***Insert Company Name***

**Hazardous Materials Management Plan**

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| ***General Instructions***   1. *Insert company logo in the header* 2. *Insert company name where indicated (“[insert company name]”)* 3. *Consider the guidance / follow the instructions given in the instruction boxes* 4. *Review the Hazardous Materials Management Plan and customise accordingly, if required* 5. *Delete the instruction boxes throughout when the document is completed, including this box.* |

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| **Document No.:** | XX |
| **Type of Document:** | Plan |

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| **Version No.** | **Issue Date** | **REVIEWED by (Team Members)** | **Reviewed by**  **(Relevant Manager)** | **Approved** | **Signature** |
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**Amendments**

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| *Instruction Box – Delete when complete.*  General Instructions for Customisation and Compliance |
| This document provides a template from which your company can develop a Hazardous Materials Management Plan (HMMP) to provide employees and contractors with a systematic approach for managing hazardous materials, preventing harm to personnel, and avoiding spillage incidents.  The purpose of a HMMP is to minimise the risks associated with Hazardous Materials (hazmats), ensure regulatory compliance, and protect human health and the environment. The HMMP will typically be used and applied by the employees and contractors, who will be required to implement practices aligned with the requirements of this plan. The Facilities Manager (or equivalent person) shall use this HMMP as a guide to inform contractors about the safe and responsible handling of hazardous materials.  The HMMP must include identification, classification, handling, labelling and warning signs, storage, transportation and offloading as well as emergency management measures and disposal requirements of hazmats used by the company. Hazmats are those materials that represent an elevated risk to property, the environment or human health because of their physical and/or chemical characteristics. Materials (including mixtures and solutions) subject to these guidelines can be classified according to the hazard they present, as follows:   * Explosives; * Toxic or flammable gases; * Flammable liquids; * Flammable solids; * Oxidizing substances; * Toxic and infectious substances; * Radioactive material; * Corrosive substances; and * Miscellaneous dangerous materials.   The HMMP shall be developed to ensure compliance with relevant national legislation as well as taking into consideration recognised international good practice, specifically International Finance Corporation (IFC) Performance Standard (PS) 3: Resource Efficiency and Pollution Prevention. In alignment with IFC PS 3 on Resource Efficiency and Pollution Prevention, the use of hazmats in operations must be avoided where possible, and where avoidance is not possible, their release must be minimised and controlled. Risks which arise from the production, transportation, handling, storage, and use of hazmats must be assessed prior to use. The following provides a list of environmental, health and safety risks commonly associated with the use of hazardous materials:   * Health risks: Exposure can lead to acute or chronic health issues, including respiratory problems, skin irritations, and long-term conditions like cancer. * Environmental Risks: Improper disposal or spills can contaminate soil, water, and air, harming ecosystems and wildlife. * Fire and Explosion Hazards: Many hazardous materials are flammable or reactive, posing risks of fires and explosions, especially in poorly managed environments. * Chemical Reactions: Incompatible materials can react violently, leading to hazardous situations. * Regulatory Risks: Non-compliance with regulations can result in legal penalties, fines, and increased scrutiny.   Where appropriate, less hazardous substitutes must be considered for use as well as reduced usage where substitution is not possible. The company must strictly avoid the use of hazmats that are subject to international bans or phase-outs due to their high toxicity to living organisms, environmental persistence, potential for bioaccumulation, or potential for depletion of the ozone layer. All World Health Organization Class 1a (extremely hazardous) and 1b including pesticides such as Dichlorovinyl Dimethyl Phosphate (DDVP) and Carbendazim fungicide, should be phased out due to their high risks in line with PS3 guidelines. A phase out plan should be implemented to progressively remove the use of such substances.  Any asset / site handling and/or storing any quantity of hazmats are required to develop site-specific HMMP as stipulated in the World Bank Group General Environmental, Health and Safety Guidelines. The objective of the management plan is to avoid or, when avoidance is not feasible, to minimise uncontrolled releases of hazmats or accidents (including explosions and fires) during the production, handling, storage and use of hazmats.  To ensure the HMMP is practical and meets both lender and operational needs, please consider the following:   * Regulatory Compliance: Ensure the HMMP follows local, national and international laws governing hazardous materials and is aligned with recognised industry standards (e.g., United Nations Globally Harmonized System of Classification and Labelling of Chemicals (GHS). * Specificity: Customise the HMMP address the specific hazardous materials used in your operations as well as the unique risks and conditions of your site. * Operational Integration: The HMMP must be integrated into daily operations and collaboration between departments (e.g. safety, procurement, operations) to ensure a cohesive approach to hazardous materials management. * Detailed Procedures and Roles: Define specific roles and responsibilities for implementing the HMMP and assign clear roles for emergency response including who is responsible for containment, communication and coordination during incidents. * Resource Allocation: Commit to allocating sufficient resources, including funding, personnel, and equipment, to effectively implement and maintain the HMMP. * Documentation and Record Keeping: Maintain detailed records of all hazardous materials, procedures, incidents, and training. Ensure all documents are up-to-date, accessible, and secure, with clear version control. * Continuous Improvement: Establish a process for regularly reviewing and updating the HMMP to reflect changes in operations, regulations, and best practices. |

