Case Study: New Zealand Group Standards

Submitted by: New Zealand
CASE STUDY: NEW ZEALAND
GROUP STANDARDS

Overview
- Background
- Purpose of HSNO Act
- HSNO Act Framework
- Group Standards
ENVIRONMENTAL RISK MANAGEMENT AUTHORITY (ERMA) NEW ZEALAND

- Central Government Agency
- Makes decisions on approval of new organisms and hazardous substances
- Sets controls & conditions on approvals
- Promotes awareness of the adverse effects of new organisms and hazardous substances
- Coordinates compliance & enforcement of HSNO

HAZARDOUS SUBSTANCES AND NEW ORGANISMS (HSNO) ACT 1996

Purpose of HSNO Act

- To protect the environment, and the health and safety of people and communities by preventing or managing the adverse effects of hazardous substances and new organisms
- Hazardous substances - covers lifecycle of substance from manufacture or import through to disposal
Hazardous substances have at least one hazardous property:

- Explosives
- Dangerous Goods
- Pesticides and Animal Remedies
- Toxic Substances
- Cosmetics and other Consumer Products

Assessment and approval process

- Based on framework of GHS
- Identify substance
- Determine hazardous properties
- Assess risk [hazard + exposure]
- Assign controls/conditions to manage the risk
HSNO ACT APPROVALS

- All hazardous substances must have an approval:
  - Single chemicals
  - Chemical products and mixtures
  - Groups of substances – GROUP STANDARDS

GROUP STANDARDS

Approvals for groups of substances of

- Similar nature;
- Similar type; or
- Have similar circumstances of use

so that the risks of the grouped substances can be effectively managed by one set of conditions
Examples of Group Standards:

- Cleaning Products
- Aerosols
- Compressed Gases
- Cosmetic Products
- Food Additives and Fragrances

Developed around primary hazards or combination of primary hazards:

- Flammability
- Self-reactive and Oxidising Substances
- Carcinogenicity
- Corrosivity
Hazards not covered by Group Standards:

- Explosives
- Highly flammable and highly reactive substances
- Highly hazardous oxidising substances and organic peroxides
- Substances highly corrosive to skin

GROUP STANDARDS STRUCTURE

Title

- Cleaning Products (Flammable, Corrosive) Group Standard 2006
- Surface Coatings and Colourants (Toxic [6.1], Corrosive) Group Standard 2006

Scope

Conditions
TITLE - CLEANING PRODUCTS

- Cleaning Products (Combustible)
- Cleaning Products (Corrosive)
- Cleaning Products (Corrosive, Combustible)
- Cleaning Products (Flammable)
- Cleaning Products (Flammable, Corrosive)
- Cleaning Products (Oxidising [5.1.1])
- Cleaning Products (Oxidising [5.1.1], Corrosive)
- Cleaning Products (Subsidiary Hazard)
- Cleaning Products (Toxic [6.7])

SCOPE OF GROUP STANDARDS

- Defines products covered by Group Standard
- Specifies the application type
- Sets out the hazard characteristics of the products covered ("primary" and "subsidiary" hazards)
- Provides for restrictions specific to the Group Standard
SCOPE OF GROUP STANDARDS

Example – Cleaning Products:

- Solid or liquid substances that are imported or manufactured for use as a cleaning product
- Primary hazard (must have) e.g. flammable
- Subsidiary hazards (may have) e.g. skin irritant
- Restrictions on carcinogens, mutagens, reproductive toxicants

GROUP STANDARD CONDITIONS

- Legal means by which compliance with Group Standard will be measured
- Based on HSNO Regulations
- User friendly, easier to understand
- Prescriptive but allow for alternative means of compliance
GROUP STANDARD CONDITIONS

1 Information requirements (including labelling and safety data sheets)
2 Site and storage
3 Approved handlers and tracking
4 Packaging
5 Equipment
6 Transportation
7 Disposal
8 Exposure limits
9 Notification to the Authority (Inventory of Chemicals)
10 Other matters
USING GROUP STANDARDS - ADVANTAGES

- Flexible, allow for some formulation changes using same approval
- Encourages product development and innovation
- Industry self-assigns product to Group Standard
- Guidance on conditions assists compliance
- Reduces costs to industry and the Government

RESOURCES

Group Standards web page
- List of Group Standards
http://www.ermanz.govt.nz/hs/groupstandards/list.html
- Labelling – Hazard & Precautionary Information
- Assigning a substance to a Group Standard
Introduction


Purpose of the HSNO Act

The purpose of the HSNO Act is to protect the environment and safeguard human health by preventing or managing any harmful effects of hazardous substances and new organisms.

For hazardous substances, the HSNO Act takes a “cradle to grave” approach and allows the setting of controls on how substances are contained, labelled, stored, used, transported or disposed of.

