



THE PRESIDENCY

REPUBLIC OF SOUTH AFRICA



employment & labour

Department:
Employment and Labour
REPUBLIC OF SOUTH AFRICA

SOCIO-ECONOMIC IMPACT ASSESSMENT SYSTEM (SEIAS)

REVISED (2019): FINAL IMPACT ASSESSMENT TEMPLATE –PHASE 2

NAME OF THE PROPOSAL:

Regulations for Hazardous Chemical Agents

to replace the

**Regulation for Hazardous Chemical Substances, 1995 under the Occupational
Health & Safety Act, 85 of 1993.**

1. Please DO NOT ALTER the template and questionnaire
2. Date must be clearly indicated
3. Draft SEIAS report should have a watermark word DRAFT indicating the version and should be accompanied by the supporting documents (draft proposal, M&E plan and pieces of research work)
4. FINAL report will be in PDF format and will be inclusive of the sign-off
5. FINAL report will have the approval stamp of the DMPE on the front cover and will include the signoff
6. Sign off forms are only valid for a period of six months.

PART ONE: ANALYSIS FOR FINAL SEIAS REPORT

Please keep your answers as short as possible. Do not copy directly from any other document.

1. Conceptual Framework, Problem Statement, Aims and Theory of Change

1.1. What socio-economic problem does the proposal aim to resolve?

The use of chemicals in the workplace have detrimental effects on the occupational health and safety of employees. In the process of executing their work, which involve using chemicals, employees in the chemical sector get exposure which in some cases lead to immediate death, in other cases exposure lead to illnesses while in still other cases employees get delayed health impact until old age. It is known through research that when worker's health is poor, their work output is negatively impacted as they would be absent from work or present but with limited capabilities to work. The aims of this proposal are therefore:

- To amend the 1995 Regulation for Hazardous Chemical Substances so that it increases the occupational safety of employees in line with global advancements in chemical production, storage, transportation and other processes
- To update South Africa's chemical processes with the Occupational Exposure Limit (OELs) and
- To align South Africa's chemical sector processes in working with chemical, in line with the United Nations' Globally Harmonised System of Classification and Labelling of Chemicals (GHS).

It is estimated by the International Labour Organization (ILO) that between 200 and 500 work-related deaths related to exposure to hazardous chemicals occur each year across the world. In 2002 the Department of Employment and Labour declared the Chemical Sector in South Africa as the fourth highest risk sectors due to large numbers of incidents and diseases emanating from this sector. As part of the efforts to address this, the Department signed a Health and Safety Accord with the sector in November 2013.

Data from the Compensation Fund, regulator of the Compensation of Occupational Injuries and Diseases of the Department of Employment and Labour, indicates the occupational exposure to chemicals resulting in adverse effects, dermatitis and occupational asthma due to chemical exposure in work places in South Africa. The Figure below shows that chemical exposure contributed higher to occupational exposure cases between the years 2016 and 2020.

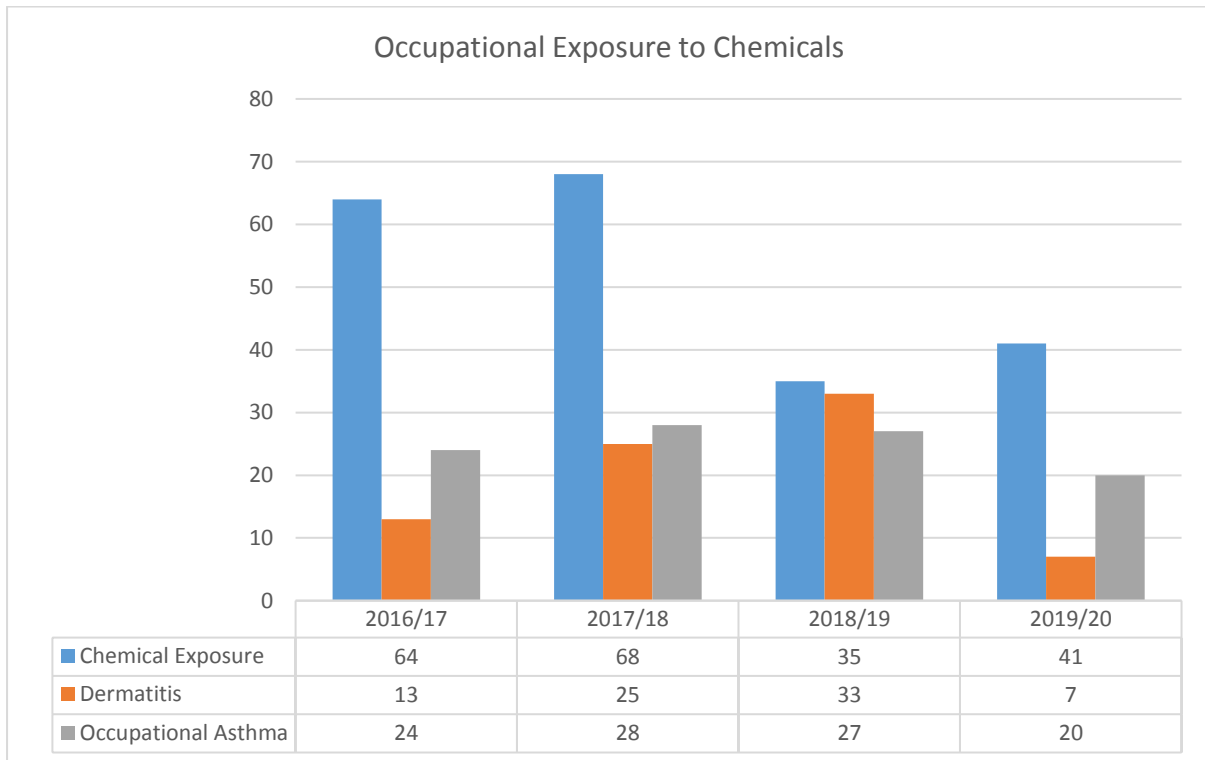


Figure: Occupational exposure to chemicals

This data indicates the highest cases of chemical exposure of workers in 2017/18 at 68, followed by 64 workers in the previous year (2016/17). While the numbers are fluctuating, the last two years (2018/19 and 2019/20) saw a decrease in the number of workers exposed to chemicals, a significant decrease from the two preceding years. It should be understood that all these reported cases for “chemical exposure”, dermatitis” and occupational asthma not only resulted in pain and suffering of the affected workers but also loss of productivity to the employers and medical costs. It is also generally accepted that occupational diseases are under reported compared to occupational injuries. This data does not include data from Mutuals (Rand **Mutual Association**- RMA or Federated Employers **Mutual Association** - FEMA).

Everyone comes into contact with chemicals every day, this is called chemical exposure. Although some chemical exposures under certain conditions are safe, others are not. Hazardous chemicals can get into the body through breathing or swallowing/ingesting chemicals or if they are absorbed through the skin. People respond to chemical exposures in many different ways. Several factors play a part in the adverse effects that chemicals may have in human bodies, including:

- The type of chemical
- The chemical properties
- Quantity of the chemical
- How long the contact lasts
- How often exposure occurs
- How the chemical enters the body, Agency for Toxic Substance and Disease Registry, (ATSDR, 2014)

Thousands of workers are still getting ill while some even die as a result of exposure to hazardous chemicals, and workers are being “exposed to levels of chemicals that are legal, but not safe, (Smith, 2014). The European Chemicals Agency estimates that there are more than 144 000 man-made chemicals in existence, although not all are currently in production or use. Smith, 2014, further holds that the United States of America’s Department of Health estimates 2 000 new chemicals are being released every year.

