

# **CHEMICALS AND HAZARDOUS MATERIALS MANAGEMENT**

## Foreword

This Standard is one of a suite of documents which address the Policy implementation requirements within Generation Operations which apply to the operation, modification and maintenance of its generating assets in order to minimise significant safety hazards or threats to commercial operation of the plant and to maximise the value from those assets.

## Coverage

This Standard applies to all Generation Sites.

## Exclusions

The following items of plant or operating practices are excluded from this Standard:

- Nil

## Deviations

Deviations from the requirements of this Standard can be considered where full compliance is not appropriate. Circumstances which require deviation from this Standard may include regulatory obligations, local conditions or other circumstances which make it infeasible or inappropriate for a particular site or set of circumstances.

In order to authorise any deviation from this Standard:

- The impact and duration of the deviation shall be risk assessed and documented. Where appropriate the Risk Register shall be updated to reflect the Deviation
- Agreement to the deviation shall be obtained from the Corporate Engineering Authority and Approval obtained from the Chief Generation Officer.

The following items of plant or operating practices deviate from this Standard:

- Nil

1.	INTRODUCTION .....	4
2.	PURPOSE.....	4
2.1	Intent and objective .....	4
3.	SCOPE OF COVERAGE AND APPLICABILITY .....	4
3.1	Contractors .....	4
3.2	Where work is performed .....	5
4.	IMPLEMENTATION.....	5
5.	COMMUNICATION AND PROMOTION .....	5
6.	RESPONSIBILITIES, ACCOUNTABILITY AND AUTHORITY.....	5
6.1	Managers and Supervisors .....	5
6.2	Person in charge .....	5
6.3	Employees and Contractors .....	6
6.4	Contractors .....	6
6.5	Chemicals and hazardous materials purchaser .....	6
6.6	HS Manager .....	6
6.7	Environmental Advisors / HS Advisors / Chemists .....	6
6.8	Occupational Health Provider .....	6
6.9	Occupational Health Nurse (OHN) .....	7
6.10	Certified Handlers .....	7
6.11	People Experience .....	7
7.	STAKEHOLDER INVOLVEMENT .....	7
8.	DEFINITIONS .....	8
8.1	Hazardous Substance .....	8
8.2	Contractor .....	8
8.3	Certified Handler .....	8
8.4	Occupational Health Providers (including Occupational Health Nurses) .....	8
9.	CONSULTATION, PARTICIPATION, INVOLVEMENT AND REPRESENTATION.....	8
10.	TRAINING, INFORMATION, INSTRUCTION AND COMPETENCIES.....	9
10.1	HS Trainer Selection .....	9
10.2	On the Job Training/Supervision .....	9
10.3	Record Keeping .....	9
11.	LITERACY AND COMPREHENSION .....	10
12.	INTERNAL REFERENCES .....	10
13.	EXTERNAL REFERENCES.....	11
14.	PROCESS AND COMPONENTS .....	11
14.1	Inventory .....	11
14.2	Safety Data Sheets (SDS's).....	12
14.3	Annual site inventories .....	13
14.4	Hazardous Substance Approval Assessments .....	13
14.5	Hazard Control .....	13
14.6	Location Compliance Certificates .....	14
14.7	Labelling .....	14
14.8	Transportation and packaging .....	15
14.9	Disposal of hazardous materials and chemicals.....	15
14.10	Emergency Response Plans.....	16
14.11	Site Plan .....	16
14.12	Site review and inspections.....	16
15.	MONITORING.....	17
16.	AUDIT AGAINST STANDARD .....	17

## 1. Introduction

Contact is committed to providing a healthy and safe workplace. As part of our health and safety management system, Contact has a process in place to manage chemicals and hazardous materials used in our operations.

Chemicals and hazardous materials within the working environment are identified, assessed and appropriate management processes implemented to reduce adverse exposure to employees, contractors and the community in which Contact operates.