# Purpose and Scope

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| *Instruction Box – Delete when complete*   * *Insert the company name where indicated throughout the document.* * *Describe the purpose of the Hazardous Materials Management Plan (HMMP).* * *Define the scope of application of the HMMP and whom it applies to.* * *The section below is generic. Review and modify as required for your company.* |

The purpose of the Hazardous Materials Management Plan (HMMP) is to provide a framework for [insert company name] to:

* Protect employees, the community, and the environment from the risks posed by the use of hazardous materials (hazmats);
* Properly identify and classify hazmats, as well as the risks associated to its use; and
* Ensure safe and efficient handling, classification, storage, transportation, and disposal of hazmats.

Hazardous materials include chemical substances used and applied during business operations, for example:

* Fuels;
* Hydrocarbons (oils, grease);
* Paints;
* Gases e.g. liquified petroleum gas (LPG) for cooking, oxygen, etc.;
* Cleaning agents, and
* Pesticides and herbicides.
* [add/remove as required hazardous materials relevant to your business operations]

This HMMP is to be followed by all [insert company name] personnel and external parties (e.g. contractors) appointed by [insert company name] to carry out work on behalf of [insert company name].

***When a hazardous material is no longer usable for its original purpose and is intended for disposal, but still retains its hazardous properties, it is considered hazardous waste and should be disposed of properly according to the Waste Management Plan (insert document reference).***

# Objectives

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| *Instruction Box – Delete when complete*   * *State the objectives of the HMMP and what it aims to achieve* * *The section below is generic. Review and modify as required for your company.* |

The objective of the HMMP is to ensure compliance with all applicable local, national, and international regulations, thereby protecting the organization from legal penalties and ensuring alignment with industry standards.

The HMMP aims to:

* Safeguard human health and safety by preventing harm to employees, contractors, visitors, and the surrounding community;
* Prevent environmental contamination and avoid the release of hazardous materials into the air, water, or soil;
* Minimize risk of incidents and accidents as well as reduce the likelihood of spills, leaks, and other hazardous material-related incidents; and
* Ensure emergency preparedness and response through establishment of effective emergency response procedures for hazardous materials incidents.

# Legal and International Requirements

## National Laws and Regulations

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| *Instruction Box – Delete when complete*   * *Review country and local legislation relating to hazardous materials management and incorporate as may be required into this section.* * *List all relevant hazardous materials management-related laws and regulations below.* |

The Plan has been developed to conform to the following national laws and regulations:

* Xx
* Xx

## International Standards and Guidelines

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| --- |
| *Instruction Box – Delete when complete*   * *List all relevant international standards, guidelines and conventions and delete any below that are not applicable.* |

The Plan has been developed to conform to the following international standards and guidelines:

* IFC PS on E&S Sustainability (2012):
  + Performance Standard 3 – Resource Efficiency and Pollution Prevention: Requires companies to identify hazardous materials used in their operations and implement measures to handle, store, and dispose of them safely. This includes the proper labelling, transportation, and disposal of hazardous waste.
* IFC General Environmental, Health and Safety (EHS) Guidelines (2007);
* IFC EHS Guidelines for Annual Crop Production (2016);
* IFC EHS Guidelines for Food and Beverage Processing (2016);
* IFC EHS Guidelines for Perennial Crop Production (2016);
* United Nations Environment Programme (UNEP) Guidelines on Environmentally Sound Management of Hazardous Wastes;
* United Nations Globally Harmonized System of Classification and Labelling of Chemicals (GHS); and
* Bamako Convention on the Prohibition of Hazardous Waste Import, and controls Transboundary movements of such wastes in Africa, 1996.

# Definitions

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| *Instruction Box – Delete when complete*   * *The table below includes a list of definitions of terms used in the document. Modify/delete/add to as required.* |

| **Term** | **Definition** |
| --- | --- |
| Disposal | The burial, depositing, discharge, abandoning, dumping, placing or release of any waste into, or onto, any land. |
| Globally Harmonized System of Classification and Labelling of Chemicals (GHS) | An internationally agreed-upon system to standardize chemical hazard classification and communication. |
| Hazardous materials (Hazmat) | A chemical, substance or material used in the workplace, which has the potential to cause injury or have an adverse effect on a person’s health. Hazardous materials exhibit one or more of the following inherent characteristics:   * Ignitability (flammable, highly flammable or explosive); * Reactivity (corrosive, oxidizing); and * Biologically harmful (toxic or eco-toxic, infectious, irritant, carcinogenic, mutagenic, teratogenic). |
| Hazardous waste | Any waste or combination of wastes which has properties that make it dangerous or capable of having a harmful effect on human health or the environment. |

