



JOINT OPERATIONS



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

SHEERS Process

Occupational Hygiene

March 2023

Compliance Management

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1.0 PURPOSE

The Occupational Hygiene (OH) Process and Standards specify requirements to maintain the health of the workforce by identifying, quantifying, assessing, and controlling exposures to workplace environmental agents that may affect their health.

2.0 OBJECTIVES

The objective of this SHEERS Occupational Hygiene (OH) process is to establish requirements to identify, assess, control and mitigate potential health risks posed to workers by exposure to chemical, physical, and biological agents in the workplace.

An overview of the SHEERS OH process is illustrated in Appendix I.

3.0 SCOPE

This process and associated standards apply to activities, premises, and facilities within the reporting boundaries of JO, as defined in the JO SHEERS Reporting Boundaries (found in SHEERS IIR Process).

Contractors within the scope of JO's SHEERS Contractor Management (CM) Process shall have their OH program evaluated through the SHEERS CM Process. The SHEERS contractor capability assessment shall verify that the contractor's program is in place to identify, assess, control, and mitigate potential health risks to workers by worksite, or work activity exposure to chemical, physical, and biological agents in the workplace.

If contractors cannot meet JO's expectations to identify, assess, control, and mitigate workers' potential health risks by worksite or work activity exposures, then JO should assess whether to perform these activities for contract workforce.

Where there is a conflict between legislation and the requirements set out in this document, a more stringent requirement shall be followed to ensure legal compliance requirements are met.

Fatigue risk management and work-related stress are managed separately from the OH process. Fatigue risk management is monitored and controlled through the Journey Management Process and by applying Kuwait Labor Law 6/2010, Section two (working hours and weekends). Work-related stress is managed directly through the Ministry of Health (Kuwait/Kingdom of Saudi Arabia).

4.0 REQUIREMENTS

To comply with this Process, JO shall meet the following requirements:

1. Occupational hygiene exposure assessments shall be conducted in accordance with the Exposure Assessment Standard (Appendix C) and includes the following steps:
 - a. Conduct and document exposure assessments (e.g., workplace, workforce, and environmental agents).
 - b. Select appropriate occupational exposure limits or levels (OELs) or other exposure standard criteria.
 - c. Develop, update, and document exposure profiles based on exposure assessment.

- d. Compare exposure profiles to appropriate OELs, other exposure criteria, and health surveillance enrollment criteria to determine if exposures are acceptable or require further action.
 - e. Develop, approve, document, and implement annual monitoring plans.
 - f. Document exposure monitoring data (e.g., emergency, non-routine, area sampling) into the JO OH IT tool.
 - g. Document the notification of employees and their supervisors of exposure monitoring results.
 - h. Conduct and document a comprehensive exposure review at least every 3 years.
2. Corrective actions shall be taken to protect workers whose monitoring data exceeds or can exceed appropriate OELs in accordance with the Exposure Prevention and Control Standard (Appendix C).
 3. Develop and implement effective systems to monitor and review hazard management programs including establishing Occupational Health Metrics (Leading and Lagging).
 4. JO shall ensure that the management of Occupational Health of its employees, contractors, visitors and local community are in accordance with:
 - A) Kuwait Environmental Protection Agency (KEPA) and other Kuwait regulatory requirements; and
 - B) Kingdom of Saudi Arabia regulatory requirements related to Occupational Health; and
 - C) Accepted industry-wide standards and practices as recognized by professional bodies such as the World Health Organization (WHO), US OSHA and the American Conference of Governmental Industrial Hygienist (ACGIH)
 5. Employees whose exposure profile data exceed or has the potential to exceed appropriate OELs, and for which health surveillance is required, shall be enrolled in health surveillance programs managed by their home Non-Operating Company. (Appendix C).
 6. Personnel, vendors, service providers, and consultants with responsibilities in JO's OH Process shall fulfill the Competencies Required for OH Process Standard (Appendix C,)
 7. JO shall implement and maintain Hazard Communication Programs in accordance with the Hazard Communication Standard (Appendix C).

5.0 MEASUREMENT AND VERIFICATION

5.1 Measurement

The following leading and lagging measures shall be tracked to determine the effectiveness of the Process in meeting its stated purpose.

Leading Measures

1. The percent of personal exposure samples collected year-to-date (e.g., TWA, STEL, and C) and documented compared to the annual monitoring plan and measured as follows:
 - Number of personal exposure samples collected year to date and documented.
 - Number of personal exposure samples included in the annual monitoring plan.
2. % of locations with defined SEGs that are current with operations (i.e. three years old or less).
3. % STEL samples associated with current (i.e. updated within the last three years) QEAs completed per sampling plan (Number of STEL samples collected divided by number of STEL samples required by sampling plan developed from current QEA).

Lagging Measures

The number of personal exposure monitoring results exceeding the OEL and measured as follows:

1. Number of personal exposure results (i.e., each individual environmental agent) exceeding the appropriate OEL. (Note that identifying and documenting samples that exceed the OEL can be an indication the OH process is working well and is identifying potential overexposures).
2. Number of personal exposure results (i.e., each individual environmental agent) exceeding the appropriate OEL and where the individual was not using appropriate personal protective equipment (PPE).

If no personal sample results exceed the OEL, report the lagging measures as zero (0).

5.2 Verification

The following steps shall be conducted to verify Process performance.