This procedure contains the detailed requirements for Contact's management of chemicals, primarily chemicals deemed as hazardous to the health, and purchased for use at Contact sites.

## 2. Purpose

### 2.1 Intent and objective

To provide a framework which all chemicals, hazardous substances, materials, and waste at Contact Energy sites are identified, handled, used, stored, tracked, transported and disposed of in a consistent manner, to protect people, the environment and communities by preventing or managing the adverse effects of hazardous substances.

## 3. Scope Of Coverage and Applicability

This company-wide standard is mandatory for Contact operations. Legal compliance is the minimum requirement, but in some instances, this standard may present requirements above that required by various legislation and regulations. In such cases this standard **MUST** still be applied as well as full compliance with the law. Although this standard has been designed to comply with industry best practice, some legislative requirements may not be covered to the level of detail specified in legislation or consent conditions. Should this conflict occur, the relevant legislative requirements **MUST** be adhered to.

This standard covers chemical and hazardous material management (primarily substances hazardous to health) in the work environment or associated with the tasks performed at all Contact sites. They include:

- inventory and tracking.
- identification and labelling.
- safe handling and storage.
- training.
- emergency management.
- disposal.

### 3.1 Contractors

This procedure applies to contractors on Contact controlled sites to the same extent it applies to Contact employees.

Contractors **MUST** inform Contact of any chemicals or hazardous materials they are bringing on site and will need to obtain approval prior to these being brought on site.

## 3.2 Where work is performed

This procedure applies to all work performed by Contact employees, regardless of where that work is performed.

Where contractors perform work on Contact's behalf but not at sites controlled by Contact, the contractor is expected to have chemical and material management processes which are at least equivalent to those required by this procedure. An example of this group is a company contracted to install or maintain equipment at customer's premises on behalf of Contact.

## 4. Implementation

Site Managers will be held accountable for demonstrating compliance with this standard. This includes adoption or modification of procedures and practices to conform to this HS standard.

This document describes mandatory requirements and where applicable, recommended practices. It also identifies other documents that may assist with the implementation of requirements.

## 5. Communication and Promotion

This standard **MUST** be made available to all employees and should be included as part of induction process. The site hazardous substances inventory should be readily accessible to any emergency worker attending the workplace during an emergency and after the workplace has been evacuated. The inventory should be available in control rooms and rooms commonly used for the preparation of hazard identifications and permits.

The Safety Data Sheets (SDS) for a particular hazardous substance **MUST** be available to any staff member or contractor working on that site.

## 6. Responsibilities, Accountability and Authority

### 6.1 Managers and Supervisors

Managers and Supervisors **MUST** ensure that all employees and contractors follow Contact's chemical and hazardous material management procedures for the safe handling, use and storage of all chemicals, hazardous materials and wastes within their areas of responsibility, and that their staff are adequately trained in accordance with Contact's Health and Safety Management System.

An overview of the regulations pertaining to managing hazardous substances is provided in a training module available via the Contact University portal to enable tracking of staff who have completed various hazardous substances training.

### 6.2 Person in charge

*(Person in control where Hazardous Substances are present)*

The Site Manager in control of the place of work is the person ultimately responsible for ensuring the hazardous substances under their control are correctly managed, the environment, and health and safety of people, are not adversely affected. In particular they **MUST** ensure:

- reviews take place yearly to ensure all site certificates or licenses required for the use and storage of hazardous substances are current and displayed in a prominent position.
- that the storage of hazardous substances on site meet all regulatory requirements.
- that all hazardous information, handling/emergency management/disposal procedures are up to date and available to staff at all times.
- that staff receive the necessary training and are provided with the necessary equipment to handle hazardous substances on site.

### 6.3 Employees and Contractors

Employees and Contractors **MUST** follow the chemical and hazardous materials management procedures for the safe handling, use and storage of chemicals, materials and wastes within their area of responsibility and be adequately trained in accordance with Contact's Health and Safety Management System.