# Abbreviations and Acronyms

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| *Instruction Box – Delete when complete*   * *The table below includes a list of abbreviations and acronyms which are referred to in the document. Modify/delete/add to as required.* |

| **Abbreviations and Acronyms** | **Definition** |
| --- | --- |
| EHS | Environmental, Health and Safety |
| GHS | Globally Harmonized System of Classification and Labelling of Chemicals |
| Hazmat | Hazardous materials |
| HMMP | Hazardous Materials Management Plan |
| IFC | International Finance Corporation |
| IPM | Integrated Pest Management |
| LPG | Liquified Petroleum Gas |
| PPE | Personal Protective Equipment |
| PS | Performance Standard |
| SDS | Safety Data Sheets |
| UNEP | United Nations Environment Programme |
| WBG | World Bank Guidelines |

# Management Procedure

## General Requirements

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| *Instruction Box – Delete when complete*   * *Outline the general requirements with respect to the management of hazardous materials and make mention of other procedures wherein reference is made to hazardous materials.* * *The text below is generic. Review and modify as required for your company.* |

[insert company name] shall aim to responsibly manage the identification, storage, handling, emergency management measures and disposal requirements of hazardous materials stored on site by the company.

The following company procedures describe the various control measures to manage the risk associated with hazardous materials, and should be referred to (as applicable) in addition to this procedure:

* Occupational Health and Safety Plan (insert document reference);
* Firefighting requirements for flammable substances: Emergency Preparedness and Response Procedure (insert document reference); and
* Spills of hazardous materials: Emergency Preparedness and Response Procedure (insert document reference); and
* Integrated Pesticide Management Plan (insert document reference).

## Selection of New Chemicals

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| *Instruction Box – Delete when complete*   * *Outline the process for selecting hazardous materials, emphasizing the importance of minimizing risks associated with Highly Hazardous Pesticides (HHP).* * *State the controls in place for selecting new materials and who is responsible for this function.* * *The text below is generic. Review and modify as required for your company.* |

To minimise the introduction of additional hazards into the workplace, all new processes and chemicals shall be evaluated for hazards before acquisition or purchase.

Information on protection against environmental, health and safety hazards associated with the material shall be obtained from the suppliers and other sources where appropriate. Safer (less hazardous) chemicals and processes and alternative practices that can eliminate or significantly reduce the need for chemicals shall be preferred, as far as feasible.

**Figure 6.1** displays the key steps involved in the selection of new materials for use and a detailed description of what each step entails is given thereafter.

**Figure 6.1: Process Flow for Chemical Selection**

Step 1: Request for Chemical

* Stakeholder identifies the need for a chemical and submits a formal request including details such as intended use, location(s) of use and required specifications.

Step 2: Identify possible chemical solutions

* Identify possible chemical solutions, especially low hazard options using databases[[1]](#footnote-2), as well as the requested option.

Step 3: Identify possible non-chemical solutions

* Identify any non-chemical solutions e.g. if rodenticide is requested, determine if all gaps where rodents could enter a building could instead be closed to keep rats out. Use of external pest control operators should also be considered as an alternative to implementing controls inhouse.
* For production processes, Integrated Pest Management (IPM) techniques shall be applied at a minimum, and agri ecology or organic farming practices (in part or whole) as well as biological control methods should be considered.

Step 3: Establish Selection Criteria

* Define criteria for selecting chemicals, such as:
  + Performance characteristics
  + Ease of use (e.g. compatibility with existing processes/materials, handling, storage and disposal requirements)
  + Toxicity Level
  + Hazards/OHS risks (e.g. a granular form may create less dust than a powder form of a chemical; a less hazardous chemical will have less serious consequences if accidentally spilt on user than a highly hazardous chemical)
  + Environmental impact
  + Cost considerations

Step 4: Evaluate Options

* Obtain the SDSs for the possible chemical solutions from the internet/ possible suppliers.
* Evaluate all possible options, including non-chemical, against each other using all available data.

Step 5: Select Preferred Option

* Select preferred option using the established criteria
* Chemicals with Hazard Statements containing the words Fatal or Very Toxic should be avoided as far as possible. The Pesticides Action Network’s list of Highly Hazardous Pesticides (HHP) can also be used to aid in identifying HHPs[[2]](#footnote-3) which should be avoided, or where avoidance is not possible, reduced.
* In general, materials with higher Globally Harmonised System (GHS) of Classification and Labelling of Chemicals hazard category numbers are less hazardous than those with a lower hazard category number within the same GHS hazard class. The least hazardous chemicals should be used unless there is significant reason not to. In some cases, this may result in an increase in the volumes of chemicals used.
* If required update or apply new EHS controls to safely manage the hazardous materials.

Step 6: Check Against Restrictions and Bans

Check the preferred chemical is not listed in the following: :

* National restrictions or bans such as those listed for pesticides[[3]](#footnote-4), for example.
* International bans or phase outs such as those listed in:
  + Rotterdam Convention[[4]](#footnote-5)
  + Montreal Protocol[[5]](#footnote-6)
  + Stockholm Convention[[6]](#footnote-7)

The company should regularly check its inventory, and the products used. Products with higher toxicity or safety concerns, or when there have been illnesses reported after use with a product, should be examined for alternatives. Substitution of currently used products with less hazardous products is one of the most effective ways of eliminating or reducing exposure to products that are toxic or pose other hazards. Be aware that manufacturers may also change their product formulations over time.

