

Retail Contractor Health and Safety Requirements



Version 5.2C

Issue Date: December 2016

Summary of Changes since last revision

Version	Short Description of the Change
5.0	Changes / new requirements are reported in the pdf document available in GDS
5.1	Updated to align with Working at Height version 3.0 and include all Partner Organizations working in Retail
5.2	Updated to align with Control Framework changes for 2017 (Work at Heights, Contractor Manual, and Hot Works)
5.2C Dec 2016	Updated to include Canada localization and adoption of mandatory criteria (must and shall). Include references to POST and SSW requiring the partner to perform a comparison between PtW and any alternate system to ensure all PtW requirements are met. NM/PI, TRC and LSR requirements and KPIs by contract holder as part of business review min qtrly. LOPC defined and specified as any hazardous product. Set 1 business day for notification of 12-120L LOPC. Minor updates to all sections.

Table of Contents

1.0	Purpose & Scope	
3		
2.0	Applicability & Implementation	
3		
3.0	Executive Summary	
3		
HSSE & SP Management system Manual		
4.0	Managing Risk	
4		
5.0	Emergency Response	
4		
6.0	Management of Change	
5		
7.0	Permit to Work	
5		
8.0	Planning & Procedures	
6		
9.0	Incident Investigation & Learning	
7		
10.0	Performance , Monitoring & Reporting	
8		
HEALTH		
11.0	Alcohol & Drugs	9
12.0	Asbestos & Refractory Ceramic Fibres	
10		
13.0	Fitness to Work	
12		
14.0	Health Risk Assessment	
12		
15.0	Hearing Conversation	
13		
16.0	Legionella	
14		
17.0	Malaria	15
18.0	Occupational Exposure Limits	
17		
PROCESS SAFETY MANUAL		
19.0	Asset Integrity - Process Safety	
17		
PERSONAL SAFETY MANUAL		
20.0	Cleaning of Storage Tanks	
18		
21.0	Confined Space Work	
19		
22.0	Electrical Safety	
21		
23.0	Excavation	
22		

24.0	Hot Work	23
25.0	Lifting and Hoisting	
	25	
26.0	Personal Protective Equipment	
	26	
27.0	Safe Isolation - Lock Out Tag Out	
	27	
28.0	Working at Height	
	28	

ENVIRONMENTAL MANUAL

29.0	Ozone Depleting Substances	
	29	
30.0	Soil and Groundwater (RBSAM)	
	30	
31.0	Waste	
	30	

TRANSPORT MANUAL

32.0	Driver Safety	
	31	
33.0	Road Safety in High Risk Environments	
	32	

1.0 Purpose & Scope

The purpose of this document is to set forth Shell Retail's Contractor Health & Safety Requirements as defined by the Shell HSSE Control Framework. This document supplements and is to be used in conjunction with all other applicable requirements and applicable laws.

Safety is the number one priority for all work performed. No one shall compromise safety in any way. If there is any doubt as to whether an activity is safe; stop, assess and determine the appropriate course of action and contact your supervisor as necessary. All employees and Contractors are authorized to stop the work if there is a genuine Health, Safety, Security or Environmental (HSSE) concern about the work.

Applicable country laws shall be complied with when performing all work. In the event of any inconsistency between the provisions of this document and applicable law, the more stringent requirement shall prevail.

2.0 Applicability & Implementation

This document applies to all contractors and subcontractors who perform work at Shell Retail locations. This includes Facilities Maintenance Contractors (FMC), Engineering, Procurement Construction Management contractors (EPCM), Soil & Groundwater Consultants (SGW), Real Estate Consultants (RE), Level 3 contractors, Level 4 subcontractors, Marketing contractors, IT

contractors and any other contractors or subcontractors performing work at Shell Retail locations.

The method of implementation of these requirements is at the discretion of the individual contractors. At a minimum, these requirements must be reflected in contractor Job Hazard Analyses (JHA), specific procedures and training programs as applicable. [Note: For the US and CA, a Job Safety Analysis (JSA) shall be used in lieu of a JHA]

Please be aware that these are the Shell Control Framework Manual Requirements. These requirements are the minimum level and the adherence with local legislation is mandatory.