An awareness training module for workers at Contact Energy is available via the Contact University portal and will enable tracking of staff who have completed this training. Additional training or competency assurance will be required for those working directly with hazardous substances. This training is to be identified as part of the process of bringing a new hazardous substance to site. Documented records of all training on hazardous substances **MUST** be kept for each worker.

### 6.4 Contractors

Contractors **MUST** notify their Contact supervisor personnel of any hazardous substance they intend to bring to site that has not already been approved for use. The request for new hazardous substance procedure 10000004997 should be followed.

### 6.5 Chemicals and hazardous materials purchaser

Any person wanting to purchase a new hazardous substance **MUST** follow the Request for New Hazardous Substance procedure in DMS 10000004997. This procedure also applies for hazardous substances where a location intends to increase the previously approved maximum quantity, or use for a different application, or store in a different location.

### 6.6 HS Manager

Contact's HS Manager is responsible for ensuring that the company-wide chemical and hazardous materials management procedures are developed and implemented and reviewing and reporting on chemical and hazardous materials management as required by Contact's HS Management System standards.

### 6.7 Environmental Advisors / HS Advisors / Chemists

Environmental Advisors, HS Advisors and Chemists will provide technical advice to employees, contractors, supervisors, and management with regard to the safe handling, use, storage and transport of these chemicals and hazardous materials.

### 6.8 Occupational Health Provider

The Occupational Health Provider is responsible for the implementation, co-ordination, and maintenance of an occupational health programme to manage any health monitoring in relation to hazardous substances and materials.

## 6.9 Occupational Health Nurse (OHN)

The OHN is responsible for monitoring those employees who are working with or are exposed to hazardous agents or materials in accordance with Contact's Occupational Health Management procedures.

The OHN **MUST** restrict employees from further potential exposure whenever warranted by findings of such periodic examinations, in consultation with the Occupational Health Provider, Contact's HS Manager and Site Managers, and maintaining records of health monitoring and providing reports to HS Manager.

## 6.10 Certified Handlers

Certified Handlers are only required for substances that require a Controlled Substance Licence (e.g., explosives or fumigants) or that are acutely toxic (6.1A and 6.1B). They replace the previous requirements for Approved Handlers and are no longer required for flammable substances.

Note that a Certified Handler Compliance Certificate is valid for five years but is tied to a particular workplace(s)/employer stated on the certificate. If an employee changes employer and/or moves to work at a different workplace then the holder **MUST** be reassessed, and the certificate reissued.

## 6.11 People Experience

People Experience –is responsible for ensuring that roles identified as having tasks relating to handling hazardous substances are subject to the pre-employment health screening programme.

# 7. Stakeholder Involvement

All stakeholders are to be involved and included in the consultation, communication, and promotion of this procedure.

## 8. Definitions

### 8.1 Hazardous Substance

Under the Health and Safety at Work (Hazardous Substances) 2017 regulations the definition of a 'hazardous substance' is any substance that has one or more of the following intrinsic 'hazardous properties' exceeding specified thresholds or minimum degrees of hazard regulations made under the HSNO Act.

- Explosiveness
- Flammability
- Oxidising capacity (accelerate a fire)
- Corrosiveness (to human tissue or metal)
- Human Toxicity (acute or chronic)
- Ecotoxicity
- Capacity, on contact with air or water, to develop one or more of the above properties.

### 8.2 Contractor

A Contractor is an individual, company or other legal entity that carries out work or performs services pursuant to a contract for service. This includes sub-contractors. A person or company engaged to provide labour or skills as an independent contractor and paid on invoice.

### 8.3 Certified Handler

A Certified Handler is a person who is competent and certified to handle certain hazardous substances.

### 8.4 Occupational Health Providers (including Occupational Health Nurses)

Is a person with expertise in the anticipation, recognition, evaluation, and control of occupational health hazards and associated monitoring programmes.

## 9. Consultation, Participation, Involvement and Representation

Effective internal and external communication and consultation is important to ensure that those exposed to chemicals and hazardous materials understand why certain actions are required.