## Hazardous Materials Inventory

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| *Instruction Box – Delete when complete*   * *List the type of information which should appear on a hazardous materials inventory.* * *The text below is generic. Review and modify as required for your company.* |

All hazardous materials in use or stored on site shall be identified and classified, and information of the substances recorded in a Hazardous Materials Inventory (*see Annex A for an example*).

The inventory should contain information on the following:

* Name of substance;
* GHS classification;
* Storage location;
* Storage capacity / maximum quantity in storage;
* Details of supplier; and
* SDS available (yes/no).

The Hazardous Materials Inventory shall be updated by when chemicals are no longer used or new chemicals are introduced.

## Safety Data Sheets

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| *Instruction Box – Delete when complete*   * *Mention how operational teams are to be made aware of the hazard associated with the use of hazardous materials.* * *The section below is generic. Review and modify as required for your company.* |

The Safety Data Sheets (under GHS) are the main communication between the suppliers of materials and the end-users. The SDS of all hazardous materials listed in the Hazardous Materials Inventory Register shall be obtained from the appropriate suppliers, compiled, and disseminated as appropriate. This should be supplied prior to the delivery of a new substance.

The SDS shall be in the international standard 16-point format aligned with the Globally Harmonised System of Classification and Labelling of Chemicals (GHS). According to this system, the SDS should contain the following information.

* Identity of the substance;
* Safety and health information pertaining to the substance;
* Composition of and ingredients used in the substance;
* First-aid measures;
* Firefighting measures;
* Accidental release measures;
* Precautions to be taken for safe handling;
* Exposure controls and personal protection needed;
* Physical and chemical properties;
* Stability and reactivity of the substance;
* Toxicological information;
* Ecological information;
* Disposal considerations;
* Transport information;
* Regulatory information; and
* Other Information.

The [Facilities/Operations Manager], using, managing or advising on hazardous materials shall study the information in the SDS and institute all required measures to ensure the safe use of hazardous materials. The information should be available to persons who are exposed to the hazardous substances or responsible for management of the hazardous substances.

Copies of each SDS, or key information on the substances should also be located near the location where the hazardous materials are used and stored. A copy of the SDS shall also be kept on file (hard copy or electronic copy) in a central electronic location.

The suppliers of hazardous materials shall be contacted at least every 5 years to either provide or update the SDS or confirm that there has been no change to the information currently on file.

## Labelling and Warning Signs

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| *Instruction Box – Delete when complete*   * *List key elements which should be included on a hazardous material label.* * *List signage requirements for hazardous materials storage on site.* * *The section below is generic. Review and modify as required for your company.* |

All containers containing hazardous chemicals shall be clearly labelled in alignment with GHS regarding the contents and hazards. All persons that are required to handle the hazardous substance shall be made aware of the hazards and the precautionary measures.

Warning signs and/or notices specifying the nature of the dangers associated with the hazardous material shall be prominently displayed in areas where such materials are used or handled. These warning labels shall be made available in all languages necessary to ensure they can be understood by all workers.

The key elements of a hazardous material label are as follows:

* Product identifier - name, chemical name, UN number, ingredients and formulation details;
* Pictogram(s) – to convey the health, physical and environmental hazard information, assigned to a GHS hazard class and category;
* Signal words (warning/poison/danger) and dangerous goods class or schedule;
* Hazard statement - standardised and assigned phrases that describe the hazard(s) as determined by hazard classification e.g. "flammable", "irritating to skin" or "harmful if swallowed";
* Precautionary statements: standardized phrases that describe measures to minimize or prevent adverse effects - e.g. "avoid contact with skin" or "do not breathe dust"; and
* Supplier information.

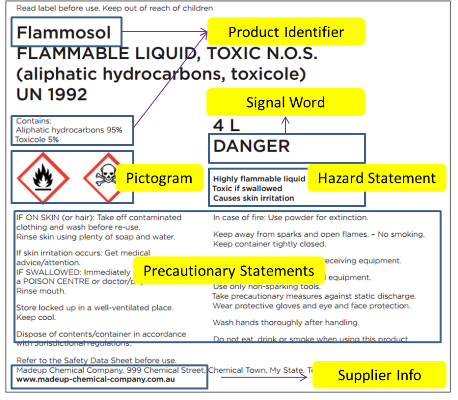
**Figure 6.2** provides examples of pictograms and hazards statements for labels and Figure 6**.3** provides an example of a label containing the above-mentioned information requirements.

Small containers (e.g. < 5 litres), or small containers into which the hazardous materials are decanted for short term use shall include the following basic information:

* Name;
* Pictogram; and
* Hazard statement.