If a local Market can't comply with the requirements, they have to report this to their local Network Delivery Manager as soon as possible.

3.0 Executive Summary

This document is made to explain the requirements of the Control Framework Manuals which are applicable for Retail Contractors. With Contractor we mean all Contractors working on Design, Construction, Maintenance, Marketing, Soil & Groundwater, IT, Real Estate, etc.

In most markets Partner Organizations (e.g. FMC, EPCM, SGW, or RE) manage Contractors on behalf of Shell. If a Contractor is engaged directly by Shell the responsibility would change from Partner Organization to the relevant position in Shell.

It is the obligation of the Partner Organizations and all Contractors to comply with these requirements and to show evidence for this compliance.

Shell has a structured process in place to check, monitor and review the compliance. The Contract Holder of the Contractor plays a leading role in this Assurance Process.

4 MANAGING RISK

Purpose is to establish a process to identify HSSE Hazards and to reduce the Risks to ALARP (as Low as reasonably practicable).

REQUIREMENTS

HSSE Risks are identified and classified in the Retail Engineering and SGW Contractor Safety Case, available in GIDS. For all medium risks, Partner Organizations are required to have Safe Work Guidelines, that contain at minimum these controls to ensure the risks are mitigated to ALARP. These Guidelines are available in English and all can be found in GIDS.

The local Partner Organizations need to:

- Train all Contractors via Toolbox Talks or other training programs so that all Contractors are aware of these risks and controls

- Assure themselves that Contractors understand the controls and have implemented them in JHA/JSAs and Safe Work Guidelines

-Contractors need to ensure that all of their employees understand how to mitigate medium risk activities by implementing the controls described in the Safe Work Guidelines.

FMC, EPCM, and SGW partners specifically need to review the Retail Engineering and SGW Contractor Safety Case as existing operations/activities can change in a way that the effectiveness of the Controls and Recovery Measures are reduced.

This review should take place once a year and all Incidents, Near Misses and Potential Incidents, Audit Findings and new Activities are taken into consideration.

After the review Shell should be informed and all Contractors should also update their **Contract HSSE Plan**, Toolbox Talks or JHAs to ensure mitigation of the new risks.

5 EMERGENCY RESPONSE

Purpose is to plan and prepare for Emergency Response to incidents that mitigates the Consequences and enables normal operations to be resumed

REQUIREMENTS

There are 3 actions coming from the requirements of this Control Framework Manual

- 1) Partner Organizations should have a MU Emergency Response Plan (ERP) effective 24/7 for all risk scenarios under their control. This means that in case of Emergency after Office Hours or in the Weekend, L2 should be available in order to call a L3 Contractor to assist in the emergency (i.e. safeguarding a Site/Canopy).
- 2) Be aware of their responsibilities in the Shell MU ERP and provide resources accordingly.
 - o In case of an incident on Site, the Retailer/Site Manager is the Incident Manager and everybody, including the Contractors, should listen to his/her instructions.
 - o If the incident happens within the fenced work area that can be contained by the L3 Contractor Staff, the L3 Site Supervisor or Permit Holder will be in charge. However the Retailer/Site Manager should be informed on the Emergency Situation so that the Retailer/Site Manager can take the right steps to safeguard the Site.

- 3) Minimum requirements for first aid kits must comply with local legislation and include burn kits when conducting Hydrocarbon related hazardous works at site. Other minimum requirements:
- o First aid kits must be maintained in readily accessible locations on each job site.
 - o For mobile or vehicle-based operations in remote locations, first aid kits may be necessary in vehicles.
 - o Kits will be inspected for completeness prior to being sent to a work location and on a regular basis while in use. Any items not approved for the kit will be removed during inspection.
 - o Appropriate first aid must be used to treat any burns or scalds as soon as possible. This will limit the amount of damage to your skin.

6 MANAGEMENT OF CHANGE (MoC)

Purpose is to manage the HSSE & SP risks resulting from unforeseen consequences of Changes.

The Manual section applies to:

- Specification or Procedural Changes
- Organizational Changes

It is only needed where it may have a HSSE impact.