Consultation can be defined as any two-way dialogue between stakeholders about the existence, nature, form, severity, or acceptability of hazardous substances hazards. Communication efforts **MUST** be focussed on consultation, rather than a one-way flow of information from decision-makers to stakeholders, especially those outside the immediate department. Communication and consultation are critical to ensure that stakeholders have access to relevant information.

The preparation and maintenance of the site chemical register for a site should be done in consultation with all staff on site.



## 10. Training, Information, Instruction and Competencies

The requirements for training, information, and instruction on hazardous substances is given in clause 4.5 of the Health and Safety at Work (Hazardous Substances) 2017 regulations. The main points are listed below.

Before carrying out work or supervising work involving hazardous substances, the employer **MUST** ensure the worker is provided with:

- Information
  - Any operations in the worker's area where hazardous substances are present; and
  - The location and availability of known reference material on the hazards, safe handling, and storage – including Safety Data sheets.
- Training and instruction **MUST** include the.
  - Physical, chemical and health hazards for the substance.
  - Procedures for safe use, handling, storage, and disposal.
  - Actions worker **MUST** take in an emergency involving the substance.
  - Practice of the safe use of plant including PPE.
  - Worker's obligations under these regulations.
  - Practical experience in the above under direct supervision.

### 10.1 HS Trainer Selection

Contact is committed to ensuring that only trainers with the relevant skills, experience or qualifications provide training. The relevant Industry Training Organisation (ITO) will confirm external provider competency, or an evaluation of the trainer shall be completed. Sites should maintain a list of preferred local training providers.

Internal trainers **MUST** possess the relevant industry qualifications and be competent to train others. Sites **MUST** keep records of their internal trainers and copies of their competencies.

### 10.2 On the Job Training/Supervision

Specific tasks and operations require formal on-the-job training and/or supervision, completed by a competent and suitably experienced person. Each site **MUST** ensure that staff are adequately supervised and that assessments of competency are carried out in accordance with industry and Contact requirements.

### 10.3 Record Keeping

Each site and business unit is responsible for storing individual training records and competency achievements for each worker and ensuring there is a facility to identify when refresher training is due. The training record should include details such as the:

- Date of training
- Topics covered.
- Name of the trainer or institution
- Results of evaluation and any qualifications obtained.
- Any other relevant information.

An inspector or compliance certifier may ask to see these records.

## 11. Literacy And Comprehension

Contact recognises the need for employees to be able to understand the information they are given. Contact requires that the information **MUST** be presented in such a form and manner that the employee is reasonably likely to understand it. This may lead to technical information — such as a safety data sheet, or safe operating procedure being interpreted or abridged to meet the needs of employees in a particular place of work.

Where employees are not fluent in the English language, or are unable to read English, managers **MUST** find an alternative method of providing information. This could apply to employees who speak English as a second language, or to workers who for other reasons are unable to read.

Checks should be made to ensure all information is understood.

## 12. Internal References

- Health & Safety Policy
- Health and Safety Management System
- Site Emergency Response Procedures (SERP)
- Environmental Management Standard – DMS 10000015820
- Management of Change - 10000015782
- Request for New Hazardous Substance procedure – DMS 10000004997
- Site Chemical Registers
- Site Hazardous Substances Procedures
- Protect@Contact Essentials – Chemical and Hazardous substances DMS 10000023827

## 13. External References

- Health and Safety at Work Act 2015
- Health and Safety at Work (Hazardous Substances) Regulations 2017
- Health and Safety at Work (Major Hazard Facilities) Regulations 2016
- Health and Safety at Work (Asbestos) Regulations 2016
- Safe Work Instruments (SWI) developed by WorkSafe for defining detailed or technical matters [www.worksafe.govt.nz/laws-and-regulations/safe-work-instruments/](http://www.worksafe.govt.nz/laws-and-regulations/safe-work-instruments/)
- WorkSafe website for hazardous substances [www.worksafe.govt.nz/topic-and-industry/hazardous-substances/](http://www.worksafe.govt.nz/topic-and-industry/hazardous-substances/)
- Hazardous substances calculator (<https://www.hazardoussubstances.govt.nz/>)
- Environmental Protection Agency (EPA) Notices.
- Regional and District Plans
- Workplace Exposure Standards publications.
  
