JOINT OPERATIONS

SAUDI ARABIAN CHEVRON INC. – KUWAIT GULF OIL COMPANY (K.S.C.)

SHEERS Process

Hazard Communication

25 May 2022

Hazard Communication

Contents

1.0 PURPOSE **3**
2.0 OBJECTIVES **3**
3.0 SCOPE **3**
4.0 REQUIREMENTS **3**
5.0 MEASUREMENT AND VERIFICATION **4**
6.0 LINK TO OTHER REFERENCES **5**
APPENDECIES **7**
APPENDIX A – Roles, Responsibilities and Competencies 7
APPENDIX B - Abbreviations & Definitions 8
APPENDIX C – Procedures 9
- Chemical Inventory 9
- Health and Physical Hazard Information 9
- Labeling and Transporting System 10
- Training System 10

Appendix D: HAZCOM Audit Protocol 11
Appendix E: Product Acceptance Process 12
Appendix F: GHS Labeling and Pictograms 14

1.0 PURPOSE

The purpose of the Hazard Communication Process (*HAZCOM Process*) is to manage chemicals in JO to ensure they are classified as per Globally Harmonized System (GHS) of Classification and Labeling of Chemicals and to communicate protective measures to employees handling chemicals in order to prevent harm to their health and safety and protect environment.

To ensure that accurate information about health hazards, physical hazards and associated protective measures in the workplace are communicated to protect personnel who may have contact with these hazards.

2.0 OBJECTIVES

The objectives of the process are to systematically manage and communicate up-to-date and accurate information regarding health and environmental hazards associated with chemicals or products used in the workplace.

3.0 SCOPE

This process covers all JO and includes any activities under the direct operational control of JO, including:

- Work activities which may expose contractors to chemical hazards.

The following areas are in scope for the Hazard Communication Process:

- Identification, Listing, and Management & Control of Hazardous materials.
- Training to enable workers to identify hazards and use appropriate protection and handling methods.
- Compliance with local legal requirements.

This SHEERS Process aligns with:

- ISO 14001 and ISO 45001 requirements
- Local laws established by the government of Kuwait and by the Kingdom of Saudi Arabia
- JO Management System

Where there is a conflict between legislation and the requirements set out in this Process, the more stringent requirements shall be followed while ensuring legal compliance requirements are met.

4.0 REQUIREMENTS

To comply with this process, the following requirements shall be met:

1. A Chemical Inventory listing of all chemicals is maintained.
2. Accurate information regarding the health and physical hazards of the chemicals is readily available to all personnel, including SDS for each chemical.

   Link to Joint Operations Safety Data Sheets (SDS)

3. All containers (including process containers) are clearly labeled following GHS Labeling requirements in a manner that communicates the hazard and the required protections so that the workers understand and follow protection procedures.

4. Awareness level training on the hazards and the protection procedures provided at initial assignment, whenever a new chemical is introduced, and when supervision deems refresher training is needed.

5.0 MEASUREMENT AND VERIFICATION

Measurement

The following metrics shall be tracked to determine if the Hazard Communication Process is effective in meeting its stated purpose.

Leading Measures

Facility chemical inventories include 95% of the chemicals that are currently in the facility.

100% of labels, including hazards and necessary protections, are in place and readable.

Lagging Measures

- Number of employee injuries, illnesses, or incidents related to hazardous chemicals.

6.0 LINK TO OTHER REFERENCES

This process comprises references to additional supporting procedures, policies, and other resources (e.g.: Standards, requirements etc.) including those that address JO HAZCOM process.

Other Resources

Refer to Product Acceptance Evaluation Form (PAEF) available in Appendix E.

Linkages to Other Procedures

The Hazard Communication Process is linked to the following:

- SHEERS process Occupational Hygiene.
- SHEERS process Control of Work.
- SHEERS process Risk Management.
- SHEERS process Emergency Management.
- SHEERS process Management of Change.
- SHEERS process Contractor EHS Management.
- SHEERS process Facilities Design and Construction.

KGOC and SAC Documents Referenced in the Development of this Process:

- KPC-HSSE-E06-OH-S02 - Occupational Management.
- KPC-HSSE-E06-OH-S02-TA-06 - Chemical Hazard Communications.
- SA/PZ Hazard Communication Operational Excellence Process Dec 2012.
- SAPZ HAZCOM Procedure
- Chevron Occupational Exposure Standards
- Chevron Industrial Hygiene Manual
- EHS Glove Recommendations
- Chevron Loss Prevention Guidelines

Other references:

- Kuwait EPA Regulations Implemented under Law No.21 of 1995 as amended by Law No.16.
- ISO 11014-1 Safety Data Sheet for Chemical Products.
- Globally Harmonized System (GHS) of Classification and labeling of Chemicals.
- NFPA 30: Flammable and Combustible Liquids Code – 2012.