Many employees are exposed to a variety of substances at work (e.g. chemicals, fumes, dusts, fibres) which can, under some circumstances, have several harmful effects on their health. These are called 'hazardous chemical agents'. If exposure to a hazardous chemical agent is not appropriately limited and controlled, it may cause ill health to employees in a number of ways. The chemical agents enter the body by:

- Inhaling the chemical agent through breathing;
- Chemical agent being absorbed through the skin;
- Chemical agent being swallowed;
- Acting directly on the body at the point of contact.

Some illnesses or damage caused by exposure to hazardous agents from workplace exposure may only appear after a long time after the first exposure, called a latent affect. Therefore, it is important to know in advance how to protect the health of employees working with hazardous chemical agents and also of other people who may be affected by the work being carried out at a workplace.

The International Labour Organisation (ILO, 2010) published a comprehensive but not exhausted list of occupational diseases caused by exposure to hazardous chemicals agents arising from work activities, some of the diseases are listed below:

- Diseases caused by beryllium, carbon disulfide and cadmium or its compounds
- Diseases caused by phosphorus and chromium or its compounds
- Diseases caused by manganese and arsenic or its compounds
- Diseases caused by mercury or its compounds
- Diseases caused by lead and fluorine or its compounds
- Diseases caused by halogen derivatives of aliphatic or aromatic hydrocarbons
- Diseases caused by benzene or its homologues
- Diseases caused by nitro- and amino-derivatives of benzene or its homologues
- Diseases caused by nitro-glycerine or other nitric acid esters
- Diseases caused by alcohols, glycols or ketones
- Diseases caused by asphyxiants like carbon monoxide, hydrogen sulphide, hydrogen cyanide or its derivatives
 - Diseases caused by acrylonitrile or oxides of nitrogen
 - Diseases caused by vanadium and antimony or its compounds
 - Diseases caused by hexane or mineral acids
 - Diseases caused by pharmaceutical agents
 - Diseases caused by nickel or its compounds
 - Diseases caused by thallium, osmium and selenium or its compounds
 - Diseases caused by platinum and copper or its compounds
 - Diseases caused by tin and zinc or its compounds
 - Diseases caused by phosgene or ammonia
 - Diseases caused by corneal irritants like benzoquinone
 - Diseases caused by isocyanates and pesticides
 - Diseases caused by sulphur oxides and chlorine
 - Diseases caused by organic solvents
 - Diseases caused by latex or latex-containing products
 - Diseases caused by other chemical agents at work not mentioned in the preceding items where a direct link is established scientifically, or determined by methods appropriate to national conditions and practice, between the exposure to these chemical agents arising from work activities and the disease(s) contracted by the worker.

According to the ILO, this new list of occupational diseases reflects the state-of-the-art development in the identification and recognition of occupational diseases in the world, (ILO, 2010). This list illustrates the far-reaching health effect exposure to chemicals in the work environment may have. Several chemicals such as arsenic, benzene, cadmium and mercury (WHO) has been highlighted as exuding adverse influence on health by the World Health Organisation (WHO)

This proposal to amend the Regulations mainly focuses on two “new” areas of concern that requires intervention and is not adequately addressed in the 1995 Regulations for Hazardous Chemical Substances, namely:

- a) Incorporation of the Globally Harmonised System for classification and labelling of hazardous chemicals and
- b) Updated Occupational Exposure Limits (OEL) and Biological Exposure Index (BEI’s)

This assessment will elaborate on these two areas as the proposal seeks to improve chemical management in South African economy.

Internationally the concept of exposure limits for chemicals in the workplace is commonly used to protect the health of employees as is the case in the following countries:

- Germany uses the MAK (Maximum Workplace Concentration)
- The United Kingdom uses the WELs (Workplace Exposure Limits)
- The USA uses – TLV's not legislated (Threshold Limit Values) and legislated PELs (Permissible Exposure Limits)
- The South African Department of Mineral Resources use – OELs (Occupational Exposure Limits)

Occupational Exposure Limits (OELs) serve as health-based benchmarks against which measured or estimated workplace exposures can be compared. In the years since the introduction of OELs to public health practice, both in developed and developing countries, have established processes for deriving, setting, and using OELs to protect workers exposed to hazardous chemicals. These processes vary widely and have thus resulted in a confusing international landscape for identifying and applying such limits in workplaces. The occupational hygienist will encounter significant overlap in coverage among organizations for many chemicals, while other important chemicals have OELs developed by few, if any, organizations (Deveau, 2016).

The challenge faced by all other countries including South Africa is the need for OEL to be assessed and updated on a regular basis. The need stems from new risks associated with specific chemicals, new industrial processes and equipments, updated methods to control and mitigate exposure to chemicals.

The first systematic collection of “modern” OELs was developed in 1946 by an **ACGIH** subcommittee (that eventually became the **TLV** Chemical Substances Committee), which had been directed to derive and maintain such a system of exposure limits. The ACGIH committee on Industrial Hygiene Codes had been charged “to promote uniformity of thought and action with regard to adoption of rules and regulations for the control of industrial environmental conditions affecting health (Borak, 2015).

The most important barrier to developing an OEL is lack of data that are relevant to human exposures in occupational settings. Many describe new technologies and data analytic methods that may be useful in overcoming data issues. The use of better models that address both uncertainty and variability in biological systems and exposure assessment offers particular promise (Borak, 2015).

The hazardous properties of chemicals such as flammability, corrosion, explosion, environmental effects, mutagenicity need to be communicated to the person handling the substance during manufacturing, packing, importing, exporting, storage and use. Traditionally communication of the hazardous properties is done through the label on the chemical's container and the Safety Data Sheet (SDS) provided along with the product.

There are different laws on how to identify the hazardous properties of chemicals globally called 'classification' and how information about these hazards is then passed to users through labels and safety data sheets for workers. This can be confusing because the same chemical can have different hazard descriptions in different countries. For example, a chemical could be labelled as 'toxic' in one country but not in another. This also act as a barrier to international trade. The Earth Summit held in Rio de Janeiro in 1992 and the World Summit held in Johannesburg in 2002 recognised this as an important global issue.

Given the expanding international market in chemical substances and mixtures to help protect people and the environment, and to facilitate trade, the United Nations has therefore developed a 'Globally Harmonised System' (GHS) on classification and labelling. The United Nations' Globally Harmonised System of Classification and Labelling of Chemicals provides a harmonised basis for globally uniform physical, environmental, and health and safety information on hazardous chemical substances and mixtures.

The GHS is a single worldwide system for classifying and communicating the hazardous properties of industrial and consumer chemicals. GHS sits alongside the UN 'Transport of Dangerous Goods' system. The UN brought together experts from different countries to create the GHS with the aim to have uniformity:

- criteria for classifying chemicals according to their health, environmental and physical hazards; and
- hazard communication requirements for labelling and safety data sheets.

The UN GHS aims to ensure that information on the hazardous properties of chemicals is available throughout the world in order to enhance the protection of human health and the environment during the handling, transport and use of chemicals. GHS also provides the basis for harmonising regulations on chemicals at national, regional and global level. This is important for facilitating trade. At a more basic level, GHS also aims to provide a structure for countries that do not yet have a classification and labelling system.

For importers and exporters of chemicals, a big challenge is that currently many different countries have different systems for classification and labelling of chemical products, requiring them to comply to all. In addition, several different systems can exist within the same country. This situation has been expensive for governments to regulate and enforce, costly for importing and exporting companies who have to comply with many different systems, and confusing for workers who need to understand the hazards of a chemical in order to work safely. Implementation of GHS will help in promoting regulatory efficiency, facilitating trade, easing compliance, reducing classification and labelling costs, providing improved and consistent hazard information, encourage safe transport, handling and use of chemicals, promoting better emergency response to chemical incidents and reducing the need for animal testing. (CCOHS, n.d.)