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| GHS hazard pictograms - Wikipedia | A sign with a flame in the middle  Description automatically generated | A red and black sign with a flame in the middle  Description automatically generated |
| * Explosive * Self-reactive * Organic peroxide | * Flammable * Self-reactive * Pyrophoric * Self-heating * Emits flammable gas in contact with water * Organic peroxide | * Oxidiser |
| A red and black sign  Description automatically generated | A skull and crossbones in a red diamond  Description automatically generated | Globally Harmonized System of Classification and Labelling of ... |
| * Gasses under pressure | * Acute toxicity | * Acute toxicity * Skin irritant * Eye irritant * Skin sensitizer |
| A sign with a person with a star in the center  Description automatically generated | GHS Corrosion Pictogram Label, 4" x 4" | Labelmaster | A sign with a fish and a tree  Description automatically generated |
| * Carcinogen * Respiratory sensitizer * Reproductive toxicant * Target organ toxicant * Germ cell mutagen | * Eye corrosion * Skin corrosion * Corrosive to metal | * Environmental Hazards |

**Figure 6.2: Examples of GHS Pictograms and Hazard Statements**



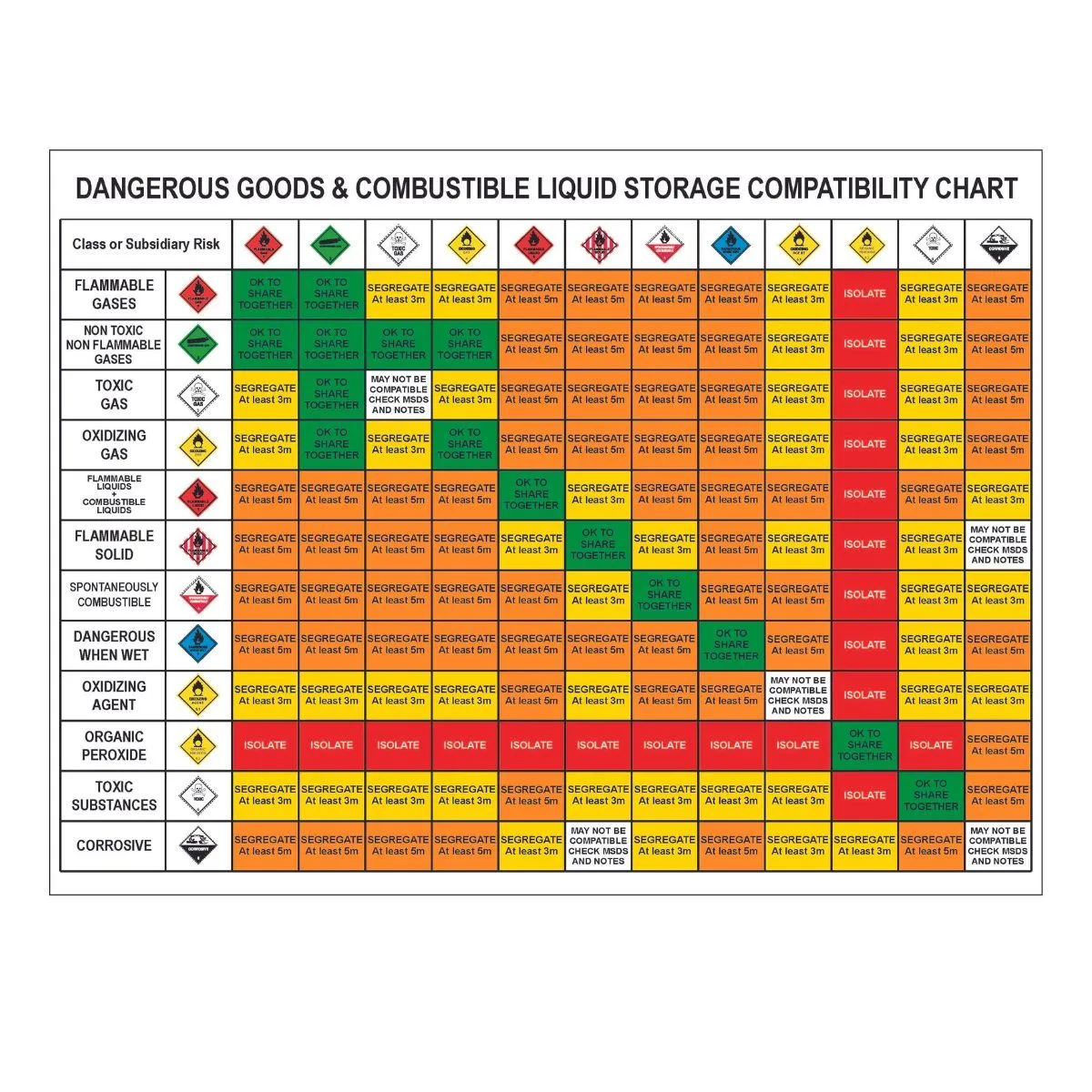
**Figure 6.3: Example GHS Label**

## Storage Procedures

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| *Instruction Box – Delete when complete*   * *Describe the requirements for the storage of all hazardous materials.* * *Explain the need for secondary containment and outline the considerations for roofed and unroofed storage* * *The section below is generic. Review and modify as required for your company.* |

