



Department of Environment
Ministry of Natural Resources and Environment

GUIDANCE FOR THE INDUSTRY ON The Notification and Registration Scheme of Environmentally Hazardous Substances (EHS) in Malaysia



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on The Notification and Registration Scheme of
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**Department of Environment
Hazardous Substances Division
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FOREWORD

The Environmentally Hazardous Substance Notification and Registration Scheme (EHSNR) has been developed and implemented by the Department of Environment since 2008. The objective of which is to collect information on hazardous substances that are available or used in the country.

The notification and registration is done electronically through the EHS link that is available on the Department of Environment website, www.doe.gov.my

This Guidance document is to facilitate the importers and manufacturers to notify to the Department of Environment on the EHS that are imported or manufactured.

A handwritten signature in black ink, appearing to read 'Rosnani'.

Dato' Hajah Rosnani Ibarahim
Director General
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Background to the proposed scheme

At present there is very limited information available on the nature and amounts of environmentally hazardous substances (EHS) present in Malaysia. The Environmental Quality Act established that there was a need to manage and control EHS in order to minimize effects to people and the environment. In order to be able to manage the potential adverse impacts of EHS imported into, produced and used in Malaysia, the government needs information on the amounts of such substances that are used.

While some types and some aspects of chemicals and their effects are already managed, many chemicals that are potentially EHS are not currently managed. The proposed Chemicals Notification and Registration scheme is designed to close that gap in knowledge and provide government with the information they need.

The Purpose of a Notification and Registration Scheme

The purpose of the notification and registration scheme in Malaysia is to provide the necessary information to the Malaysian Government that will enable the Department of Environment and other agencies involved in chemicals management to identify substances of concern in the country and make decisions about how to manage these substances in a safe and sound manner.

Based on the information submitted by industry, Department of Environment (DOE) will establish the Malaysian Chemicals Register. The Malaysian Chemicals Register will contain information about the identity of substances that have been notified to DOE, their uses in Malaysia, their hazard classification and the accumulated amounts placed on the market in Malaysia.

Scope of The Scheme

This Scheme will cover all substances not covered by other notification/registration schemes in Malaysia, and substances fulfilling the criteria for classification as hazardous in accordance with GHS or until the full implementation of GHS, in accordance with the current classification requirements for chemicals in Malaysia. The scheme also covers substances not covered by the GHS classification but considered to be substances of concern.

This Scheme does not apply to substances from which information has already been submitted to other government agencies in Malaysia by means of other legislations, unless the substance is also used for other purposes not covered by the Pesticides, Poisons and Chemicals Weapons Convention Acts.

What is an Environmentally Hazardous Substance (EHS)?

Environmentally Hazardous Substances (EHS), under the Environmental Quality Act 1974, is defined as “any natural or artificial substances including any raw material, whether in a solid, semi-solid or liquid form, or in the form of gas or vapour, or in a mixture of at least two of these substances, or any living organism intended for any environmental protection, conservation and control activity, which can cause pollution”.

For the purposes of Notification and Registration under the EQA, an EHS will be defined as follows:

An EHS is a substance that is assigned a hazard category under the GHS classification scheme or is present on an existing internationally agreed list of proscribed substances.

Who Shall Notify?

The Scheme is aimed at manufacturers and importers of EHS and importers of chemical mixtures or finished products that contain EHS as their constituents.

The Scheme is also aimed at companies importing individual EHS and/or chemical mixtures or finished products containing EHS as constituents above certain cut-off limits.

Who Shall Not Notify?

Chemical industries involved in the manufacturing of chemical mixtures or products using locally manufactured EHS or imported EHS sourced from local suppliers as raw materials are not subject to this scheme.

Chemical companies involved in formulation, distribution, retailing and use of EHS or EHS containing mixtures/products from locally sourced EHS are not subject to this scheme.