Review of Process Effectiveness

In accordance with the Assessment step of the Management System Process (MSP), JO Process Sponsor and Process Advisor shall determine the extent to which the Process is accomplishing its purpose and meeting its objectives.

The following steps shall be conducted for Process verification.

Verification of Conformance

JO Process Sponsor and JO Process Advisor shall verify conformance and identify non-conformance with the SHEERS Process as designed and documented annually. A documented verification of conformance of the SHEERS Process shall be based on the following:

- Documents and records
- Demonstrated competence at the point of execution
- Process leading and lagging metrics

5.3 Continual Improvement

JO shall prioritize process performance gaps, non-conformities, and unfulfilled SHEERS expectations identified as part of the Process measurement and verification step. JO shall consider directives, risk, resources, and other local factors, and combine and prioritize improvement opportunities for all SHEERS processes.

The Continual Improvement Plan for processes identifies the following items:

- Improvement opportunities and gaps to be closed
- Resources required
- Responsible person(s)
- Timing and milestones for improvements

5.3.1 Linkage to Annual Business Plan

JO shall have a Continual Improvement Plan based upon gaps identified in measurement and verification of the Process. Process gaps, non-conformances, and improvement opportunities identified shall be summarized and used to assist in building Continual Improvement Plans. The

Continual Improvement Plan includes improvement opportunities for the Process and related Standards. Improvement opportunities from the Continual Improvement Plan shall be incorporated into the business plan.

6.0 REFERENCES

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

6.1 Other References

The following documents inform or are referred to in the content of SHEERS process:

- SHEERS Assurance (Compliance Assurance)
- Environmental Stewardship
- Management of Change
- Fitness for Duty
- Contractor Health Environment and Safety Management
- Emergency Management
- Incident Investigation and Reporting
- Control of Work
- Facility Design and Construction
- Process Safety Standards
- Risk Management

○ Other References

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

Document Title	Links
Chevron Corporation OH Process Flowchart	Flowchart
Occupational Health Management KPC-HSSE-E06-OH Document	
Chevron Occupational Exposure Standards (COES)	COES
Chevron OH Guidance Manual	OH Manual
Chevron GO-1055 Workplace Exposure Monitoring Record	GO-1055
Chevron Policy 566 – Information Retention	Policy 566
Chevron Retention Schedule	Retention Schedule
Chevron Medical Examination Program	MEP
Guidance for Incorporating OH into the Contractor Health, Environment and Safety Process	CHESM
JOSOP 500 – H2S Technical Standard	H2S Technical Standard
KPC-HSSE-E06-OH-S02-TA-01 Biological Hazards and Exposure control	
KPC-HSSE-E06-OH-S02-TA-02 Chemical Handling	

Document Title	Links
KPC-HSSE-E06-OH-S02-TA-03 Employee Health Surveillance	
KPC-HSSE-E06-OH-S02-TA-04 Fatigue Risk Management	
KPC-HSSE-E06-OH-S02-TA-05 Food and drinking water safety	
KPC-HSSE-E06-OH-S02-TA-06 Chemical Hazard Communications	
KPC-HSSE-E06-OH-S02-TA-07 Management of Thermal Stress	
KPC-HSSE-E06-OH-S02-TA-08 Work Related Diseases	
KPC-HSSE-E06-OH-S02-TA-09 Management of Work-related Stress	
KPC-HSSE-E06-OH-S02-TA-10 Noise Exposure Control & Management	
KPC-HSSE-E06-OH-S02-TA-11 Medical Management of Acute Toxic Substances	
KPC-HSSE-E06-OH-S02-TA-13 Vibration Monitoring and Management	
KPC-HSSE-E06-OH-S02-TA-14 Industrial Hygiene Quantitative Exposure Assessment	
KPC-HSSE-E06-OH-S02-TA-15 Management and Control of Asbestos	
KPC-HSSE-E06-OH-S02-TA-16 Indoor Air Quality Management	
KPC-HSSE-E06-OH-S02-TA-17 Radiation Evaluation and Control	
KPC-HSSE-E06-OH-S02-TA-18 Industrial Hygiene Qualitative Exposure Assessment	
KPC-HSSE-E06-OH-S02-TA-19 Drug and Alcohol	

APPENDIXES

Appendix A:

[Roles and Responsibilities](#)

Appendix B:

[Abbreviations & Definitions](#)

Appendix C: Procedure

Standards establish requirements to implement the OH Process and are described in the appendices to this process.

Guidance and tools for the OH Process, Standards, and Chevron Occupational Exposure Standards (COESs) can be found on the Corporate OH Community of Practice site and in the JO OH Manual.

1. Exposure Assessment Standard

[Exposure Assessment Standard](#)

This Standard contains the requirements that JO shall meet for exposure assessments.

2. Exposure Prevention and Control Standard

[Exposure Prevention and Control Standard](#)

This Standard contains the requirements that JO shall meet for exposure prevention and control.

3. Health Surveillance Standard

[Health Surveillance Standard](#)

This Standard contains the requirements that JO shall meet for health surveillance.

4. Competencies Required for OH Process

[Competencies Required for OH Process](#)

This Standard contains the levels of competency that JO shall meet.

5. Hazard Communication Standard

[Hazard Communication Standard](#)

This Standard contains the requirements that JO shall meet for the communication of the physical and health hazards of a hazardous chemical.

Appendix D:

[**SHEERS Expectations Met**](#)