- OSHA. Hazard Communication Standard. 29 CFR 1910.1200.

APPENDECIES

APPENDIX A – Roles, Responsibilities and Competencies

Role	Responsibilities	Competencies
JO HAZCOM Process Advisor	• Coordinate and lead HAZCOM Process in Joint Operations • Control HAZCOM Process documentation and records • Coordinate or support process measurement and verification • Audit plans and against the process requirements and develop Continual Improvement Plan • Conduct performance reporting and trend analysis	• Understanding and experience of the HAZCOM Process • Facilitative leadership skills • Analytical and planning ability • Understanding of continual improvement • Understanding of the SHEERS Management System
JO HAZCOM Process Sponsor	• Serve as JO advocate of HAZCOM Process to ensure that process is supported and functioning as designed • Advise Management on any exceptions requested to the process • Ensure appropriate priority and funding, personnel, and other resources • Ensure that process effectiveness and efficiency are measured and verified • Be accountable for progress on the Continual Improvement Plan • Approve specific HAZCOM Process changes to ensure compliance with JO Expectation	• Ability to provide vision and strategic direction • Understanding of the HAZCOM Process • Understanding of the SHEERS Management System
Operational Managers/ Supervisors	• Visibly support the HAZCOM Process by ensuring adherence of process requirements • Conduct periodic reviews of HAZCOM Process effectiveness • Assure personnel have awareness training upon initial assignment, whenever a new chemical is introduced, and whenever supervision deems refresher training necessary • Assure transporters are provided with the required information regarding chemical hazards and handling and protection measures	• Understanding of the JO HAZCOM process

APPENDIX B - Abbreviations & Definitions

1.0 Abbreviations & Acronyms

EHS	Environment, Health & Safety
EM	Emergency Management
HAZCOM	Hazard Communication
JO	Joint Operations
KGOC	Kuwait Gulf Oil Company
MS	Management Systems
SHEERS	Safety, Health, Environmental, Efficiency, Reliability & Security

2.0 Key Terms and Definitions

Common name:	Any designation or identification such as code name, code number, trade name, brand name or generic name used to identify a chemical other than by its chemical name.
Hazardous Chemical:	Any chemical that is capable of causing a health, physical or environmental hazard during handling or use.
Hazard Communication:	Once a chemical has been classified, the hazard(s) must be communicated to target audiences. Labels, Material Safety Data Sheets and Training are the main tools for chemical hazard communication.
Hazard Warning:	Means any words, pictures, symbols, or combination thereof appearing on a label or other form of warning that is based on regulatory guidance or experience. Hazard warning conveys the specific physical, health, and/or environmental hazard(s) effects of the chemicals(s) in the container(s) or at point of use.
Health hazardous chemicals:	Means chemicals that can cause acute or chronic health effects in exposed employees. Categories of “health hazards" include Acute Toxicity, Skin Corrosion/Irritation, Eye Damage / Eye Irritation, Respiratory or Skin Sensitization, Germ Cell Mutagenicity, Carcinogenicity, Reproductive Toxicology, Target Organ Systemic Toxicity - Single Exposure, Target Organ Systemic Toxicity - Repeated Exposure, and Aspiration Toxicity.
Label:	Means any written, printed, or graphic material displayed on or affixed to containers of hazardous chemicals.
Lower Explosive Limit (LEL):	Minimum concentration of vapor or gas in air, which will burn when a source of ignition (spark) is introduced.
Safety data sheets (SDS):	SDS must be formatted according to the UN Globally Harmonized System of Classification and Labeling of Chemicals (GHS) requirements.

APPENDIX C – Procedures

1.0 Overview

The specific procedures to support the Hazard Communication Process include the following:

- Chemical Inventory.
- Hazard Information.
- Labeling System.
- Training System.

2.0 Details

Written communications should be developed and communicated to all personnel to ensure clear understanding of the chemicals present in their work products, how to protect themselves from exposure, what actions to take in an emergency and where to get more information.