The available information and studies reveals vast economic consequences of unsound chemicals management. The work of the WHO (2011) and UNEP (2010) provides figures on health and environmental effects. Estimates for a subset of chemicals of which the health effects have been estimated, i.e. including only chemicals involved in unintentional acute and

occupational poisonings, a limited number of occupational carcinogens and particulates and lead, correspond to a total of 964,000 deaths (1.6% of total deaths) and 20,986,153 DALYs (1.4% of total DALYs) in 2004. According to UNEP (2013) a preliminary view of the global costs of environmental effects due to chemicals can be established. Volatile organic compounds (VOCs) account for USD 236.3 billion and mercury emissions account for USD 22 billion of environmental costs due to human activity. (UNEP, 2013)

The sound management of chemicals, including hazardous wastes, aims to prevent and, where this is not feasible, to reduce or minimize the potential for exposure of people and the environment to toxic and hazardous chemicals as well as chemicals suspected of having such properties. It includes prevention, reduction, remediation, minimization and elimination of risks during the life cycle production, storage, transport, use and disposal of chemicals and chemicals in products and articles. It involves the application of the best managerial practices of chemicals, which requires strengthened governance and improved techniques and technologies at each stage of the life cycle (UNEP, 2013).

Given the background above on the challenges faced by occupational and public health professionals, the need to harmonise chemical identification is still important today as it was when the ILO adopted the relevant Convention.

In aligning to international peers, WHO and ILO standards, South Africa has to adopt systems of ensuring workers' safety from chemical exposure and had been using the old Regulations which are overtaken by dynamic developments in the chemical sector. The aim of this SEIAS proposal is therefore to address the following issues:

- To promote employee occupational safety, health and wellness as well as to improve their working condition.
- To keep employees safe and informing them about their duties and responsibilities with regards to their health and safety at a workplace.
- To minimise the negative impact of increased absenteeism in the workplaces, the losses in compensation for occupational diseases or injuries and healthcare expenditure caused by the exposure to HCA.
- To minimise the burden of health risk associated with workplace, number of work-related deaths and immense suffering caused for workers' families.

1.2 What are the main root causes of the problem identified above?

Uncontrolled release and associated exposure resulting from the inappropriate manufacturing, storing, transport, use and disposal of Hazardous Chemical Agents

What socio-economic problem does the proposal aim to resolve	What are the main roots or causes of the problem
<p>Employees contracting occupational diseases caused by their exposure to hazardous chemicals in the work environment are negatively impacted on their ability to work and earn a living due to ill health.</p> <p>Exposure can occur during manufacturing, importing, packaging, storage, transport or working with chemicals during various industrial processes. Occupational diseases induced by hazardous chemical exposure include occupational lung cancer, dermatitis, cancer, byssinosis, occupational asthma, irritant induced asthma, silicosis, work aggravated asthma, upper respiratory tract disorders, mutagenetic affects and physical injuries, such and skin burns, eye damage and chemical burns to the upper respiratory tract.</p>	<ul style="list-style-type: none"> • Chemicals are extremely wildly used in a number of industries and daily life, as we know it cannot assist without chemicals, such as soap, petrol, detergents, various gasses, paint and many more. • Exposure to chemicals occur during various processes including manufacturing, importing, packaging, storage, transport of chemicals. • Hazardous chemicals are also used in industry specifically for the hazardous properties it exhibits such as oxidisers, acids and alkalis. • In many instances chemicals are specifically deigned to have hazardous properties, such as herbicides, pesticides, fertilisers, flammable and explosive chemicals oxidisers and so on. • Work with hazardous chemicals is a necessity in many industries, but the work should be made a safe as possible not to adversely affect the health and safety of employees and the self-employed.

1.3 Summarise the aims of the proposal and how it will address the problem in no more than five sentences.

- The proposal aims to update the 1995 Regulations for Hazardous Chemical Substances, affording employees protection for their health and safety.
- The proposal also aims to bring the classification of hazardous chemicals and the labelling thereof in line with an international standard, affording South African employees similar protection and allowing for easy import and export from and to other courtiers respectively on the same system. the public. Please describe how the problem identified could be addressed if this proposal is not adopted. At least one of the options should involve no legal or policy changes, but rather rely on changes in existing programmes or resource allocation.

1.4 Please describe how the problem identified could be addressed if this proposal is not adopted. At least one of the options should involve no legal or policy changes, but rather rely on changes in existing programmes or resource allocation.

Option 1.	Continue with the enforcement of the Regulation for Hazardous Chemical Substances, 1995 under the Occupational Health & Safety Act
Option 2.	Develop a national policy for controlling chemical risks in the occupational setting.

PART TWO: IMPACT ASSESSMENT

2. Policy/Legislative alignment with other departments, behaviours, consultations with stakeholders, social/economic groups affected, assessment of costs and benefits and monitoring and evaluation.

2.1. Are other government laws or regulations linked to this proposal? If so, who are the custodian departments? Add more rows if required.

Government legislative prescripts	Custodian Department	Areas of Linkages	Areas of conflict
Occupational Health and Safety Act,1993 (Act.85 of 1993)	Department of Employment and Labour	Section 8: Need to establish occupational risk and provide control measures	None
Atmospheric Pollution Prevention Act no.45 of 1965, repealed by the Environmental Management: Air Quality Act, No. 59 of 2008	Department of Environmental Affairs	Extraction control measures to ensure compliance with exposure limits complies with the requirements of this Act	None
Prohibition on the Import, Export, Possession, Acquisition, Sale, Use and Disposal of Agricultural Remedies	Department of Environmental, Fisheries and Forestry	Act lists remedies that are prohibited from being handled in any ways in workplaces	None

of the Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act 36 of 1947			
Waste Classification and Management Regulations of the National Environmental Management: Waste Act, No. 59 of 2008	Department of Environmental Fisheries and Forestry	HCA's waste disposal: ensuring that this is done following this Act and regulations	
Labour Relations Act, No. 66 of 1995	Department of Employment and Labour		None
Employment Equity Act, No. 55 of 1998	Department of Employment and Labour		
General Administrative Regulations, 2003 of the Occupational Health and Safety Act, 1993	Department of Employment and Labour	Reporting of an illness as a result of exposure to the HCAs	None
Facilities Regulations of the Occupational Health and Safety Act, 1993	Department of Employment and Labour	Ensuring that changing rooms are away from fugitive contamination with the HCAs	None
Compensation for Occupational Injuries and Diseases Act, No. 130 1993	Department of Employment and Labour		No conflict, alignment ensured.
National Road Traffic Act, 1996	Department of Transport	Transporting of HCAs as part of 'dangerous goods'	None
Phasing-out and Management of Ozone Depletion Substance Regulations,	Department of Environmental Fisheries and Forestry	Control and regulation of ozone depleting chemicals	None
ITAC Import and Export Regulations	Department of Trade and Industry	Import and export of chemicals	None
Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act	Department of Agriculture	Control of Pesticides and herbicides	None
Air Quality Regulations, National Environmental Management Act etc.	Department of Environmental Fisheries and Forestry		None

2.2. Proposals inevitably seek to change behaviour in order to achieve a desired outcome. Describe (a) the behaviour that must be changed, and (b) the main mechanisms to bring about those changes. These mechanisms may include modifications in decision-making systems; changes in procedures; educational work; sanctions; and/or incentives.

- a) What and whose behaviour does the proposal seek to change? How does the behaviour contribute to the socio-economic problem addressed?