- Land Transport Rule: Dangerous Goods 2005 (<https://www.nzta.govt.nz/resources/rules/dangerous-goods-2005-index/>)
- NZS 5433:2020 “Transport of Hazardous Substances on Land”
- AS/NZS 1596:2014 The storage and handling of LP Gas.
- AS 1940:2017 The storage and handling of flammable & combustible liquids
- AS 4326:2008 The storage & handling of Oxidising Agents
- AS/NZS 4452:1997 The storage and handling of Toxic Substances
- AS 3780:2023 The storage and handling of corrosive substances
- AS/NZS 3833: 2007 The storage and handling of mixed classes of dangerous goods, in packages and intermediate bulk containers.

## 14. Process And Components

### 14.1 Inventory

Every Contact site **MUST** have an inventory (register) of hazardous substances used or stored at the workplace, including any hazardous waste. Inventory does not need to include:

- Consumer products used in quantities and ways consistent with household use.
- Hazardous substances kept and used in a designated laboratory under the Health and Safety at Work (Hazardous Substances) Regulations 2017. (Presently just the Wairakei and Te Mihi laboratories). (Although any hazardous substances that need to be tracked or that have not been approved under the HSNO Act need to be recorded).

The inventory **MUST** include the:

- Name of the substance (product or chemical name).
- UN number (if available).
- Maximum approved quantity that can be at each storage location on a site.
- The location of the hazardous substances.
- Any specific storage and segregation requirements (see section 7 and 10 of Safety Data Sheet).

- A Safety Data Sheet for each hazardous substance (other than waste) available at the workplace. (Usually, we just include the Safety Data Sheet expiry date on the inventory list).

Other useful items to include in the inventory are:

- The hazard classification (we should do this so can confirm the trigger levels for required compliance certifications).
- The substance state (gas, liquid or solid).
- The container size.

The inventory **MUST** be readily accessible to any emergency service worker after the workplace has been evacuated.

It is recommended that the complete official inventory of hazardous substances for each storage location within a site be kept on the WorkSafe Hazardous Substances Calculator [hazardoussubstances.govt.nz/calculator](http://hazardoussubstances.govt.nz/calculator) website. The calculator automatically determines what controls are required and links to the relevant clauses in the regulations. The calculator is also free to access. The inventory can be printed with the associated controls or exported to a spreadsheet to allow wider access. A unique PIN is allocated to each inventory in order to gain access, but this provides full write access (cannot provide others with only read access). Hence, the PIN should only be given to staff involved with the administration of the inventory and managing compliance. PIN numbers are to be recorded and kept so that in the event of a staff member leaving Contact the inventory records are not lost. All PIN numbers are to be shared with the Senior Engineer (Chemistry). Alternatively, inventory can also be recorded in the Chemwatch database, which Contact subscribes to. Chemwatch does not link well to the New Zealand Hazardous substance regulations and if Chemwatch is used to record inventory then the WorkSafe calculator should be cross checked to ensure that controls relevant to New Zealand regulations are applied.

## 14.2 Safety Data Sheets (SDS's)

SDS's provide the information required to allow the safe handling of substances deemed hazardous to health in the workplace. All employees, contractors, and emergency service workers **MUST** have ready access to SDS at the workplace and have a clear understanding of how to safely handle hazardous substances they work with. A condensed version of the SDS may also be used by the work party.

SDS's should be obtained from the supplier of products containing substances hazardous to the health.

The SDS should be obtained in advance of the substance arriving on site. This is to allow an assessment of the controls required. Where an SDS cannot be obtained the person responsible for Chemical Management should make every effort to access this information.

