GHS Journey in the Gulf Cooperative Council (GCC) States

Abdallah Abou-Haidar, SABIC
Chairman: GPCA’S Product Stewardship Sub-Committee
Chairman: Industry Working Group – GHS Africa
Agenda

- Who is Gulf Petrochemical and Chemicals Association (GPCA): Their Role and Responsibilities
- GHS Journey in the Gulf Cooperation Council (GCC)
- Round Table Discussions
- Gulf Standardization Organization (GSO): *The Implementation Agency*
1. Verinoque Garni, PST Director at CEFIC
2. Jette Rogen, Consultant, Bureaux Veritas – Denmark
3. Dr. Antonio Riganelli, DOW Chemicals – Italy, & the EU GHS Committee Chairman
4. Khalsa Al-Kemyani, Omani MoE
5. Kashif Al-Rashid, GPCA
6. Dr. Odai Buhamad, GSO
7. Ali Al-Ghamdi, GSO
8. Fahad Al-Gharibi, ORPIC
9. Abdulaziz Al-Baloal, EQUATE
10. Abdallah Abu-Haidar, PST TF Chairman
GPCA at a Glance

GPCA is a non-profit regional association, established in March 2006 by the “eight founding members” and has rapidly emerged as the “Voice” of the chemical industry in the Arabian Gulf region.

**Mission:**

To support the growth and sustainable development of the petrochemical and chemical industries in the Gulf in partnership with our members and other stakeholders.
GPCA’S Full Members

Full Members account collectively for >95% of the chemicals output in the Arabian Gulf Region

Bahrain
- GPIC

KSA
- Advanced
- Alujain
- Astra Polymers
- CHEMANOL
- Farabi
- NAMA Chemicals
- NATPET
- PETRORABIGH
- Sadara

Qatar
- Sahara
- Maaden
- Saudi Aramco
- SABIC
- SIPCHEM
- S-Chem
- TASNEE

UAE
- ADNOC
- Borouge
- ADNOC Fertilizer
- ADNOC Refining
- Mubadala

Kuwait
- EQUATE
- Kuwait Aromatics
- PIC

Oman
- Oman Methanol
- ORPIC
- OMIFCO
- Salalah Methanol
- Duqm Refinery

Bottom Right: GPCA's Full Members account collectively for >95% of the chemicals output in the Arabian Gulf Region.
GPCA’S Committees

- **Responsible Care Committee**: Championing sustainable development practices and encouraging programs aimed at HR development and improved (EHS&S) performance.
- **Plastics Committee**: Commissioning reports and studies on issues of importance to our members and the industry.
- **Agri-Nutrients Committee**: Fostering an innovation culture and establishing programs focused on the promotion of STEM education.
- **Supply Chain Committee**: Promoting sustainability and its various principles and engaging with value network partners in the region on joint initiatives focused on Circular Economy and value addition.
- **International Trade Committee**: Partnering with local, regional and global regulatory bodies to ensure industry’s active participation in forming best in class technical standards.
- **Research and Innovation Committee**:
Proposed Code of Practice in the GCC

**GPCA’S GHS Code of Practice** published on April 2017

**Bringing Consistency in Classification & Labelling of Chemicals in the GCC** Published on Nov. 2017

**The Code of Practice defines a comprehensive hazard communication system to:**
1. Classification and Labelling (data and rules used to classify, the pictograms used, etc.)
2. The format and logic of the two main hazard communication instruments (SDS & Labels)

GPCA'S Code of Practice – a C&L system based on the European CLP Regulation:

- **Classification and Labeling are available on the “REACH registered substances” internet site**
- **Classification of about 8000 substances are harmonized (listed in Annex VI to CLP)**
- **EU have a unified system (hazard phrases, signal words, symbols, etc.) which is constantly updated**
December 12, 2017 - 1st GCC Regulators Workshop (SABIC, Riyadh)

Attended by Industry, Several Government and Non Government Agencies from the GCC

Objective: Introduce the Subject and build initial capacity
Inconsistencies of Hazards Classifications Before for GHS