The HSNO Act repealed a whole host of fragmented legislation:

- Explosives Act 1957
- Dangerous Goods Act 1974
- Toxic Substances Act 1979
- Pesticides Act 1979

The HSNO Act brings the control of all hazardous substances under a single piece of legislation.

What is a hazardous substance?

[The term “hazardous substance” excludes radioactive, ozone-depleting and infectious substances]

A hazardous substance is any substance that triggers the regulatory threshold levels for one or more of the following hazardous properties:

- Explosiveness
- Flammability
- Ability to oxidise
- Corrosiveness
- Toxicity (including chronic toxicity)
- Ecotoxicity

These hazardous property threshold levels are set out in regulations (Hazardous Substances Minimum Degrees of Hazard Regulations) developed by the Ministry for the Environment.

Examples of hazardous property threshold levels:

- If a substance has an LD_{50} (oral) of less than or equal to 5000 mg/kg it is a hazardous substance because it triggers the threshold for oral toxicity
- If a substance has a flash point (closed cup) of less than or equal to 93°C, it is a hazardous substance because it triggers the threshold for flammability

Any substance can trigger more than one hazardous property threshold.

Hazardous Substance Approvals

All hazardous substances must have an approval under the HSNO Act:

- Single component chemicals (e.g., acetone, toluene)
- Chemical products and mixtures (e.g., pesticide formulations)
- Groups of substances – Group Standard Approvals

Group Standard Approvals

Over 100,000 hazardous substances are now managed under group standard approvals.

What is a Group Standard?

A group standard is an approval for a group of hazardous substances of a similar type or nature, or that are used in a similar way. For example, paints and the raw ingredients used in paint manufacture are controlled under a group standard.
Group standards may apply to one or more of the following hazardous substances or products:

- an existing hazardous substance that was covered by previous chemicals legislation;
- a new hazardous substance;
- a hazardous substance that is already approved under the HSNO Act;
- a product that is, contains, incorporates or includes a hazardous substance. This may include a manufactured article, a waste product, or a manufacturing by-product.

On 1 July 2006, ERMA New Zealand issued group standards for 30 different categories of hazardous substances. When a substance is ‘assigned’ to a group standard\(^1\), it is deemed an approved substance under HSNO.

**What substances are covered by a Group Standard?**

Group standards cover a wide variety of products used in many different situations – everything from substances for home use, such as detergents and drain cleaners, to highly specialised industrial chemicals.

There are group standards for paints, adhesives, flavours and fragrances, lubricants, industrial and domestic cleaners, cosmetics, polymers and many more.

Currently there are 200 group standards, covering 30 categories of substances. Most categories are based on the use of a substance. For example, there are separate group standards for cleaning products, leather and textile products, and water treatment chemicals.

A smaller number of group standards are based solely on a substance’s hazardous properties, rather than the way it’s used. For example, group standards for aerosols include substances with quite different uses, such as spray paints and aerosol cleaning products.

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\(^1\) A substance is considered to be ‘assigned’ to a group standard if it meets the scope of the group standard.

**Categories for which Group Standards have been developed**

- Additives, Process Chemicals and Raw Materials
- Aerosols
- Animal Nutritional and Animal Care Products
- Class 4 Substances
- Class 5.1.1 Oxidising Substances
- Class 5.2 Organic Peroxides
- Cleaning Products
- Compressed Gas Mixtures
- Construction Products
- Corrosion Inhibitors
- Cosmetic Products
- Denatured Ethanol
- Dental Products
- Embalming Products
- Fertilisers
- Fire Fighting Chemicals
- Food Additives and Fragrance Materials
- Fuel Additives
- Industrial and Institutional Cleaning Products
- Laboratory Chemicals and Reagent Kits
- Leather and Textile Products
- Lubricants
- Metal Industry Products
- N.O.S. (Not Otherwise Specified) Substances
- Photographic Chemicals
- Polymers
- Refining Catalysts
- Solvents
- Surface Coatings and Colourants
- Water Treatment Chemicals

**What does a Group standard cover?**

Each group standard has the following sections:

**The Group Standard** – the title of the group standard, its HSNO approval number, the date it came into force and its scope. The scope defines the types of substances covered by the group standard, their hazardous properties and uses. For a hazardous substance to be approved under a group standard, it must meet the scope of the group standard.

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\(^1\) A substance is considered to be ‘assigned’ to a group standard if it meets the scope of the group standard.
Schedule 1: Conditions of the group standard – these are the requirements that any substance belonging to the group standard must comply with. The conditions are set out in 10 parts:

Part 1 Information requirements
Part 2 Site and storage
Part 3 Approved handler and tracking
Part 4 Packaging
Part 5 Equipment
Part 6 Transportation
Part 7 Disposal
Part 8 Exposure limits
Part 9 Notification to the Authority
Part 10 Other matters.