The proposal aims to improve the behaviour of unsafe exposure to hazardous chemicals in the workplace by workers and employers. The protection of employees' health in all chemical sectors and any employee exposed to chemicals during work, which includes most employees in South Africa as everyone is exposed to chemicals at some point even if it is only to cleaning chemicals, hand sanitizers or pesticides. The behaviour of working unsafely with chemicals or disposing unsafely of chemical waste has far reaching impact on the country's economic and social wellbeing as it has detrimental effects on the health of employees and can have a devastating effect on the environment. If well regulated, the chemical sector would benefit from a healthy workforce, as it is very costly to all parties when employees develop occupational diseases and they lose work-time and wages due to their health being compromised. Employers on the other hand will experience production loss, income and further investments loss, which in-turn affect the economy at large due to low GDP for example.

- b) How does the proposal aim to bring about the desired change?

Firstly, the proposal will update the 1995 Regulations for Hazardous Chemical Substances and align legal requirements with the internationally implemented Globally Harmonised System for Classification and labelling of hazardous chemicals. Adoption and enforcement of this harmonized system will put the classification of chemicals and the labelling of chemicals in South Africa on par with other countries worldwide that have implemented the system. Countries such as the European Union, the United Kingdom, Canada, China, Brazil, Russia, Japan, Zambia and Chile amongst others.

Secondly, the proposal will update the occupational exposure limits and biological exposure index from the 1995 Regulations for Hazardous Chemical Substances.

2.3. Consultations

- a) Who has been consulted inside of government and outside of it? Please identify major functional groups (e.g. business; labour; specific government departments or provinces; etc.); you can provide a list of individual entities and individuals as an annexure if you want.

The proposed regulations were published for public comments on 14 September 2018 for a 90-day period to allow for interested and affected parties to comment and provide inputs. The Department of Employment and Labour also embarked on hosting workshops to present the Draft regulations in Johannesburg, Durban and Port Elizabeth during October and November 2018.

The draft regulations were also presented to the Multi-Stakeholder Committee on Chemicals Management (MCCM) hosted by the Department of Environmental Fisheries and Forestry on 3 December 2018. Members were also invited at this meeting to provide comments and inputs on the proposal after the meeting with a given due date. Government Departments represented at the MCCM were: Department of Water and Sanitation, Department of Health, Department of Transport, Department of Trade, Industry and Competition, Department of Agriculture, Land Reform and Rural Development and Department of Basic Education. NGO's and Industry Associations represented include CAIA, RPMASA, Groundworks and SAPEMA.

Stakeholders at both workshops and MCCM agreed that the review of the 1995 Regulations were overdue and that alignment to the international standards as proposed is needed in the best interest of the South African chemical sector specifically and industry in general.

Consulted Government Departments, Agencies and Other Organs of State

Department's name	What do they see as <u>main benefits, Implementation/ Compliance costs and risks?</u>	Do they <u>support or oppose</u> the proposal?	What <u>amendments</u> do they propose?	Have these amendments been <u>incorporated in your proposal?</u> If yes, under which section?
Department of Agriculture	In line with legislative developments to also incorporate GHS implementation in the agricultural sector through requirements of pesticides, herbicides and fungicides. No cost incurred	Supported	none	NA
Department of Environment, Fisheries and Forestry	In line with legislative developments to also incorporate GHS implementation for chemical waste.	Supported	Timeframe for compliance, update of prohibited agents	Yes Regulation 21

	Alignment with regards to Persistent Organic Pollutants (POPs) No cost incurred			
Department of Health	Protection of the health of employees, will lessen the burden on the national health system No cost incurred	Supported	none	
Department of Transport	In line with legislation regulation the transport of "Dangerous Goods". No cost incurred	Supported	none	
Department of Trade and Industry	In line with Regional developments regarding chemical s management No cost incurred	Supported	none	
Nelson Mandela Bay Municipality	Industry standardisation through GHS. Cost of compliance as an employer	Supported	Provision of a table of content (index) to the regulations	Yes (Table of contents)

Consulted stakeholders outside government

Name of Stakeholder	What do they see as main <u>benefits</u> , <u>Implementation/ Compliance costs and risks</u> ?	Do they <u>support</u> or <u>oppose</u> the proposal?	What <u>amendments</u> do they propose?	Have these amendments been <u>incorporated</u> in your proposal?
AMA – Aerosols Manufacturing Association	Industry standardisation on classification and international alignment.	Supported	Remove "carcinogen" definition	No
			Transition period for classifying single substances	Yes Regulation 18 (2)
			Clarify the term "agent"	No
Banking Association SA	No clearly indicated	Support	Inclusion of Definition of AIA	No. Provided in Act
RPMASA – Responsible Packaging Management SA	Industry standardisation on classification and international alignment.	Support	Inclusion of Environmental risk criteria.	Yes Annexure 1

	Support inclusion of CAS numbers			
			Clarify non-toxic	Yes Annexure 4
			Addition to training requirements	No
			Use wording "Shall" rather than "must"	No
ESKOM	Updated OEL's required in Industry	Supported	Provision of definition of "action level"	No
			Definition for competent person	No
			TWA definition to include 40 hours	Yes Annexure 2
			Update reference to OEL tables	Yes Annexure 2
UCT – University of Cape Town	Not clearly indicated in comments	Not indicated	Change assessment to "health risk assessment"	No
			"UN" before GHS Classification	No
			Taking hazardous chemical not in Annexure 1 into account	Yes Annexure 1
			Clarify STEL and Ceiling limit	Yes Annexure 2
			Clarify "prohibited agent"	Yes Regulation 1
			Labelling of piping modified	Yes Regulation 14B
			Check referencing to tables	Yes Annexure 2
SAPIA – SA Petroleum Industry Association	Industry standardisation through GHS and updated limits of exposure	Supported	Carc definition to include the wording " <u>chemical agent</u> "	Yes Regulation 1
			Household chemicals to contain negligible trace amount of hazardous agents – should be risk base	Yes Regulation 5
			Remove reference to EH42 form definition	Yes Regulation 1
			"C" notation use for ceiling limit	Yes Annexure 2
			"sensitizer" definition aligned to GHS	Yes Regulation 1
			Transitional arrangements to moving over to GHS required (18 months)	Yes Regulation 18
			Clarify reference to "transport of dangerous goods"	Yes Regulation 1

BUSA – Business Unity SA	Not clearly indicated in comments submitted	Support	Household chemicals to contain negligible trace amount of hazardous agents – should be risk base	Yes Regulation 5
			“sensitizer” definition aligned to GHS	Yes Regulation 1
			Clarify reference to “transport of dangerous goods”	Yes Regulation 1
			Transitional period to moving over to GHS required (18 months)	Yes Regulation 18
			Provision of full address on label unreasonable	Yes Regulation 14 B
			Include “STEL” am “C” notification in table	Yes Regulation 1
			Consider timeframes in obtaining lab results	Yes Annexure 4
Engen	Updated OEL’s required in Industry. Alignment with international product standards	Support	Regulations scope limited to health hazards	No
			Remove reference to EH42 form definition	Yes Regulation 1
			No reference should be made to asbestos abatement regulations	Yes Regulation 1
			Provision of full address on label unreasonable	Yes Regulation 14B
			Include “STEL” am “C” notification in table	Yes Annexure 2
			Correct numbering in annexure 3	Yes Annexure 3
KEMi – Swedish chemical agency	Alignment with international classification, labelling and SDS standards	Support	Shorten SDS definition	No
			Add exclusion of pharmaceuticals to scope	Yes Annexure 4
			Reference categories during classification	Yes Regulation 14
			Stipulate label size to ensure readability	Yes Annexure 4
LISAM Systems	International standardisation through GHS elements	Support	Implementation period to moving over to GHS required (suggest 24 months)	No – provided for 18 months
			GHS training for ALL employees, exposed or not	No
			Packing should include minimum labelling elements	Yes Annexure 4