All hazardous materials shall be stored in designated storage facilities appropriate to the type of substance and related hazards. The following shall be put in place:

* Storerooms and Storage Areas
  + Storerooms shall have adequate ventilation to prevent the accumulation of vapours e.g. in the warehouse where solvents and cleaning agents are stored, [insert company name] has installed an industrial ventilation system to ensure continuous airflow to prevent the buildup of vapours from substances such as xxx, xxx and xxx;
  + Storerooms shall be fitted with adequate lighting. Lighting (and other electrical fittings in storerooms) where flammables are stored shall be explosion proof (i.e. intrinsically safe fittings which are electrically insulated/sealed to contain electrical sparks and prevent potential explosions from flammable vapours);
  + Adequate secondary containment shall be provided as follows to contain any spillages and leaks:
* At least 110% of the volume of the largest tank; or
* 25% of the combined storage for smaller containers (e.g. for 1 m3 intermediate bulk containers, 210 litre drums or 20-25 litre polycans).
* In the case of permanent bunds, these shall consist of a smooth impermeable surface (concrete). The floor of the bund shall be sloped, draining to sump.
* Where practicable, containers shall be stored under a roof. However, where the tanks or containers are stored in an external environment with no roof, a valve shall be installed for the purpose of releasing uncontaminated rainwater from the secondary containment area. The valve shall remain closed, and only opened to release water once the containment area has been inspected and confirmed not to contain any hazardous substance. If contamination is detected, the following steps shall be taken (if this has resulted in spillages follow the spill procedure in the **Emergency Preparedness and Response Plan**, **Section 6.4 Chemical Spill**):
  + Immediately secure the area to prevent access;
  + Notify the appropriate personnel and environmental safety team;
  + Conduct a thorough assessment of the contamination extent;
  + Implement containment measures to prevent further leakage or spread, such as:
    - Using absorbent materials (e.g., spill pads, booms) to soak up spills.
    - Creating physical barriers (e.g., berms or dikes) to contain the contaminated area.
    - Setting up temporary secondary containment (e.g., portable tanks) to collect leaking materials.
  + Follow the established hazardous waste disposal procedures for contaminated materials;
  + Document the incident and response actions for future reference and compliance;
  + Where storerooms or storage is located outside, all storage areas will be located at least 100 m from water sources (e.g. boreholes, streams, wetlands, rivers, etc); and
  + Avoid the use of underground storage tanks as far as possible due to lack of visibility of leakages.
* Signage
  + Signage indicating the type of hazardous materials (e.g. flammable store, gas store) shall be placed outside the storage facility.
  + Display “no smoking” and “no naked flame” signs in and around the project area, as well as near the hazardous material store.
* Access
  + All stores shall be access controlled, and only authorised personnel permitted to enter.
* Compatibility
  + It is essential to segregate incompatible substances. Mixed types of hazardous materials shall only be permitted to be stored together where they are compatible. A compatibility chart (example included in **Figure 6.4**) shall be available on site and used accordingly;
  + Flammable substances shall be kept in a store designated for flammable substance (or combustible liquids such as oils and greases) only;
  + Equipment, furniture, documents etc. not associated with the chemicals shall not be kept in the store, and in particular combustible materials should not be kept in flammable stores; and
  + Flammable substances and oxidisers should not be stored in wooden cabinets or on wooden shelves;
* Emergency equipment
  + Emergency equipment will be easily accessible and located outside or nearby the store including:
* Fire extinguishers; and
* Spill kits as well as eyewash stations and emergency showers (for corrosive or toxic chemicals).



**Figure 6.4: Hazardous Materials Compatibility Chart**

### Gases

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| *Instruction Box – Delete when complete*   * *The section below is generic. Review and modify as required for your company.* |

The following measures shall be applied for the storage of gas cylinders:

* Gas cylinders shall be securely strapped or chained to a wall or within a cage;
* Gas storage areas shall have ample natural ventilation;
* A gas cylinder trolley shall be used to move the gas cylinders;
* Separate cages shall be used for full and empty cylinders which will be clearly marked;
* Poisonous chemicals will be kept secure with access permitted only by authorised personnel; and
* Cylinders will be kept raised off the floor to prevent contact with water to prevent corrosion.

### Bulk Chemicals

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| *Instruction Box – Delete when complete*   * *The section below is generic. Review and modify as required for your company.* |

The following measures shall be applied for the storage of bulk chemicals:

* Earthing/grounding connections shall be provided for flammable chemicals;
* To prevent overfilling of tanks, monitoring equipment will be applied to monitor the level or volume in the tanks, and this will be checked to confirm adequate space prior to pumping into the tanker (between tanks or delivered by tanker). This can include alarm sensors fitted to warn of high levels; and
* Tanker and tank transfer equipment shall be compatible to ensure proper coupling to prevent spills and leaks.