A person or persons **MUST** be clearly identified as being responsible for maintaining the SDSs (in general, no older than 5 years from date of last revision) for all substances in the inventory - with the exception of hazardous waste.

A SDS **MUST** be obtained from the manufacturer, importer, or supplier of the hazardous substance when:

- Being supplied to the workplace for the first time
- First supplied after the SDS is amended. (This may be difficult to know unless the supplier informs you or if our current SDS is nearly five years old)

- It has been five years or longer since the substance was supplied to the workplace.

## 14.3 Annual site inventories

Every Contact site **MUST** take a careful inventory of all chemical holdings at least once every 12 months. This inventory shall be used to:

- Identify any chemicals on site that do not have an SDS (there should be none); and
- Update the chemical inventory records: including deleting the substances no longer used at the site.
- Review controls are still appropriate.

## 14.4 Hazardous Substance Approval Assessments

The level of approval required before a new chemical is introduced depends on its hazard potential. When a new chemical needs to be introduced to site, follow the procedure 10000004997 Request for New Hazardous Substance

Unless the use of the new chemical is to be brief and one-off, the relevant register and SDS collection **MUST** be updated once approval has been granted to introduce the chemical.

It should be noted that no new chemical will be approved for purchase or use until an assessment has been completed and authorisation for purchase / use has been received.

The purpose of a hazard assessment is to gain adequate information on the use of the substances hazardous to the health in a place of work. This will allow for decisions to be made on the requirements for control measures, training, and monitoring.

Hazard assessments **MUST** be performed:

- prior to the introduction of all new hazardous substances (or for a different application or storage location for an existing hazardous substance used on site) that are classified as “hazardous” under the New Zealand classification systems.
- as required by regulations.
- for existing chemicals classified as ‘hazardous’.

Hazard assessments **MUST**:

- clearly document all the tasks involved, and the people doing the assessment, including the involvement of any health and safety representatives.
- list all the hazardous substances used in the task.
- review the health hazards of the hazardous substances involved in the task, highlighting the most significant potential adverse health impact by route of exposure (eyes, skin, or inhalation).
- in the manner of a hazard identification, split the task up into discrete steps, considering the potential for exposure to eyes, skin and via inhalation at each step.
- list the precautions already in place at each step and any improvements identified as a result of the assessment.

These hazard assessments **MUST** be maintained on a database or in a document repository to make them as accessible as possible to persons involved in using the substances.

## 14.5 Hazard Control

Where a material or chemical has been deemed a significant hazard the following hierarchy of controls **MUST** be applied:

1. Eliminate any hazardous substances no longer needed.
2. Substitute with a less hazardous alternative substance if possible.
3. Isolate the hazard to prevent people coming into contact with it.

4. Engineering controls to minimise risk, e.g., ventilation.
5. Administrative controls, e.g., work control, work method statements.
6. Personal Protective Equipment (PPE) if risk remains after all other measures have been applied. Note that PPE is not always fully effective – see WorkSafe website for information on health monitoring.

## 14.5.1 Selection of Controls

When assessing control strategies and/or specific controls for hazards that cannot be eliminated there are frequently choices of controls to apply at the isolate and minimise levels.

The “all practicable steps” test **MUST** be applied in the selection of the controls required.

## 14.5.2 Revision of Materials and Chemicals Hazard Assessments

Assessments should be reviewed if.

- the process, plant or substance related to exposure to the substances hazardous to health is modified.
- new information on the hazards of the substance becomes available.
- monitoring indicates inadequate exposure control.
- the installation of new or improved control measures becomes practicable; or
- there is reason to believe that the last assessment is no longer valid.

## 14.6 Location Compliance Certificates

The WorkSafe hazardous substance calculator will determine if a Location Compliance Certificate is required for a hazardous substance storage location. Applies to classes 3, 6 and 8.

## 14.7 Labelling

All containers of chemicals **MUST** be labelled regardless of identification status. More stringent conditions are placed on substances hazardous to the health. All containers into which a substance has been decanted **MUST** also be clearly labelled to identify its contents.