Schedule 2: Transitional conditions – set out the provisions for staged implementation. The transitional periods for implementation of the conditions have now expired, except for product labelling and packaging provisions for child resistant packaging and permanent identification.

Schedule 3: Interpretation – the definitions and terms used in the group standard.

Explanatory Note – this section provides simple guidance for users. It may include the types of products that are covered, the packing group and UN numbers of substances, and information on where to obtain copies of the group standard and related material.

How do Group standards manage risk?

Group standards set conditions to manage risks to people and the environment from hazardous substances. They cover a substance’s full lifecycle, from its manufacture or importation, to storage, transportation and use, through to final disposal. The conditions cover matters such as how to label a substance, or whether a user needs protective clothing. If the substance is flammable, the conditions say what needs to be done to avoid a fire.

The conditions are generally based on the Hazardous Substances Regulations, but are written in a more user-friendly way. In some cases, particularly for information requirements, the conditions are more prescriptive than the regulations.

The conditions of a group standard must be complied with, and are legally enforceable.

Group Standard Landscape

A group standard comprises not just the group standard documentation, but incorporates a number of other elements, some of which is mandatory (must be followed), some of which is guidance, and some of which may provide alternative means of compliance. As an example, the site and storage conditions are incorporated into a group standard by reference, and compliance with these conditions is mandatory.

On the other hand, compliance with the labelling conditions and the document Labelling of Hazardous Substances: Hazard and Precautionary Information http://www.ermanz.govt.nz/hs/groupstandards/standards/ss/hplabelling.pdf is not mandatory if manufacturers prefer to achieve labelling compliance through compliance with the HSNO regulations.

Material Incorporated by reference

Requirements of a group standard may be placed on an importer, manufacturer or person handling a hazardous substance by reference to specific requirements given in a separate document or publication. Where such material is referenced as a condition of the group standard, compliance with these requirements is mandatory. This may include:

- Site and storage conditions – the means for managing physical hazards such as flammability, and the requirements for emergency management and signage; (refer to Site and Storage Condition Documents http://www.ermanz.govt.nz/hs/groupstandards/siteandstorage.html

- Schedule 8 of the Dangerous Goods and Scheduled Toxic Substances Transfer Notice, covering controls for stationary container systems; and

- Tracking, Tank Wagon and Compressed Gas Regulations.
How do group standards apply for new hazardous substances?

A hazardous substance imported or manufactured for the first time after 1 July 2006 can be approved under a group standard. Any new hazardous substance which meets the scope of a group standard is an approved substance. The scope of a group standard basically sets out the allowed hazardous properties of the substance (e.g. whether it can be flammable or toxic) and its uses.

For a new substance to be approved under a group standard, it must:

- be used for the purpose given in the group standard, and meet the relevant definition(s);
- comply with any use restrictions specified in the group standard. For example, group standards may exclude pesticide and veterinary medicine actives and formulated pesticide and veterinary medicine products;
- have only those hazardous properties that are specifically allowed under the scope of the group standard. Not all HSNO hazardous properties are included within the scope of the group standards issued by the Authority on 1 July 2006; and
- if it is a hazardous chemical, must be listed on the Inventory of Chemicals, www.ermanz.govt.nz/hs/compliance/inventory.html. Any chemical that is 'new' to New Zealand (i.e. not listed on the Inventory) must have an individual HSNO approval before it can be imported or manufactured here.

Using a Group Standard Approval

For a new hazardous substance that is manufactured or imported into New Zealand, it will be the responsibility of the manufacturer or importer to identify an existing group standard for that substance (if one exists). This will require the manufacturer or importer to undertake their own hazard classification assessment using the composition of the substance and other hazard information available with the substance such as that given on a Safety Data Sheet. Any new substance that fits within the scope of a group standard is automatically deemed a HSNO approved substance. There is no requirement for a manufacturer or importer of the substance to contact ERMA New Zealand for an approval. For guidance on the self-classification process refer to the ERMA New Zealand document Assigning a Hazardous Substance to a Group Standard. [pdf - 2.1MB]

Applications for new group standards

If a new substance doesn’t fit within the scope of an existing group standard, then the importer or manufacturer must apply to ERMA New Zealand for approval of the substance. The importer or manufacturer can apply for an amendment to an existing group standard, a new group standard or an approval under Part V of the Act.

Although ERMA New Zealand has developed the first set of group standards, we envisage that in future, group standards will be developed by industry.

Keeping Records

When an importer or manufacturer assigns a substance to a group standard, it is a requirement of the group standard for a record to be kept. The record must demonstrate the basis for assigning the substance to the group standard, and must contain enough information to allow the assignment to be independently verified. A company must be able to provide this record if asked to do so by an enforcement officer.

There is no obligation to submit information to ERMA New Zealand; it is the manufacturer or importer who must hold this information.

Group Standards web page


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