major incidents, and likely areas affected. | Site and hazard detail | |

Safety case concordance for major hazard facilities

| RELATED SCHEDULE 7 ITEM | REGULATION REQUIREMENT | DESCRIPTION OF REGULATORY REQUIREMENT | TOPIC | SAFETY CASE REFERENCE |
|-------------------------|--|--|------------------------|-----------------------|
| Schedule 7 Clause 3 | Schedule 3 Clauses 8, 10, 14, 15, 16, 22, 24 and 25 | <p>The emergency procedures to include but not be limited to the items below:</p> <ul style="list-style-type: none"> - the command philosophy and structure to be activated in an emergency, so that it is clear what actions will be taken, who will take the actions, and how, when, and where they will be taken - control of any incident involving hazardous substances - safe evacuation of, and accounting for, all people who are on site - notifying the emergency services organisations, local authority and local community in the event of a major incident - arrangement for assisting emergency services organisations and nearby facilities with control actions taken in the surrounding area - decontamination following an incident involving hazardous substances. | Site and hazard detail | |
| Schedule 7 Clause 3 | Schedule 3 Clause 9 | The infrastructure (on site and off site) that may be affected by a major incident. | Site and hazard detail | |