## Transportation

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| *Instruction Box – Delete when complete*   * *Describe the process for the safe transport of hazardous materials including loading and offloading of hazardous materials.* * *State who is responsible for supervising the loading and offloading of hazardous materials.* * *The section below is generic. Review and modify as required for your company.* |

Contracts with suppliers of hazardous materials (transporting chemicals to site) and logistics companies (transporting product from site) shall incorporate requirements to ensure the safe and responsible transport of substance, considering potential spillage or risks that could impact the environment or communities through which trucks may drive.

All loading and offloading of hazardous materials shall be supervised by trained site-appointed personnel such as the *[Facilities / Operations Manager]* to ensure the following:

* The substance being loaded/offloaded is correct according to the purchase order;
* Off-loading areas shall be designed to included containment in the event of a spill;
* To prevent overfilling of tanks, monitoring equipment will be applied to monitor the level or volume in the tanks, and this will be checked to confirm adequate space prior to pumping into the tanker (between tanks or delivered by tanker). This can include alarm sensors fitted to warn of high levels; and
* Tanker and tank transfer equipment shall be compatible to ensure proper coupling to prevent spills and leaks.
* Earthing/grounding connections shall be provided for flammable chemicals;
* The vehicle is in an acceptable condition for transportation of hazardous materials;
* There are no leaks from the vehicle or hazardous substance containers on the vehicle;
* Containers are labelled correctly;
* The loading/offloading is conducted in a safe manner - for example:
* Engine is turned off (unless required e.g. for pumping into bulk containers);
* Containers are lowered carefully e.g. using forklifts. No containers are permitted to be dropped from any height; and
* No other activities are being conducted that increases specific risks during offloading (e.g. maintenance work that involves fire or heat-producing activities should not be conducted during the off-loading of flammable substances.);
* Driver is licenced to operate vehicles transporting dangerous goods;
* Vehicle is licenced to transport dangerous goods;
* Vehicle has the correct signage indicating the transport of dangerous goods and includes identification numbers;
* Offloading is conducted in a location where spills can be easily contained and prevented from impacting the soil or stormwater system;
* There is adequate capacity in the store or tank receiving the hazardous substance;
* Fire extinguishers are located in an easily accessible and nearby location; and
* Spill kits are located in an easily accessible and nearby location.

## Safe Disposal of Hazardous Materials Containers

|  |
| --- |
| *Instruction Box – Delete when complete*   * *Describe the process for the safe disposal of hazardous materials containers.* * *The text below is generic. Review and modify as required for your company.* |

Containers used to contain hazardous materials shall be disposed of in accordance with requirements of the *Waste Management Plan* [insert document reference]. Preference shall be to return the empty containers to the supplier who will then re-use or dispose of it in a safe manner.

In accordance with an Integrated Pest Management (IPM) plan, all pesticide containers should be triple rinsed before disposal.

Maintain records of all container disposals and returns, including details of the containers, disposal methods, and any communications with suppliers.

Empty chemical containers (even if cleaned) shall not be given or sold to staff or members of the public.

For leftover diluted pesticides the follow need to be considered:

* Any remaining diluted pesticides after application should be managed according to the guidelines outlined in the IPM plan:
* If safe and appropriate, leftover diluted pesticides should be reapplied to the target area, ensuring this does not exceed label rates and is within the appropriate application timeframe.
* Only mix the amount of pesticide necessary for the task to minimize leftovers.
* If reapplication is not feasible, dispose of leftover pesticides according to local hazardous waste regulations. Contact local waste disposal facilities for proper disposal options.
* Do not dispose of pesticides in regular trash, down the drain, or in stormwater systems.
* Keep thorough records of the quantities of pesticides used, any leftovers, and how they were disposed of.
* Always use PPE when handling pesticides and follow environmental regulations to minimize impacts.
* If unsure about disposal methods, consult with pest management professionals or local agricultural extension services.

# Monitoring and Review

|  |
| --- |
| *Instruction Box – Delete when complete*   * *Include measures for regular monitoring of the effectiveness of the HMMP.* * *The section below is generic. Review and modify as required for your company.* |

Internal audits and inspections are to include the assessment of compliance with this plan, including the correct storage and labelling of hazardous materials.

Results of inspections and monitoring shall be provided to company management. Based on monitoring and audit results, corrective and / or enhancing actions will be designed and implemented. Performance of these actions will also be monitored and reported.

# Training and Awareness

|  |
| --- |
| *Instruction Box – Delete when complete*   * *Include training that is provided to employees and contractors on the requirements of the HMMP.* * *The section below is generic. Review and modify as required for your company.* |

[insert company name] recognizes the need for staff and contractors to be appropriately trained in the safe use, storage, and handling of hazardous materials. The training shall be based on the relevant SDS and this HMMP, and is to be provided to all personnel and contractors who are required to manage hazardous materials.

All personnel and contractors who handle hazardous materials shall be provided with training and awareness in respect of the company’s hazardous materials management procedures, to ensure hazardous materials are managed appropriately in line with requirements of this industry standards and in-country legislation.