Regular inspections are to be performed to check that all chemicals and hazardous materials are correctly labelled by suppliers.

### 14.7.1 Unlabelled containers

If a container that does not have a label or is improperly labelled is found, action should be taken to correctly label the container. If the contents are unknown, the container should be marked “Caution do not use unknown substance” and forwarded to the appropriate person for identification and suitable disposal if required. Always assume materials and chemicals are hazardous until proven to be non-hazardous.

### 14.7.2 Re-use / Recycling of Containers

Any empty non-hazardous containers suitable for recycling / reuse on site, should be rinsed, relabelled appropriately (with a blank label) and stored in the correct location on the open store shelving. When the container is reused, it **MUST** be relabelled to indicate the new product being stored within. You **MUST** check with the site / Contact chemist first to ensure the container is compatible with substance.

## 14.7.3 Hazardous Substances Certification and Compliance Requirements

The WorkSafe hazardous substance calculator will identify what certifications are required. For example:

- A Location Compliance Certificate. A notification form **MUST** be sent to WorkSafe at least 30 working days before commissioning a new hazardous substance location that will require a location compliance certificate (see WorkSafe website). The quantities of hazardous substances on a site's location compliance certificate should not exceed those specified in the notification provided to WorkSafe or listed in the inventory. A new notification to WorkSafe is required if the quantity is to be increased or different hazardous substances are held on site.
- Stationery Container Certificate typically for tanks > 5,000 L capacity.
- Sites may require team members to have Certified Handlers certificates.
- Correct segregation **MUST** be employed at all times and displayed in storage areas.
- Tanks **MUST** be designed and installed to meet the necessary requirements for the hazardous substance they will contain.
- Secondary containment **MUST** meet regulatory standards.
- Correct environmental conditions need to be established and maintained for the type of hazardous substance being stored e.g., temperature, humidity, ignition sources.
- An atmosphere zone may be required, and if this is the case expert advice should be sought to ensure compliance with the applicable regulations.
- Correct signage **MUST** be established and installed.
- Ventilation and building construction materials **MUST** be fit for purpose.
- Safety and protective equipment **MUST** be provided, and users trained.
- Signage.
- Tracking (required for certain very hazardous substances).

## 14.7.4 Radio-Active Materials

Small quantities of radioactive materials are used on some of Contact's operational sites. Storage, transportation and isolation regulations **MUST** be adhered to. All testing **MUST** be carried out under the supervision of New Zealand National Radiation Laboratory licence holders.

## 14.7.5 Gases

Gases, such as acetylene, oxygen, SF6 and nitrogen are used on various Contact operational sites. All gas stored on site **MUST** only be stored in the containers provided by the Gas Supplier. There are additional regulations and reporting requirements around SF6 as it is a powerful greenhouse gas.

## 14.8 Transportation and packaging

Sites with hazardous substances **MUST** comply with the regulatory requirements that fall under the Land Transport Rule: Dangerous Good 2005 administered by Waka Kotahi (NZ Transport Agency).

All hazardous substances being transported from site **MUST** comply with the required regulations.

## 14.9 Disposal of hazardous materials and chemicals

The disposal of a Hazardous substance **MUST** be considered, and a plan developed before a substance is brought to site.

Particular attention should be paid to the composition of the chemical to be disposed, especially concerning compatibility with any medium used to dilute, neutralise, or absorb the chemical. The potential reactivity of any disposed chemical should be carefully considered before mixing it with any other substance.

Hazardous Substances and empty containers that have held hazardous substances **MUST** be disposed of in accordance with information as specified in the substance SDS and disposal plan.

If there is any doubt as to the correct disposal process for a Hazardous Substance professional advice from a suitably qualified person, such as a Chemist is to be sought before disposal.