- ### Chemical Inventory

All chemicals used or handled at all facilities are listed, their properties are identified, and their nature as hazardous or non-hazardous is determined. Each operational field within the facility shall have a chemicals inventory specific to their facility which is continuously updated and readily available to all personnel in their fields.

Contractors are responsible for informing their employees (and the subcontractor's employees,) of the following:

- The list of JO chemicals to which they could be exposed in the work area.
- The location of JO chemicals in the work area.
- The location at which JO information can be found regarding the hazards and the handling and protection measures for the chemicals in the work area.

The Contractor shall provide JO's Representative with a list of the chemicals and the information regarding hazards and handling and protection measures for those chemicals which the Contractor, (or the subcontractor, or the subcontractor's employees) will bring on JO property. The Contractor must also ensure that all chemical containers are appropriately labeled as to contents and hazard warning.

- ### Health and Physical Hazard Information

Each facility shall have readily available information regarding the health and physical hazards of the chemicals in their facility. The information, often in the form of a Safety Data Sheet or SDS, should include:

- Identification.
- Hazard(s) identification.
- Composition/information on Ingredients.
- First-aid measures.
- Fire-fighting measures.

- Accidental release measures.
- Handling and storage.
- Exposure controls/personal protection.
- Physical and chemical properties and safety characteristics.
- Stability and reactivity.
- Toxicological information.
- Ecological information.
- Disposal consideration.
- Transport information.
- Regulatory information.
- Other information.

- **Labeling and Transporting System**

Refer to Appendix F.

- **Training System**

Information and training on chemicals present in the workplace shall be provided. The content of all HAZCOM training shall include:

- Operations where chemicals are present.
- Methods used to communicate hazards and protections needed.
- Methods used to detect the presence of hazardous materials – odors, visible signs, etc.
- Proper use of personal protective equipment.
- Instruction on the appropriate actions to take in case of an emergency.

Training shall be conducted on initial assignment (includes transfers), whenever a new chemical is introduced into the work area, and whenever supervision deems refresher training necessary.

Appendix D: HAZCOM Audit Protocol

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HAZCOM Audit Template

The audit consists of three parts:

1. **Review of the Area Chemical Index**
2. **Site walkthrough**
3. **SDS Retrieval and Review**

Positive Observations

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Findings

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Recommended Action

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Appendix E: Product Acceptance Process

Product Acceptance for New Chemicals

User/Originator (Person who wants to introduce a new chemical in a work location in JO) shall complete "Product Acceptance Evaluation Form" (PAEF) made available on JO Web to ensure ascertaining of hazards, introduction of safer chemicals, safe handling of chemicals, control measures, waste management, and training.

The form, duly signed by User/Originator and Superintendent/Team Leader of originating division, shall be submitted to the Superintendent of the EH&S division, with Safety Data Sheet (SDS) in internationally agreed 16-part Global Harmonized System (GHS) format for review and approval.

If deemed necessary, HAZCOM process advisor will get PAEF reviewed from Sr. Environment Engineer for harm to environment and adequacy of waste handling and disposal.

Superintendent of EH&S shall either approve, approve subject to conditions, or reject PAEF, and notify to Superintendent/Team Leader of Originating division.

The originator shall include in the purchase request description that PAEF is approved and attach PAEF approved by Superintendent EH&S and SDS to purchase request.

Purchasing division shall ensure that request for quote for new chemical purchases are released only after the division has received a copy of PAEF approved by Superintendent of EH&S, from originating division.

Purchasing division shall include in the purchase order that Supplier shall provide a copy of the most recent updated SDS to Purchasing and Warehouse prior to delivery of each batch of chemicals.

Contractor wanting to bring a new chemical must submit PAEF and SDS to Superintendent EH&S through Contract Owner and obtain necessary approval. Contractor shall introduce new chemical in JO only after getting approval of PAEF from Superintendent EH&S, and after providing training to employees in HAZCOM and chemical handling.

Product Acceptance Evaluation Form (PAEF)

Person responsible for introducing a New Chemical on-site (user) shall fill this form; get it approved from his Superintendent, and send it to Superintendent EHS, along with manufacturer supplied MSDS, for review and approval. This form will be used by EHS to evaluate risks, approve safer chemicals, and ensure availability of proper control measures including training, handling, emergency response, and waste disposal of products proposed for use.

Person responsible for introducing chemical on-site (user):

Product name:

Chemical name/ Generic Chemical Group:

Area/ Unit where chemical will be used?

Is it a replacement of existing chemical: Yes / No

Justification:

Maximum quantity that will be brought on-site?