Master Builders -KZN		Support	Remove definition of “Chemical Agent”	No
			Implementation period to moving over to GHS required, staggered over several years	No
SAIOH- Southern African Institute for Occupational Hygiene AND Saioh – South African Institute for occupational health and safety	Updated OEL’s and BEI’s urgently required	Supported	Definition for “Chemical agent” not needed	No
			Refer to HCA in text not Chemical	Yes Throughout
			Implementation staggered over time, with indicated “cut-off” dates.	No
			No need for Y & Z in table 4	Yes Annexure 2
			Where applicable OELs should be in both ppm and mg/m ³	Yes
			OH &SA should be in full	Yes Throughout
			Correct reference to tables annexures	Yes Annexure 2
			No reference should be made to asbestos abatement regulations	Yes Throughout
			Alignment of definition of “CARC”	Yes Annexure 2
			Refer to the “National Environmental Management Air Quality Act”	Yes Regulation 1
Modderfontein Laboratories	Not clear from comments	Support	Correct atmospheric pressure in formula	Yes Annexure 4
Sasol	Not indicated	Not clear from comments	HSG 173 to be removed, EH42 to be defined	Yes Regulation 1
			Include definitions for “Intake” that was removed	Yes Regulation 1
			Clarify OEL-8 hour Time - weighted	Yes Annexure 2
			“Skin” definition not clear	Yes Annexure 2
			Threshold to b indicated a “entry level” in scope	No
			Implementation period to moving over to GHS required (suggest 36 months)	No – provided for 18 months
			Labelling should not be applicable for containers	No

			used for short periods at work	
			Impractical to label pipelines	No
			0.1% threshold for GHS classification / reporting	Yes Regulation 14 D
			OEL for DMP to be included	Yes Annexure 2
			Replace “coal dust” OEL	Yes Annexure 2
SASOHN – South African Society for Occupational Nursing	Updated BEI’s required in Industry		Remove “inhalation” from BEI definition	Yes Annexure 2
			HCA to be used consistently	Yes throughout
			No need for Y & Z in table 4	Yes Annexure 2
			OH &SA should be in full	Yes Throughout
			Reference to spirometry ONLY – incorrect	Yes Regulation 7
WITS - University	Not indicated in comments	Support	Include definition for reasonably practicable.	No, In the Act
			Introduce term: inhalable fractions	Yes Annexure 4
			Ozone OEL not at level of exertion	No
			Correct reference to CL and RL	Yes Annexure 4
			Chang reference to CI to Minister – Setting OEL	No
			Criterion 3 not valued any more – consider replacing	Yes Annexure 4
			Total inhalable fraction replaced	Yes Annexure 2
			Mass fraction only referred to in relation to aerosol fraction	Yes Annexure 4
Private Individuals	Generally: Alignment with international classification, labelling and SDS standards and Updated OEL’s and BEIs required in Industry.	Support	Use of “agents” to refer to both substances and mixtures not suitable	No
			Include evaluation of “potential” workplace health hazards	No
			Clarify “maximum average airborne concentration”	Yes Annexure 4
			“sensitizer” definition aligned to GHS	Yes Regulation 1
			Reference to “airborne exposure” not	Yes Regulation1

			appropriate in “skin” definition	
			Require direction of flow on pipeline	Yes Regulation 14 B
			Only agents contributing to classification to be on label	Yes Regulation 14 B
			Penalties not in line with severity of offences	Yes Regulation 16
			Provide OEL for petrol, not only components	No
			Iscyanetes was previously a CL OEL	No
			Notations to be included	Yes Annexure 2
			Molecular weight to be provided	Yes Annexure 4
			Table with OEL to provide target organ	No
			Correct referencing in guide	Yes Annexure 4
			Use sub-letter in formulas	Yes Annexure 2

b) Summarise and evaluate the main disagreements about the proposal arising out of discussions with stakeholders and experts inside and outside of government. Do not give details on each input, but rather group them into key points, indicating the main areas of contestation and the strength of support or opposition for each position:

- Concerns were however raised about the implementation timeframes, or when the sector would be expected to comply with the new requirements. It was pointed out that South Africa already agreed in 2008 to implement the GHS classification and that compliance to this was voluntary. Several industry role-players already implemented the GHS system in order to comply with export partner countries’ requirements. A transition period from old classification and labelling systems to the GHS system and update OEL’s of 18 months were agreed and included into the Draft.

- Provision was needed in the draft for phasing-in of legal requirements to allow manufacturers time to implement new requirements.
- Cut-off limits was needed for level when a chemical need to be classified as hazardous.
- Numbering corrections was required and referencing between regulations and paragraphs.

2.4. Assessment of costs and benefits to stakeholders inside and outside of government

Stakeholders	Inside or Outside Government	Cost	Benefit
Manufacturers / Importers	Outside	Cost of classification of chemicals, development of SDS and labels according to GHS for one chemical product – ± R6500.	Reduction in health risk due to exposure to chemicals
Employers		Cost of classification of chemical mixtures, development of SDS and labels according to GHS will depend on the number and complexity of the substances and types. Cost training employees on GHS ± R8000 per person.	
		Implementation of control measures to comply with new exposure limits (OEL). Cost depending on the type and extend of controls to be implemented – such as engineering, local ventilation systems, shift work, training, new work procedures, new raw materials and personal protective equipment. Cost training employees on GHS ± R8000 per person.	Reduction in health risk due to exposure to chemicals
Department of Employment and Labour	Inside	Cost of training Inspectors “in-house” ± R 2000 per OHS Inspector	Controlling and monitoring occupational health risks through enforcement of legal requirements

		Cost of informing stakeholders – Virtual workshops	Controlling occupational health risks leading to less occupational disease and fatalities
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2.5. Describe the groups that will benefit from the proposal, and the groups that will face a cost. These groups could be described by their role in the economy or in society. Note: NO law or regulation will benefit everyone equally so do not claim that it will. Rather indicate which groups will be expected to bear some cost as well as which will benefit. Please be as precise as possible in identifying who will win and who will lose from your proposal. Think of the vulnerable groups (disabled, youth women, SMME), but not limited to other groups.

List of beneficiaries (groups that will benefit)	How will they benefit?
Employees	Improved health and safety
Employers	<ul style="list-style-type: none"> • Reduced compensation cost • Staff retention and longer work life for employees. • Employers saving on work-days lost to medical treatment due to their good health owing to prevention through protection against exposure to chemicals • Low training costs as staff retaining results in keeping skilled workers • Stable and increased production levels when Employees will be safe from workplace chemical related diseases. Their moral will be increased • Protection of employees from unsafe workplace.
All stakeholders; Employers, employees, Labour Unions, AIAs & occupational health practitioners, Chemical manufacturers and importers, Department of Employment and Labour	Clearer, more directive regulations for ease of application
AIAs and Occupational Health Practitioners	Clearer, more directive regulations and updated exposure limits will instil confidence in application of these by AIAs and OMPs
Families of the employees	Secured households income and well-being of family members
Compensation Fund	Less COIDA claims
Unemployment Insurance Fund	Less UIF claims

Department of Health	Savings on medical services offered to ill employees
Communities	Improved health due the limiting exposure to hazardous chemicals in their environments