Notification Process

- Register your company with the Department of Environment Malaysia to participate in the **EHS NOTIFICATION AND REGISTRATION SCHEME**. This can be done by logging into the DOE website (<http://www.doe.gov.my>) and activating the menu on EHS Notification and Registration. Select the option on Company Registration in the resultant output to register your company. A letter of approval, sent by e-mail, will be communicated to you once the registration is verified and approved by the Department.

- A two stage approach is recommended to chemical industries for the Notification and Registration of EHS. Once access to your company private domain or window is obtained, i.e. after entering the User ID and Password, follow the procedures listed below:
- Activate the menu on Basic Notification of EHS to undertake a basic notification for each hazardous substance which you have finalized. On completion of data entry, check for correctness of your data before submitting the information to DOE, since information once submitted will not be subject to any changes. Repeat the basic notification for all substances in your list. A display listing all substances entered into the system and notified by your company is available for your viewing and printing, if required. Explanatory texts to assist you in entering the data as well as how to proceed with the notification process are given in the system.
- Once the basic notification has been completed, a detail notification can then be undertaken. In this case, the substances which require detail notification will be listed when the menu Detail Notification of EHS is activated. Select a particular substance to begin the detail notification process. *(Note: All six sets of data, i.e. EHS Identification, Physical Chemical Properties, Physical Hazards, Hazards to Human Health, Hazards to Aquatic Environment and Overall GHS Classification must be completed before submitting the data to the Department of Environment Malaysia).*
- If a substance had been previously notified in detail (e.g. in the previous year), a detail notification of the said substance is not required anymore. However a new detail notification of the substance should be made if new data are available to the company. In this case, detail data previously notified can be accessed and edited to reflect the changes.

Required EHS Dataset (Based on GHS)	
Identification of the substance and physical and chemical properties	Physicochemical properties
Name and IUPAC Name	Physical state at 20° C and 101.3 KPa
EC Number and CAS Number	Melting point and Boiling point
Molecular Formula and Structural Formula	Vapour pressure
Molecular Weight	Water solubility
Synonyms	Partition coefficient n-octanol/water (log value)

Physical Hazards	Human Health and Environment
Explosive properties	Acute Toxicity
Flammability – gases, aerosols, liquids, solids	Skin Corrosion/Irritation
Oxidizers – liquid, solid, gases	Serious Eye Damage/Eye Irritation
Self-Reactive	Respiratory or Skin Sensitization
Pyrophoric – liquids, solids	Germ Cell Mutagenicity
Self-Heating	Carcinogenicity
Organic Peroxides	Reproductive Toxicity
Corrosive to Metals	Target Organ Systemic Toxicity – Single and Repeated Dose
Gases Under Pressure	Hazardous to the Aquatic Environment
Water activated flammable gases	

Implementation Plan for EHS Notification and Registration

The Notification and Registration of EHS by chemical industries in Malaysia will be implemented in phases. Initially the scheme will be on a voluntary basis, where beginning of 2009 all chemical industries, irrespective of the tonnage imported or manufactured, can register to participate in the scheme. The scheme will be made mandatory when the regulation for notification and registration of EHS is expected to be enacted after 2010. The notification of EHS by manufacturers and importers will be phased based on the total tonnage of EHS manufactured and imported. This will be announced in the website 60 days before the mandatory implementation date. The tentative phase-in year for the notification based on tonnage is given in the **Table 1**.

Annual Tonnages (MT)	YEAR OF IMPLEMENTATION OF EHS NOTIFICATION							
	2009 - 2010	2011	2012	2013	2014	2015	2016	2017
>100	Voluntary Notification							
10-100		*+	*+					
1 - 10		*+	*+					
0.1 - 1		*+	*+					

All substances that, under GHS classification, are assigned an aquatic toxicity classification of 'chronic 1' (*) or are 'suspected or known human carcinogens, reproductive toxicants or mutagens' (+) must also be notified during years 2011 and 2012

Which Substances will be exempted from N&R?