REQUIREMENTS

- 1) Partner Organizations should develop and apply their own MoC Procedure
- 2) Notify Shell if it has a HSSE impact for Shell.

Ad 1) MU Partner Organizations should inform the relevant Shell Contract Holder in the MU if there is a process Change, a Procedural Change or an Organizational Change within their Organization or their activities which has a HSSE impact for Shell.

7 PERMIT TO WORK (PtW)

Purpose is to manage the risk of Hazardous work and work that could interfere with other hazardous operations.

REQUIREMENTS

There are 2 actions coming from the requirements of this Control Framework Manual

- 1) Establish, Implement and maintain the Retail Permit to Work Procedure (see latest version Retail PtW version in GIDS HSSE).
- 2) Train all Contractors, Permit Issuers and Permit Holders when needed

Ad 1) Establish, Implement and maintain the Retail Permit to Work Procedure.

- Partner Organizations to ensure that all Contractors are trained with the PtW process and that the PtW process is implemented with every activity on a Shell Site.
- All Contractors have training logs of all their workers to ensure compliance
- The Retail PtW system is explained in the GIDS standard. Any alternate work permit system (such as POST in Canada and Safe System of Work in the US) shall be compared to the Shell PtW system by the Partner organization. Any requirement in the Retail PtW system that is not included in the alternate system must be incorporated into the alternate system and the training program the Partner provides to the contractors.

Ad 2) Train all Contractors, Permit Issuers and Permit Holders when needed

- Partner Organizations to keep a record of all competent Permit Issuers and Holders. All high risk work (as defined in Retail PtW) must follow PtW requirements including specialized training for Permit Issuers and Permit holders. Partners and L3 Contractors, must assure that Permit Issuers and Holders are competent and understand their individual responsibilities.

The Retail HSSE CoE will provide the latest version of the PtW version in English and it is up to the Partner Organizations to translate and adapt it to the local situation as long the minimum requirements of the Global version are guaranteed.

8 PLANNING AND PROCEDURES

The Purpose is to integrate the requirements of the Shell HSSE & Control Framework into Business Plans and Procedures

REQUIREMENTS

There are 3 requirements from this Control Framework Manual

- 1) Integrate the HSSE & SP Objectives, HSSE & SP targets and HSSE plans into the operational Plan
- 2) Develop and maintain Procedures to implement the requirements of the CF and to manage the HSSE Risks
- 3) Communicate the Plan and Procedures

Ad 1) Integrate the HSSE & SP Objectives, HSSE & SP targets and HSSE plans into the operational Plan

- Partner Organizations to integrate the HSSE Objectives, the HSSE targets and the HSSE plans into their Business Plan. This should be done at Global and at Local level ensuring alignment between the two.

Ad 2) Develop and maintain Procedures to implement the requirements of the CF and to manage the HSSE Risks

- Where applicable Shell will develop Contractor HSSE Requirements and Technical Standards and Procedures (GIDS).
- Partner Organizations are responsible for applying Shell requirements including development of operational Standards when needed.

Ad 3) Communicate the HSSE Plan and Procedures

- Partner Organizations are responsible to ensure that the yearly HSSE plan and the Shell Requirements are communicated to and implemented by the Contractors.

9 INCIDENT INVESTIGATION AND LEARNING

The purpose is to log, investigate and learn from Incidents

REQUIREMENTS

There are 7 actions coming from the requirements of this Control Framework Manual

- 1) Contractors should report all Incidents, including Near Misses and Potential Incidents. They can use their own systems for this.
- 2) In case of an incident (see below) the relevant Shell Contract Holder should be notified as soon as possible
- 3) Partner Organizations should make an initial classification of the Incident, if needed with the support of the local HSSE Manager
- 4) The relevant Shell Contract Holder to log the Incident in Fountain Incident Management
- 5) Partner Organizations to investigate the Incident within 30 days
- 6) Make a final classification based on the outcome of the incident investigation
- 7) Learn from Incidents, Fatalities, High Potential Incidents and High Severity Incidents through communication and implementation of required actions



Retail Contractor Incident Reporting Pr

Ad 1) Workers must report all significant Near Misses/Potential Incidents and are encouraged to report all NM/PIs regardless of potential severity. The Shell contract holder shall set minimum requirements for reporting with the Partner Organizations. Partner Organizations shall supply a detailed account of Near

Misses and Potential Incidents (NMPI) to the Shell MU HSSE Manager on the 15th working day of the following month. A NMPI summary is to be part of the HSSE dashboard at each business review and must be done at least quarterly. The Partner Organizations should use these reports to identify areas for additional HSSE focus in the following months.