## 14.10 Emergency Response Plans

Where required Emergency Response plans are to be included in the Site Emergency Response Plan (SERP). The WorkSafe hazardous substance calculator will identify when specific emergency response plans are required for a particular hazardous substance storage location. These plans should cover each reasonably foreseeable emergency arising from a breach or failure of controls and provide:

- Actions to warn, protect, help, or treat people.
- Actions to restrict/reduce severity of loss of containment.
- Identify each person with responsibilities, any special training or equipment required.
- Actions to contact any emergency service provider.
- Inventory of hazardous substances.

Site plan

The emergency response plan **MUST** be tested at least every 12 months to demonstrate plan is workable and effective (within 3 months if change plan). All records of tests **MUST** be kept to show Compliance Certifier as required.

## 14.11 Site Plan

A drawing of the site to scale showing any:

- Vehicle and pedestrian entry points.
- Structures (e.g., buildings, cooling towers).
- Physical position of all hazardous substance locations and the distances from each other and to the legal boundary of the site.
- Hazardous atmospheric zoning for flammables, may require separate drawing(s) to show elevation (side view) as well as plan view.
- Company/Trading name and physical street address of the site.
- Additional useful inclusions are the location of safety showers & eye wash, nearby drains (and where drain to), spill kits, and firefighting equipment (for flammables).

The site drawing should be of an appropriate size (at least A4).

## 14.12 Site review and inspections

A review of all chemicals and hazardous materials contained on site **MUST** be carried out at frequencies as indicated in the table below by a competent person trained or experienced in hazardous substances.



Description	Review Frequency
<p><u>Site certificates</u></p> <ul style="list-style-type: none"> <li>Location certificates are current.</li> <li>Certified handlers are current.</li> <li>Tank certificates are current</li> </ul>	Yearly
<p><u>Site inspections</u></p> <ul style="list-style-type: none"> <li>Hazardous substance storage areas are tidy and appropriate.</li> <li>All chemicals and materials (including containers) are labeled correctly.</li> <li>Vessels and equipment containing hazardous substances are inspected</li> </ul>	<p>To be completed as part of scheduled audit inspections</p> <p>Every 5 years</p>
<p><u>Administrative</u></p> <ul style="list-style-type: none"> <li>SDS are current and relevant.</li> <li>Materials and chemical hazard assessments are reviewed.</li> <li>Site signage checked for condition &amp; relevancy.</li> <li>Hazardous atmospheric zones adequate</li> <li>Site inventory is current.</li> <li>Site plan map is current.</li> <li>Protective handling equipment is available, in good condition and relevant for job.</li> <li>Handling, emergency, and disposal procedures are up to date, available and relevant.</li> <li>Emergency information is up to date, available and relevant.</li> <li>Hazardous Substances are segregated correctly.</li> <li>Staff training in Hazardous Substances is being carried out and is relevant.</li> <li>All excess chemicals surplus to requirements are disposed of</li> </ul>	<p>Every 5 years</p> <p>Every 5 years</p> <p>Included in scheduled audit inspections.</p> <p>Included in annual location certificate.</p> <p>Annually</p> <p>Included in annual location certificate.</p> <p>Two-yearly</p> <p>Two-yearly or sooner if process changes.</p> <p>Annually</p> <p>Included in scheduled audit inspection.</p> <p>As required, annual check of competencies</p> <p>Annually</p>

## 15. Monitoring

Contact’s chemical and hazardous materials management processes will be monitored by:

- annual review of chemical / hazardous substances registers.
- in accordance with any environmental consent conditions imposed on the site.
- annual review of occupational health hazards to ensure that controls are in place for managing exposure to substances hazardous to the health.
- at the Triannual Risk reviews to review any recorded chemical and hazardous materials incidents, investigation findings, action progress and any process improvements implemented.
- examination of any audit results.

## 16. Audit Against Standard

Adherence to this standard will be audited as part of Contact’s Business Assurance Plan. Audits **MUST** measure site and company performance with this standard and actions to address non-conformances will be recorded, monitored, and reported to the Audit and Risk Committee.