- naturally-occurring materials
- incidental/end-use reaction products
- substances formed during the manufacture of an article
- mixtures (but not mixture components)
- impurities
- by-products
- non-isolated intermediates
- contained site-limited intermediates
- transported intermediates
- substances manufactured solely for export
- substances used in research and development
- substances produced for test marketing
- low volume substances (<0.1 tonnes per annum?)
- polymers

Which Substances Will be Included?

The N & R scheme will cover substances such as:

- Petrochemicals including plastics and resins
- Chemicals in fertilizers and pesticides *
- Soap and detergents
- Cosmetics, toiletries and household products
- Organic chemicals
- Oleochemical products
- Chemicals in pharmaceutical* products
- Industrial gases
- Paints and paints products
- Basic industrial chemicals
- Rubber industry

**Not active ingredients which are already regulated*

How would the Scheme be operated?

- Manufactures / Importers (M/I) to prepare lists of all of the substances manufactured and imported.
- M/I to determine for each individual substance whether the substance already has a GHS classification as listed in the EHS Reference List. This can be done by entering the CAS/EC/Index No. at the checked box provided in the system.
- For substance that already listed in the EHS Reference List, the M/I are only required to provide basic information (Basic Notification). The information require are;
 - Substance identification (CAS No, EC No or Index No),
 - Annual tonnage in metric tons
 - Use of the substance
 - Concentration interval of substance in raw materials or finished products (maximum and minimum concentration)
 - Country of export (if imported)
- For substance that is not listed in the EHS Reference List, there are two possibilities which can be interpreted; 1) The substance is not hazardous based on the GHS hazard classification and 2) The substance is not yet classified and therefore not listed in the list. For (1), the M/I are required to go through the substance Material Safety Data Sheet and search for any clues or statements which can relate the substance as hazardous or Not hazardous. For (2), M/I are required to provide extra information (Detailed Notification) in addition to the basic information. The information required are;
 - Data on Substance Identification (e. g. structural formula, molecular weight, etc)
 - Data on Physical Chemical Properties (e. g. melting point, auto-ignition temperature, etc)
 - Data on Physical Hazards (e. g. flammability, corrosivity to metals, etc)
 - Data on Hazards to Human Health (e. g. acute toxicity, skin corrosion/irritation, etc)
 - Data on Hazards to Aquatic Environment (e. g. acute aquatic toxicity and properties like bio-accumulation, etc)
 - Overall GHS Classification

- Basic notification is required to be done once a year, whereas detailed notification is only required once unless there are some major changes in the hazard classification for the substance.
- M/I are required to retain the data used for the reference purpose.
- For substances that are unable to be classified due to lack of data or data cannot be submitted due to no information available, the M/I can submit the notification with reasons on why those information cannot be submitted.
- In the case where M/I cannot get the data from the overseas supplier due to the Confidential Business Information (CBI) issues, the M/I can request the overseas suppliers to notify it directly to DOE. This is known as "external notification" and can only be done through registration by local Malaysian companies. Malaysia companies who want to request overseas suppliers to notify on behalf of them due to the confidential issues can register their overseas suppliers in the system together with their temporary username and password. Once the overseas suppliers receive the email with that username and password, they can immediately change to their own preference username and password. Local companies can only monitor in the system the date that submission is made by the overseas suppliers.
- DOE will check the substance classification data supplied by the M/I for;
 - Accuracy and self consistency
 - Consistency of classification assigned with those assigned by other M/I and/or DOSH to that substance
 - Correct assignment of GHS classification based on the substance data supplied and GHS classification rules.
- In the case of DOE disputing the GHS classification assigned by the M/I, there will be discussion between DOE and the M/I to resolve any disagreement or misunderstanding.
- If agreement still cannot be reached, the Technical Committee on Classification will decide on the agreed GHS classification.
- Once the GHS classification has been accepted, DOE will enter the substance and associated data into the Register of Notified Substances (EHS Register).