# Review and Continuous Improvement

|  |
| --- |
| *Instruction Box – Delete when complete*   * *The section below is generic. Review and modify as required for your company.* |

This HMMP shall be reviewed annually and more often where deemed necessary and will be updated where there are significant changes to applicable regulations or work processes and/or depending on the results of monitoring of effectiveness. Seek feedback from key individuals/stakeholders including the [Facilities / Operations] Manager, employees, contractors, authorised vendors for hazardous waste disposal, and logistics personnel responsible for transporting hazardous materials. This feedback will help identify areas for improvement.

# Roles and Responsibilities

|  |
| --- |
| *Instruction Box – Delete when complete*   * *Assign roles and responsibilities for the implementation of this plan.* * *Select responsible employees, perhaps from your existing management team, to take charge of your hazardous materials management program.* * *The section below is generic. Review and modify as required for your company.* |

The key roles and responsibilities for the implementation of this Plan are described in **Table 10.1** *[modify as required].*

**Table 10.1 Key Roles and Responsibilities**

| **Role** | **Responsibility** |
| --- | --- |
| **Facilities / Operations Manager** | * Ensure the development, regular review, and continuous improvement of the HMMP. * Ensure that the HMMP complies with all relevant local, national, and international regulations, as well as company policies. * Oversee the development and delivery of training programs related to hazardous materials management. * Regularly monitor compliance with the HMMP through inspections, audits, and performance reviews. * Report on the effectiveness of the HMMP to senior management and recommend improvements. * Communicate HMMP procedures and updates to all employees, contractors, and relevant stakeholders. * Serve as the primary point of contact for external audits, inspections, and regulatory inquiries. |
| **Contractors** | * Ensure that the use and management of hazardous materials is in alignment with the requirements of this plan. |
| **All employees** | * Adhere strictly to all procedures outlined in the HMMP for handling, storing, transporting, and disposing of hazardous materials. * Follow all safety guidelines, including the use of Personal Protective Equipment (PPE) and proper labelling of hazardous materials. * Immediately report any incidents, spills, leaks, or near misses involving hazardous materials to the Facilities Manager. * Attend all required training sessions on hazardous materials management and emergency response. * If not trained in the handling of hazardous substances, refuse to assist in the handling thereof. |

# Annex A: Hazardous Materials Inventory Register Template

**Table A‑1: Hazardous Materials Inventory Register Template**

|  |  |  |  |
| --- | --- | --- | --- |
| Name of Department / Facility: |  | Address: |  |
| Person Completing Inventory: |  |
| Department / Designation: |  | Inventory Date: |  |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| No. | Name of Substance | GHS Classification | Storage location | Storage Capacity | Details of Supplier | SDS Available? (Y/N) |
|  | [list alphabetically] |  |  |  |  |  |
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1. Such as [SIN List](https://sinlist.chemsec.org/), Pesticides Action Network: [Alternative Pest Control Strategies](https://www.pan-uk.org) and EPA: [Safer Choice Program](https://www.epa.gov/saferchoice) [↑](#footnote-ref-2)
2. [PAN International List of highly hazardous Pesticides (HHPs) March 2021 (pan-international.org)](https://pan-international.org/wp-content/uploads/PAN_HHP_List.pdf) (updated May 2022). Check [Resources | PAN International (pan-international.org)](https://pan-international.org/resources/) for most up to date list. [↑](#footnote-ref-3)
3. [Pesticide Info](https://www.pesticideinfo.org/pesticide-maps/global-ban) [↑](#footnote-ref-4)
4. [Annex III Chemicals (pic.int)](https://www.pic.int/TheConvention/Chemicals/AnnexIIIChemicals/tabid/1132/language/en-US/Default.aspx) (proceed only if there are specific exemptions/phase out timelines and no alternatives exist), [Recommended for listing (pic.int)](https://www.pic.int/TheConvention/Chemicals/Recommendedforlisting/tabid/1185/language/en-US/Default.aspx) - (proceed only if no alternatives exist), [Candidate Chemicals to CRC (pic.int)](https://www.pic.int/TheConvention/Chemicals/CandidateChemicals/tabid/1061/language/en-US/Default.aspx) (proceed only if no alternatives exist); [Not yet recommended for listing (pic.int)](https://www.pic.int/TheConvention/Chemicals/Notyetrecommendedforlisting/tabid/1181/language/en-US/Default.aspx) (for all chemicals meeting Annex II criteria proceed only if no alternatives exist) [↑](#footnote-ref-5)
5. [Summary of control measures under the Montreal Protocol | Ozone Secretariat (unep.org)](https://ozone.unep.org/treaties/montreal-protocol/summary-control-measures-under-montreal-protocol) [↑](#footnote-ref-6)
6. [Listing of POPs in the Stockholm Convention](https://chm.pops.int/TheConvention/ThePOPs/AllPOPs/tabid/2509/Default.aspx) [↑](#footnote-ref-7)