List of cost bearers (groups that will bear the cost)	How will they incur / bear the cost
Employers	<ul style="list-style-type: none"> • Cost associated with improvement of controls to comply to reduced OELs • Occupational Hygiene sampling and analysis costs (some OELs might require new sampling and analytical equipment and techniques) • Reduced OELs might trigger additional medical surveillance and biological monitoring requirements • Additional AIA related services and costs • Employers will have to implement safety measures required. • Training employees about safety as per regulation. • Ensuring employees have Personnel Protective Equipment (PPE) • Pay fines and penalties for non-compliance
Government : Compensation Fund, UIF, Social Grants, Hospitalization	<ul style="list-style-type: none"> • Compensation in the case of disablement caused by occupational injuries and diseases through COIDA and Unemployment Insurance Act • Compensation Fund will save on costs for compensating claims, for medical treatment and rehabilitation of affected workers • UIF will pay for Illness benefits when workers are laid-off due to ill health • Workers will be employed for longer and not become prematurely dependant on social grant benefits • Burden to hospitals and clinics will be reduced when chemical related

	diseases are reduced or eliminated through this regulation.
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2.6 Describe the costs and benefits of implementing the proposal to each of the groups identified above, using the following chart. Please do not leave out any of the groups mentioned, but you may add more groups if desirable. Quantify the costs and benefits as far as possible and appropriate. Add more lines to the chart if required.

Note: "Implementation costs" refer to the burden of setting up new systems or other actions to comply with new legal requirements, for instance new registration or reporting requirements or by initiating changed behaviour. "Compliance costs" refers to on-going costs that may arise thereafter, for instance providing annual reports or other administrative actions. The costs and benefits from achieving the desired outcomes relate to whether the particular group is expected to gain or lose from the solution of the problem.

For instance, when the UIF was extended to domestic workers:

- *The implementation costs were that employers and the UIF had to set up new systems to register domestic workers.*
- *The compliance costs were that employers had to pay regularly through the defined systems, and the UIF had to register the payments.*
- *To understand the inherent costs requires understanding the problem being resolved. In the case of UIF for domestic workers, the main problem is that retrenchment by employers imposes costs on domestic workers and their families and on the state. The costs and benefits from the desired outcome are therefore: (a) domestic workers benefit from payments if they are retrenched, but pay part of the cost through levies; (b) employers pay for levies but benefit from greater social cohesion and reduced resistance to retrenchment since workers have a cushion; and (c) the state benefits because it does not have to pay itself for a safety net for retrenched workers and their families.*

Group	Implementation costs	Compliance costs	Costs/benefits from achieving desired outcome	Comments
Workers exposed to chemicals	None- cost to be carried by employers	none	Improved health	
Employers of workers working with chemicals	Cost of training workers, Cost of exposure monitoring Cost of medical tests and Cost of equipment and controls such as ventilation and personal protective equipment.	Cost of controlling exposure to meet limits. Fines for non-compliance.	Improved workforce health, Qualifying to get jobs when they exist due to meeting required compliance	
Manufactures / Importers of chemicals	Cost of classification of chemicals, Cost of developing SDS, cost of developing labelling		Compliance to international standards to ease export	
Government	Awareness training and promotion of legislation Legislation enforcement		Improved workforce health, lessen COIDA claims and burden of national health care system	

2.7 Cost to government: Describe changes that the proposal will require and identify where the affected agencies will need additional resources

- a) Budgets, has it been included in the relevant Medium Term Expenditure Framework (MTEF): and

Training cost for Department of Employment and Labour Inspectors are already included into the Departmental budget – no additional costs are expected. Due to the COVID-19 pandemic, training will be conducted on virtual platforms (software already in place) thus eliminating travel cost to provide training to Inspectorate nationwide. Personal protective equipment that Inspectorate may need is already provided for in Provincial budgets –as inspections are already required, thus not new expenditure.

- b) Staffing and organisation in the government agencies that have to implement it (including the courts and police, where relevant). Has it been included in the relevant Human Resource Plan (HRP):

No additional staffing required as the existing inspectorate would be implementing the enforcement of the revised Regulations as they did with the 1995 Regulations.

Note: You MUST provide some estimate of the immediate fiscal and personnel implications of the proposal, although you can note where it might be offset by reduced costs in other areas or absorbed by existing budgets. It is assumed that existing staff are fully employed and cannot simply absorb extra work without relinquishing other tasks.

2.8 Describe how the proposal minimises implementation and compliance costs for the affected groups both inside and outside of government.

For groups outside of government (add more lines if required)

Group	Nature of cost (from question 2.6)	What has been done to minimise the cost?
Small, Medium and Micro Enterprise, Informal sector	Exposure assessment cost	Air monitoring intervals will be 24 months for BOTH RL and MEL (currently - 12 months for OEL-CL).
Employers	Training of employees Safeguarding employees	Costs are not new – these are already requirements in 1995 legislation. (training may be performed “in-house” reducing costs)
	Additional controls implemented	Implementation of the hierarchy of control: <ul style="list-style-type: none"> • Elimination

		<ul style="list-style-type: none"> • Substitution • Engineering controls (physical barriers, ventilation systems) • Administrative controls (shift work, training) • Personal protective equipment
	Classification and labelling according to GHS	The cost of classification of a single agent, development of SDS and labelling can be around R6000 per item. For chemical mixtures it depends on number and complexity of components.

For government agencies and institutions:

Agency/institution	Nature of cost (from question 2.6)	What has been done to minimise the cost?
Department of Health, Department of Agriculture, Forestry and Fisheries	Exposure assessment cost	Air monitoring intervals will be 24 months for BOTH RL and MEL (currently - 12 months for OEL-CL).
Department of Health and, Department of Employment and Labour	Compensation costs and medical costs	As the proposed exposure limits are stricter than current ones, it is anticipated that less people will get occupational related diseases, there will be lower medical costs and less claims for compensation.
Department of Environmental Affairs, Department of Health		The disposal of HCA being now regulated by the national Waste Act is anticipated to minimize costs related to environmental pollution, and reduce medical costs related to persons adversely affected by chemical waste and environmental pollution.

2.9 Managing Risk and Potential Dispute

- a) Describe the main risks to the achievement of the desired outcomes of the proposal and/or to national aims that could arise from implementation of the proposal. Add more lines if required:

A risk exist that industry may need additional time to implement requirements and meeting standards.

Note: It is inevitable that change will always come with risks. Risks may arise from (a) unanticipated costs; (b) opposition from stakeholders; and/or (c) ineffective implementation co-ordination between state agencies. Please consider each area of risk to identify potential challenges.

- b) Describe measures taken to manage the identified risks. Add more rows if necessary:

Mitigation measures means interventions designed to reduce the likelihood that the risk actually takes place.

Identified risk	Mitigation measures
Time required to comply	The proposal addressed the timeframe for new requirements such as the classification, SDS and labelling according to GHS by stipulating an implementation date 18 months from the date of promulgation of the Regulations.
	The proposal addressed the timeframe for compliance to new exposure limits (OEL & BEI) by stipulating implementation date 18 months from the date of promulgation.
Limited knowledge to comply with GHS requirements	<p>Industry associations engaged on development of standardised training criteria on GHS.</p> <p>Explanatory notes to the Regulations have been and will be published on the Department of Employment and Labour’s website and distributed to all stakeholders. Additional document addressing “Competent Authority decisions” to be made available as well.</p> <p>Workshops / virtual workshops will be hosted by the Departments on the new Regulations once promulgated for all stakeholders.</p> <p>The Department will be available to make presentations on invitation relating to the Regulations.</p>

- c) What kinds of dispute might arise in the course of implementing the proposal, whether (a) between government departments and government agencies/parastatals, (b) between government agencies/parastatals and non-state actors, or (c) between non-state actors? Please provide as complete a list as possible. What dispute-resolution mechanisms are expected to resolve the disputes? Please include all of the possible areas of dispute identified above. Add more lines if required.