Substance with Oral Toxicity LD50(*) = 257 mg/kg-Body Weight

Hazard Classification

- US: Toxic
- Australia: Harmful
- India: Non-toxic
- Japan: Toxic
- New Zealand: Hazardous
- China: Moderately toxic
- EU: Harmful

After GHS – Danger Classifications: Toxic if Swallowed

(*)LD stands for "Lethal Dose". LD50 is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals
**Definition:** The GHS (Globally Harmonized System) is a system for standardizing and harmonizing the classification and labeling of chemicals

**Objectives:**
1. Define the physical, health, and environmental hazards of chemicals and harmonizes their classification criteria
2. Ensure uniform classification and labeling of hazardous goods worldwide
3. Creating classification processes that use available data on chemicals
4. Standardizes the content and format of chemical labels and Safety Data Sheets.

http://www.unece.org/trans/danger/publi/ghs/ghs_welcome_e.html
Employees who are fully aware of the risks resulting in wearing the proper protection gears and handling the products properly
• The UN GHS is not a regulation

• It is not legally binding in any country

• Countries adopting GHS can select basic GHS elements from the Purple Book and formulate their own regulations or standards

• Country/region can set extra requirements on chemical classification and labelling

Examples of Selective Regulatory Framework

- Both the United States and Canada adopted two physical hazard classes not contained in the GHS
- The EU and China added a new environmental hazard class

*Combustible dust physical hazards* are not classified were added to the U.S. program under the Hazard Communication Standard and to the Canadian program under the Workplace Hazardous Materials Information System (WHMIS)

The EU added *the environmental hazard class of hazardous to the ozone layer* to their programs under the EU’s Classification, Labelling and Packaging of Substances and Mixtures Regulation (CLP), and China to The Rule for Classification, Hazard Communication of Chemicals, and Safety Data Sheet for Chemical Products

In the EU, the SDS section 16 on “other information” must include additional safety and environmental information regarding the bulk transport of dangerous goods by sea
GHS Implementation by Region

http://ghs.dhigroup.com/GHSGlobalImplementationMap.aspx
Benefits to Industry

- Improve the safety of employees and protect the environment by providing accurate data and promoting safe handling of chemicals based on solid scientific principles
- Future Growth by expanding into international markets
- Support the compliance principles of Responsible Care®
- Standardized the format and unify the hazardous classification in the SDSs and labels subject to local regulations
- More effective use of scarce resources (e.g., reduced animal testing, avoiding the need for testing and evaluation against multiple classification systems, regulatory authorities not having to repeat the work of other authorities, etc.)
- Maintain positive corporate image and credibility
Benefits to Governments and Regulators

- Availability of unified hazard data for Regulators, and Government agencies such as Customs, Municipalities, Ministries of Environment, Health, Labour, Industry, and others
- Consistent cross-border information and removal of trade barriers, with improved exchange of information between Countries, and apply structured enforcement methods
- Remove duplication of efforts in creating national systems in lieu of regional systems
- Improve domestic and international reputations due to successful chemical management
Positive Impacts on Others

Chemical Storage and Transporters

- Alignments with international systems for dangerous goods transport classification (sea, road, and rail);

General Public

- Reduce the risk of incidents involving hazardous chemicals due to lack of understanding and/or not being properly informed (*e.g. household cleaning agents, pesticides, insecticides, etc.*)
- Increase confidence in chemicals whose hazards are properly assessed and identified, and regain the trust of our citizens in the Industrial Community.
November 7th 2018: The 2nd Regulators Roundtable – Kuwait (EQUATE)

Attended by Several Government and Non Government Agencies from the GCC, with strong representation from Industry

Elaborated on the concept of GHS and the added values to the Industry, Governments, and Communities. Also, announced the issuance of the “GSO GHS Standard”
Draft of the new “**GSO GHS Standard**” is complete and published on GPCA’S Website


*The new standard combined GSO ISO Standard for Hazard Communication with GPCA’S GHS Code*

Excellent accomplishment by RCC/GPCA for publishing a GHS Standard for local companies when implementing GHS

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A harmonized and consistent way of classifying and communicating the hazards of substances and mixtures down the supply chain—chemicals being supplied, produced and used in the GCC.