Containers (Type and capacity):

Method of use of chemical? (For example, refilling will be done from containers by hand or pump).

Describe in brief, risk control measures proposed to be implemented? Engineering controls, Safe handling procedure. PPE, Training

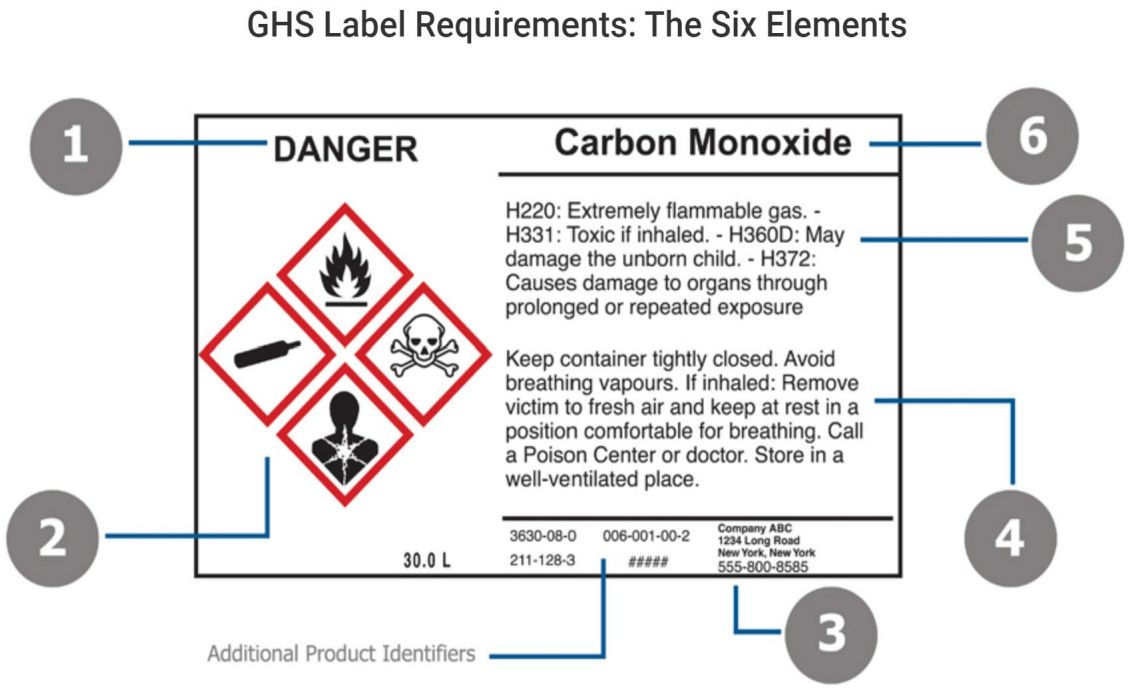
Write job tittle, and number of JO employees who will handle the chemical per shift?

Spill management, and Emergency Response?

Will any waste streams be created (including container)?

	Name	Signature and Date	Remarks of HAZCOM Advisor
User (Originator)			
Superintendent Originating Division			
Reviewed by HAZCOM Advisor			
Superintendent EHS			Remarks of Superintendent EHS

Appendix F: GHS Labeling and Pictograms



All products must follow the 6 elements of GHS label requirements

1. Signal Word
2. GHS Symbols (Hazard Pictograms)
3. Manufacturer Information
4. Precautionary Statements / First Aid
5. Hazard Statements
6. Product Identifier/Name

Health Hazard  • Carcinogen • Mutagenicity • Reproductive Toxicity • Respiratory Sensitizer • Target Organ Toxicity • Aspiration Toxicity	**Flame**  • Flammables • Pyrophorics • Self-Heating • Emits Flammable Gas • Self-Reactives • Organic Peroxides	**Exclamation Mark**  • Irritant (skin and eye) • Skin Sensitizer • Acute Toxicity (harmful) • Narcotic Effects • Respiratory Tract Irritant • Hazardous to Ozone Layer (non Mandatory)
Gas Cylinder  • Gases Under Pressure	**Corrosion**  • Skin Corrosion / Burns • Eye Damage • Corrosive to Metals	**Exploding Bomb**  • Explosives • Self-Reactives • Organic Peroxides
Flame Over Circle  • Oxidizers	**Environment** (Non-Mandatory)  • Aquatic Toxicity	**Skull and Crossbones**  • Acute Toxicity (fatal or toxic)