Note: Disputes arising from regulations and legislation represent a risk to both government and non-state actors in terms of delays, capacity requirements and expenses. It is therefore important to anticipate the nature of disputes and, where possible, identify fast and low-cost mechanisms to address them.

Disputes relating to the proposed Regulations are not expected as the regulations were drafted in consultation with Organised Labour and Business in Technical Committee. The draft was approved by the Minister's Advisory Council consisting of Government Departments, UIF as well as Organised Labour and Business. The Draft was published for public comments for 90 days and all inputs considered. The Draft Regulations was presented to Stakeholders at workshops and several different forums explaining the reasoning behind the requirements.

However, the Occupational Health and Safety Act provides for a well-established dispute-settlement processes within the Department of Employment and Labour, which allow for a decision from the Labour Inspector of Department of Employment and Labour to be appealed. Section 35 of this Act also allows for application for exemptions. Section 40 of the Act further allows for both these processes to be expedited. This option would be available to address any disputes on the enforcement of the draft regulations.

Section 35 of the Occupational Health and Safety Act 85 of 1993 as amended:

35. Appeal against decision of inspector. - (1) Any person aggrieved by any decision taken by an inspector under a provision of this Act may appeal against such decision to the chief inspector, and the chief inspector shall, after he has considered the grounds of the appeal and the inspector's reasons for the decision, confirm, set aside or vary the decision or substitute for such decision any other decision which the inspector in the chief inspector's opinion ought to have taken.

Definition: "inspector" means a person designated under section 28;

Section 28 of the Occupational Health and Safety Act 85 of 1993 as amended: 28. Designation of inspectors by Minister. - (1) The Minister may designate any person as an inspector to perform, subject to the control and directions of the chief inspector, any or all of the functions assigned to an inspector by this Act.

Nature of possible dispute (from sub-section above)	Stakeholders involved	Dispute-resolution mechanism
Compliance to exposure limits	Employers	Work with industry stakeholders to develop requirements for training and unit standards on training, qualifications, continued and development.
Updating and provision of SDS for imported chemicals	Importers, Employers	Working alongside SARS officials to ensure importers of chemicals are updated regarding labelling and SDS requirements. Information sharing with Customs officials.
Provision of product detail on SDS	Importers, Manufacturers	Protection of business information along national legislation and international standards.

Would it be possible to establish or use more efficient and lower-cost dispute-resolution mechanisms than those now foreseen? These mechanisms could include, for instance, internal appeals (e.g. to the Minister or a dedicated tribunal) or mediation of some kind.

Nature of possible dispute	Proposed improvement in dispute-resolution mechanism
Appeal of regulatory requirements	Current system of appeal as stipulated in the Occupational Health and Safety Act 85 of 1993, through Section 35, does not result in any cost to the public. The Department of Employment and Labour would incur the cost of assessing and investigating appeals, through time spend by official compensations.

2.10 Monitoring and Evaluation

- a) When is implementation expected to commence after the approval of the proposal?

Compliance to the Draft Regulations requirements are expected to commence at the time of promulgation by the Minister of Employment and Labour through publication in the Government Gazette as this draft only replaces an existing Regulations of 1995. However, Regulation 3 and Regulation 14, 14A, 14B, 14C and 14D will come into effect 18 months after the promulgation of the Regulations.

- b) Describe the mechanisms that you will apply to monitor the implementation of the proposal after being approved:

Through the proposed Regulations the duty for implementation is placed on every employer and self-employed person doing business with hazardous chemical agents.

The Department of Employment and Labour's Inspection and Enforcement Branch (IES) has a national footprint. Through the IES Inspectorate the compliance of employers with the proposed Regulations will be inspected, monitored and enforced. Departmental Inspectors are appointed in accordance with *Section 28 of the Occupational Health and Safety Act 85 of 1993 as amended: 28. Designation of inspectors by the Minister. (1) The Minister may designate any person as an inspector to perform, subject to the control and directions of the chief inspector, any or all of the functions assigned to an inspector by this Act.*

The Provincial offices of the Department of Employment and Labour report on a monthly basis on the numbers of inspections conducted, the number of notices issued to employers and the number of prosecutions undertaken. The Provincial Offices will thus report on the compliance (implementation by employers) with the proposed Regulation and steps taken to ensure compliance.

- c) Who will be responsible for monitoring the implementation of this proposal?

The IES Branch of the Department of Employment and Labour will be responsible for monitoring the implementation of the proposal by employers.

Practical monitoring can happen when routine inspections are conducted or complaints and incidents investigated. All these monitoring functions are conducted by Inspectors within the IES Branch of the Department of Employment and Labour and reports generated.

- d) What are the results and key indicators to be used to for monitoring? Complete the table below:

Results	Indicators	Baseline	Target	Responsibility
Impact: long term result (change emanating from the implementation of the proposal in the whole of society or parts of it)				

Outcome: medium term result (what beneficiaries achieve as a result of the implementation of the proposal)				
Impact: long term result (change emanating from the implementation of the proposal in the whole of society or parts of it) Reduction of occupational acquired chemical related diseases.	Reduction in industrial fatalities acquired from occupational exposure to chemicals	Current number of fatalities during the financial year 2010/2011* the amount of R2,708,203,689 was paid to the Chemical sector for COIDA claims	30% reduction of injuries and fatalities by 2040	Department of Employment and Labour & Industry
Outcome: medium term result (what beneficiaries achieve as a result of the implementation of the proposal) Reduced adverse health effects on employees in the chemical industry	Rate of occupational diseases due to chemical exposure	During the financial year 2009/2010 R 2 286 410 189 was paid to the chemical sector and during the financial year 2010/2011* R 2,708,203,689 was paid to the Chemical sector for COIDA claims	15% less occupational diseases reported to Compensation Fund, resulting in less pay-outs	Department of Employment and Labour and Industry
Outputs: direct results of the activities Improved knowledge of the regulatory requirements by employers and employees.	Number of training sessions	NA	2 virtual Workshops	Department of Employment and Labour's IES Branch and Industry Associations
Outputs: direct results of the activities Improved compliance HCA regulations by employers and employees	Number of inspections conducted to monitor compliance to HAC regulations by employers	NA	10% increase of Inspection in the Chemical Industry by the IES Branch Department of Employment and Labour	Department of Employment and Labour, IES Branch

* 2013, 2014, 2015, 2016, 2017, 2018 & 2019 data not available from Compensation Fund

- e) When will this proposal be evaluated on its outcomes and what key evaluation questions will be asked? Below please find evaluation questions for your consideration:

The outcome of implementation will be monitored on a monthly, quarterly and yearly basis within the Department of Employment and Labour. The monitoring will contribute to the Department's long and medium term objectives.

The proposed legislation will be monitored and the Advisory Council on Occupational Health and Safety (ACOHS) to the Minister of Department of Employment and Labour may instruct that the legislation be reviewed if and when it sees fit. In addition, when there are new developments or policy changes or improved technology available the legislation may be reviewed and/or updated.