**Draft Standard for the Global Harmonized system (GHS) in Gulf Cooperation Council (GCC) countries- Draft**
CLP or OSHA

- Lack of regulations and when they exist they are performed on country rather than regional level
- Some companies are compliant with the EU regulation (CLP & REACH), others follow the American regulation (OSHA), and some use hybrid systems

These differences create inconsistencies in hazard communication and result in additional safety and environmental risks
April 10, 2019: The 3rd Regulators Round Table – Oman (ORPIC)

The main goal of the regional activities was to bring together key representatives from governments, business and industry, and public interest and labor organizations to discuss GHS implementation and capacity needs.

Built on the previous two Regulators RT and conducted a workshop; a) “the Pros and Cons of Implementing GHS individually vs. collectively”, b) going forward with GHS Implementation Team
The GHS and International Chemicals Agreements and Initiatives

GHS and the Strategic Approach to International Chemicals Management (SAICM)
SAICM provides further international recognition of the need to include GHS capacity building and implementation into overall chemicals management strategies and national SAICM implementation programs.

GHS and the Rotterdam Convention
Ensure that hazardous chemicals that are exported from their territory are packaged and labelled in a manner that is adequately protective of human health and the environment.

GHS and the Stockholm Convention
The Stockholm Convention underlines “the importance of manufacturers of persistent organic pollutants to take responsibility for reducing adverse effects caused by their products and for providing information to users, governments, and the public on the hazardous properties of those chemicals.”
The GHS and International Chemicals Agreements and Initiatives

GHS and the Basel Convention
A Basel Convention-UN SCEGHS Joint Correspondence Group has been established with the aim to work towards harmonization of hazard classification systems and to improve consistency at the international level on the use of classification systems for wastes and chemicals. Use of the GHS can help to define hazardous characteristics of wastes under the Basel Convention while satisfying the needs of both international instruments.

GHS and the Montreal Protocol
The Parties of the Montreal Protocol requested the Ozone Secretariat to contact the UN Sub-Committee of Experts on the GHS to evaluate the possibilities for and feasibility of including ozone-depleting substances on its work program.

The third revised edition of the GHS Purple Book includes a new hazard class for substances and mixtures hazardous to the ozone layer.
August 29, 2019: The 4th Regulators Round Table – Bahrain (GPIC)

UNEP Stressed on the value of expediting the GHS implementation in the GCC and provided to utilize their leverage at the UN agencies for further support

UNEP: Mr. Abdulmenam Muhamed, Regional Program Officer – Bahrain, E-Mail: abdelmenam.mohamed@un.org Tel: 973.178.127.83
March 6, 2020: The 5th Regulators Round Table – Abu Dhabi (Borouge)

Focused on the formation of the GHS Implementation team driven by GSO
GPCA suggests the formation of a **Regional GHS Coordinating Committee**

To establish the following:

a. Secure strong commitment of each country in the GCC to implement GHS, and identify resources and key stakeholders, (i.e. government, industry, society, etc.)

b. Develop a strategy for the regional implementation process

c. Establish governance and communication processes that support effective implementation

d. Participate and advocate in the regional and international forums and industry groups to solicit common understanding and directions

e. Continue to support the GCC Industry’s voluntary implementation of the GPCA Code of Practice in the GCC.

f. Develop plans for monitoring, evaluation and enforcement during early planning for GHS implementation

g. Participate in the United Nations Sub-Committee of Experts on the Globally Harmonized System (UNSC-E-GHS), and the United Nations Sub-Committee of Experts on the Transportation of Dangerous Goods (UNSC-E-TDG). Join the ECOSOC Sub-Committee of Experts on the GHS
GSO (Gulf Standardization Organization) at a Glance

Established in Dec. 2001 under the umbrella of the Gulf Cooperation Council for the Arab States of the Gulf
GSO Role and Responsibilities