- i. What was the quality of proposal design/content? (Assess relevance, equity, equality, human rights)*
- ii. How well was the proposal implemented and adapted as needed? (Utilise the Monitoring and Evaluation plan to assess effectiveness and efficiency)*
- iii. Did the proposal achieve its intended results (activities, outputs and outcome) as per the Monitoring and Evaluation plan?*
- iv. What unintended results (positive and/or negative) did the implementation of the proposal produce?*
- v. What were the barriers and enablers that made the difference between successful and failed proposal implementation and results*
- vi. How valuable were the results of your proposal to the intended beneficiaries?*

- f) Please provide a comprehensive implementation plan

Department of Employment and Labour ("the Department") endeavours to achieve the United Nation's Sustainable Development Goals (SDG) linked to management of chemicals; SDG #3 (good health and well-being), #8 (decent work and economic growth), #11 (sustainable cities and communities), #12 (responsible consumption and production) and #15 (life on land). These 5 SDG's all have an impact on chemicals management internationally. By way of this the Department is committed to collaboration with stakeholders and affected parties, keeping up to date with international trends, ensure protection for all works including vulnerable workers and youth and female workers.

The implementation plan for the proposal will be finalised in the next financial year and aligned with the IES Branch and Departmental workplans. The implementation plan will consider:

- **Timeframes:** The regulations will be implemented by employers once the Regulations have been promulgated, except for regulations 13(d), 14, 14A, 14B, 14C and 14D these will be implemented 18 months after promulgations by the Minister of Department of Employment and Labour.
 - **Stakeholder engagement:** Department of Employment and Labour will publish the proposed Regulations and provide workshops to interested and affected stakeholders within industry on the Regulations to assist in implementation, within 6 months after promulgation. Once published industry associations will be made aware of the new requirements stipulated within the Regulations. Industry associations will be requested to inform their members accordingly. Explanatory notes to the Regulations to provide additional assistance will be placed on the Departmental website once published. All these guideline documents will be available at the time of promulgations by the Minister of Department of Employment and Labour.
 - **Instruction and Training:** Before promulgation and immediately thereafter, training will also be provided to the Departmental Inspectors to update them on enforcement of the legislation. Instruction will be provided to standardise inspections and enforcement of the proposed regulations across South Africa.
 - **Inspection and Enforcement:** Department of Employment and Labour coordinate an inspection plan 18 month after promulgation when Regulations 13(d), 14, 14A, 14B, 14C and 14D will come into effect – the evaluate the level of readiness and compliance to the new requirements and develop intervention plane in collaboration with Industry.
- g) Please identify areas where additional research would improve understanding of then costs, benefit and/or of the legislation. Research conducted on the:
- Baseline for the number of chemical related injuries, diseases and deaths due to occupational exposure in South African Industry compared to SADC Region.
 - Cost of GHS implementation to South Africa in its entirety.

For the purpose of building a SEIAS body of knowledge please complete the following:

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PART THREE: SUMMARY AND CONCLUSIONS

1. Briefly summarise the proposal in terms of (a) the problem being addressed and its main causes and (b) the measures proposed to resolve the problem.
 - (a) Everyone comes into contact with chemicals every day, this is called chemical exposure. Hazardous chemicals can get into the body through breathing or swallowing/ingesting chemicals or if they are absorbed through the skin. In the work environment employees are exposed the chemicals specially develop the have specific properties such as corrosivity and oxidisers. People respond to chemical exposures in many different ways. The root cause of the problem is uncontrolled exposure, release and associated exposure resulting from the inappropriate manufacturing, storing, transport, use and disposal of Hazardous Chemical Agents.
 - (b) The proposal aims to ensure a safe work environment concerning chemicals that is not dangerous to the health of safety of employees. This is being achieved through incorporation of the international standard on classification and labelling of chemicals as well as updating existing occupational exposure limits to chemicals in the work place.

2. Identify the social groups that would benefit and those that would bear a cost, and describe how they would be affected. Add rows if required.

Groups	How they would be affected
Beneficiaries	
1. Manufactures	Reduction in health risk due to exposure to chemicals
2. Chemical Importers.	Reduction in health risk due to exposure to chemicals
3. Employers	Controlling occupational health risks leading to less occupational disease and fatalities
Cost bearers	
1. Employers	Cost associated with improvement of controls to comply to reduced OELs Training employees about safety as per regulation.
2. Government (Compensation)	Compensation in the case of disablement caused by occupational injuries and diseases

3. What are the main risks from the proposal in terms of (a) undesired costs, (b) opposition by specified social groups, and (b) inadequate coordination between state agencies?

- Undesired cost – The draft was developed with the objective of eliminating undesired cost of ill health of employees.
 - The draft/proposal was developed to address the concerns of workers and communities faced with health risks associated with chemical exposure
 - Coordination is required Environmental Fisheries and Forestry and Department of Health on related legislation.
 - Cost associated with improvement of controls to comply to reduced Occupational Exposure Limits (OEL)
 - Personal protective equipment costs to employer
 - Occupational Hygiene sampling and analysis costs (some OELs might require new sampling and analytical equipment and techniques)
 - Reduced OELs might trigger additional medical surveillance and biological monitoring requirements
 - Employers will have to implement safety measures required.
 - Training employees about safety as per regulation.
 - Pay fines and penalties for non-compliance
4. Summarise the cost to government in terms of (a) budgetary outlays and (b) institutional capacity.
- (a) Awareness training and promotion of legislation and legislation enforcement
- (b) Training cost for Department of Employment and Labour Inspectors are already included into the Departmental budget – no additional costs are expected. Personal protective equipment that Inspectorate may need is already provided for in Provincial budgets –as inspections are already required, thus not new expenditure.
5. Given the assessment of the costs, benefits and risks in the proposal, why should it be adopted?
- The Draft regulations are not entirely new regulations but are to replace the 1995 regulations
 - Clearer, more directive regulations and updated exposure limits will instil confidence in application of these.
 - Compensation in the case of disablement caused by occupational injuries and diseases
 - Compensation Fund will save on costs for compensating claims, for medical treatment and rehabilitation of affected workers
 - Workers will be employed for longer and not become prematurely dependant on social grant benefits
 - Burden to hospitals and clinics will be reduced when chemical related diseases are reduced or eliminated through this regulation.
6. Please provide two other options for resolving the problems identified if this proposal were not adopted.

Option 1.	Develop a national policy for controlling chemical risks in the occupational setting.
Option 2.	Continued enforcement of the current 1995 Regulations for Hazardous Chemical Substances

7. What measures are proposed to reduce the costs, maximise the benefits, and mitigate the risks associated with the legislation?

- a) New cost for the Department of Employment and Labour are not foreseen as the Labour Inspectorate is already in place to perform inspections and enforcement.
- b) Training requirements for Inspectors and external stakeholders are not new as this is always planned for in the budget for the Inspection and Enforcement (IES) Branch.
- c) Industry will have more guidance on how that manage hazardous chemicals properly and protect the health of employees.

8. Is the proposal (mark one; answer all questions)

	Yes	No
a. Constitutional?	Yes	
b. Necessary to achieve the priorities of the state?	Yes	
c. As cost-effective as possible?	Yes	
d. Agreed and supported by the affected departments?	Yes	

9. Which of the National priorities would be most supported by this proposal?

Priorities 1, 2, 4, 5 and 7.

PRIORITY 1: Economic transformation and job creation

PRIORITY 2: Education, skills and health

PRIORITY 3: Consolidating the social wage through reliable and quality basic services

PRIORITY 4: Spatial integration, human settlements and local government

PRIORITY 5: Social cohesion and safe communities

PRIORITY 6: Building a capable, ethical and developmental state

PRIORITY 7: A better Africa and world.

Acronyms:

BEI – Biological Exposure Index

GHS- Globally Harmonised System for classification and labelling of chemicals

HCA- Hazardous Chemical Agent

IES- Inspection and Enforcement Services (Branch of the Department of Employment and Labour)

ILO – International Labour Organisation

OEL – Occupational Exposure Limit

SDS- Safety Data Sheet