• Spearheading the GHS Implementation Process
• Secure approval for the GSO GHS Standard, and publish it on their website
• Form the implementation team
• Carry the process forward (training, technical support, funds, etc.)
Oct. 2nd 2018: GPCA & GHS Technical Committee Meeting
ESMA, Abu Dhabi

Connect with GSO’s Technical Committee, the local agency who will study and recommend the implementation (delegates from UAE, Oman, Saudi Arabia, Kuwait, and Bahrain)

- Presented the GHS concept and the added values of GHS in the region
- The expectations of the TC from GPCA and the TF
- The revision process and time-frame
journey to be continued
Back-Up Slides
GHS Implementation in Other Regions
GHS Implementation – Eurasia Economic Union (Russia & Surrounding States) [Example]


Adopted on March 3, 2017 by Decision No. 19 of the Council of the Eurasian Economic Commission

Date of entry into force: June 2, 2021

Consideration of the draft documents:

- Procedure of formation and maintenance of the register of chemical substances and mixtures of the Union
- Procedure of notification for new chemical substances
- Transitional provisions of TR EAEU 041/2017

EAEU

| Republic of Armenia | Republic of Belarus | Republic of Kazakhstan | Republic of Kyrgyzstan | Russian Federation |

Expert working group (EWG) on supplementary regulations
## Thailand Model - GHS Implementation

<table>
<thead>
<tr>
<th>Agency</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ministry of Public Health</td>
<td>Consumer Products, Cosmetics, Drugs, Narcotics, Chemicals in Foods, Psychotropic Substances</td>
</tr>
<tr>
<td>Ministry of Industry</td>
<td>Industrial Chemicals</td>
</tr>
<tr>
<td>Ministry of Agriculture &amp; Cooperatives</td>
<td>Fertilizers, Fishery, Livestock</td>
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<tr>
<td>Ministry of Energy</td>
<td>LPG, NGV</td>
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<tr>
<td>Ministry of Interior</td>
<td>High-Risk Chemicals in Accidents &amp; Massive Disasters</td>
</tr>
<tr>
<td>Ministry of Defense</td>
<td>Chemicals in Armanents</td>
</tr>
<tr>
<td>Ministry of Labor</td>
<td>Safety &amp; Health aspects of Hazardous Chemicals in the Workplace</td>
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<tr>
<td>Ministry of Finance</td>
<td>Import/Export of Chemicals</td>
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<tr>
<td>Office of the Consumer Protection Board</td>
<td>Goods &amp; Services, Unsafe Products</td>
</tr>
<tr>
<td>Country</td>
<td>Agency/Regulation</td>
</tr>
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<tr>
<td>Brazil</td>
<td>Ministry of Work &amp; Employment</td>
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<tr>
<td></td>
<td>Brazilian Association of Technical Standard</td>
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<tr>
<td>Argentina</td>
<td>National Service for Food, Health, and Quality Cooperation (SENASA)</td>
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<tr>
<td>Mexico</td>
<td>Mexican Official Standards</td>
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<tr>
<td>Ecuador</td>
<td>Technical Norm NTE INEN 2266:2013</td>
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<td></td>
<td>Technical Regulation RTE INEN 078 (2013)</td>
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<tr>
<td>Country</td>
<td>Agency</td>
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<td>-------------------------------------------------------------</td>
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<tr>
<td>Vietnam</td>
<td>Vietnam Chemical Agency (VCA)</td>
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<tr>
<td>Philippines</td>
<td>Department of Labor and Employment</td>
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<td></td>
<td>Department of Environment and Natural Resources</td>
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<tr>
<td>Singapore</td>
<td>Ministry of Manpower</td>
</tr>
<tr>
<td></td>
<td>Multi-Departments established in 2005</td>
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<tr>
<td>Malaysia</td>
<td>Department of Safety and Health</td>
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<tr>
<td>Indonesia</td>
<td>Ministry of Industry and Information</td>
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<tr>
<td>Country</td>
<td>Agency</td>
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</tr>
<tr>
<td>China</td>
<td>Ministry of Industry and Information Technology (MIIT)</td>
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<td></td>
<td>Ministry of Foreign Affairs</td>
</tr>
<tr>
<td></td>
<td>Others (Total of 12 different departments)</td>
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<tr>
<td>Taiwan</td>
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<tr>
<td>Japan</td>
<td>Joint Committee of GHS</td>
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<td>S. Korea</td>
<td>Ministry of Environment</td>
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<tr>
<td></td>
<td>Ministry of Labor</td>
</tr>
<tr>
<td>Thailand</td>
<td>Multiple Ministries &amp; Government Agencies</td>
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How to be officially listed as GHS compliant country?

When a country adopts GHS Guidance (Directive) as a law, “They should inform the UNECE secretariat. UN will share this information through their website after verification by the secretariat. (http://www.unece.org/trans/danger/publi/ghs/implementation_e.html).

What type of information can be shared with the UN?

The legal instruments such as the adopted codes or standards, and their details (date of application, transitional period, publication details, internet address), names and addresses of administrations responsible for their implementation).
How to be GHS Official Member

Can non-member countries participate in the general assembly meetings?

1. If they are invited by the Secretariat or by the Sub-Committee
2. If they apply for consultative status with the Sub-Committee and their application is approved

*NOTE: Information for obtaining consultative status with the ECOSOC can be found at: http://csonet.org/*

Who can represent the GCC in the GHS General Assembly Meetings?

Countries of the GCC can participate as observers. Each country member of the Sub-Committee is represented by an accredited government "expert". This expert may be accompanied by accredited alternate experts and by advisers.
The UN Economic Commission for Europe (UNECE) provides the Secretariat functions for UNSCEGHS and UNSCETDG. It was set up in 1947 by ECOSOC (Economic and Social Council). ECOSOC is the UN platform for reflection, debate, and innovative thinking on sustainable development.

Ms. Sabrina Mansion, Scientific Affairs Officer, UN Economic Commission for Europe
Email: sabrina.mansion@un.org  Tel: +41 (0) 22 917 32 71

Governments and/or other stakeholders may submit any relevant information or questions using the dedicated contact form (http://www.unece.org/trans/danger/ghs/contactform.html).

ECOSOC Sub-Committee of Experts on the GHS meets twice per year in Geneva to review and update GHS related matters on a global scale. For information and registration (http://www.unece.org/trans/danger/meetings.html#/)

UNITAR: UN Agency for assisting countries and regions to implement GHS.
Mr. Oliver Wootton - E-Mail: Oliver.WOOTTON@unitar.org  Tel: (41 22 91 78154)
Industry Working Group (IWG) – Structure, Roles, & Responsibilities

**ICCA (Industry Working Group)**

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization</th>
</tr>
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<tbody>
<tr>
<td>Abdallah Abu-Haidar</td>
<td>SABIC (Chairman)</td>
</tr>
<tr>
<td>RUIZ-CUEVAS Maria</td>
<td>CEFIC (Secretary)</td>
</tr>
<tr>
<td>Otte, Dr. Jens</td>
<td>BASF, Germany</td>
</tr>
<tr>
<td>Antonio Riganelli</td>
<td>DOW, Italy</td>
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<tr>
<td>Vania Glaus</td>
<td>Givaudan, Switzerland</td>
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<tr>
<td>GOREN Servet</td>
<td>CEFIC</td>
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<td>Swearingen, Anastasia</td>
<td>American Chemistry Council</td>
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<td>Weible, Cherie</td>
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<td>Davis, Raleigh</td>
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<td>Dyer, Barry</td>
<td>Responsible Care NZ</td>
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<td>Penfold, Deidre</td>
<td>CAIA, S. Africa</td>
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**Consultants**

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization</th>
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<tbody>
<tr>
<td>Rocznia, Dan</td>
<td>American Chemistry Council</td>
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<tr>
<td>Kelecom, Baudouin</td>
<td>ExxonMobil</td>
</tr>
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GPCA’S Responsible Care Committee Structure

- More than 60 Professionals working within the group
- Cater to Regional issues and opportunities