Loss of Primary Containment (LOPC) - Any time a hazardous product escapes from its intended location, regardless of the presence or absence of secondary containment.

- LOPC Less than 10KG (<12L equivalent gas/diesel) is to be reported as a NM/PI;
- LOPC 10KG-100KG (12L -120L equivalent gas/diesel) must be reported within 1 business day as Incident with Consequences to the Shell MU HSSE Manager or Wet stock focal who will determine if a full investigation report and LFI is required.
- LOPCs >100KG (>120L equivalent gas/diesel) requires reporting in the same manner as a TRC, with immediate notification and initial incident report within 24 hours, the final investigation report completed and approved within 30 calendar days, and a LFI within 45 days of the incident (see Ad 2-7)

Ad 2) Partner Organizations need to notify their relevant Shell Contract Holder of all Incidents (fatalities, LOPC > 120L), total recordable cases (TRC), Medical treatment cases (MTC) and LSR Breaches within 24 hours. The relevant Shell Contract Holder must inform the MU NDM and the MU HSSE Manager

Ad 3) Partner Organizations should make an initial classification of the Incident Fatality, Lost of Primary Containment (LOPC), Total Recordable Case (TRC), Medical Treatment Case (MTC) and LSR Breaches within 3 days. Final classification will be determined with agreement of the Shell MU HSSE Manager



Classification TRC or
FAC.doc

Ad 4) The relevant Shell Contract Holder must enter the incident in FIM and be identified as the Responsible Supervisor

Ad 5) Partner Organizations must set up an Investigation team and this Team to finalize the Investigation Report within 30 Calendar days of the incident.

This Investigation Report must contain a root cause analysis, learnings and actions that will be undertaken to reduce the possibility of the same incident from recurring

Ad 6) After the Investigation report has been reviewed and approved by the Contract Owner the NDM and MU HSSE manager, the Investigation report can be classified as final.

Ad 7) Partner Organizations should make Learning from Incident (LFI) within 6 weeks (Calendar Days) after the Incident occurrence. This LFI must be approved by the relevant Shell Contract Holder and the Shell MU HSSE Manager and should be communicated to all relevant persons to ensure that the incident will not reoccur.

10 PERFORMANCE MONITORING AND REPORTING

The Purpose is to report HSSE Performance data to Group that are relevant, consistent, transparent, accurate and complete, for consolidation by the VP HSSE Reporting for internal review and public disclosure.

REQUIREMENTS

There are 5 actions coming from the requirements of this Control Framework Manual

Local Partner Organizations to collect HSSE & SP Performance data. This data that needs to be collect every month is:

- a. Exposure hours for all contractors (L2. L3. L4 etc.)
 - The exposure hours need to be reported by the Partner Organizations to the MU HSSE manager. This includes exposure hours of all contractors (L2, L3, L4 etc.) working for the Shell Account.
 - Actual work hours are the preferred standard, although it is permissible to use estimated hours. For example; based on the budgeted labor amount, or an average calculated labor per work order. When providing estimated values, describe the method of estimation when submitting data.
 - Estimations must be reviewed by the Partner a minimum of 2x per year. This should be interpreted as revisiting any assumptions which have been made in calculating exposures hours to ensure they are still valid.
- b. KM driven for all contractors
 - If members of the Partner Organization's staff are driving exclusively for the Shell account, the business KMs of those staff shall be reported

by the Partner Organizations to the MU HSSE Manager.

- Partners who do not have drivers who operate vehicles exclusively for the Shell account are exempt from reporting any KM data to Shell.
- The number of kilometers can be estimated if the method of estimation is provided.
- Estimations must be reviewed by the Partner a minimum of 2x per year. This should be interpreted as revisiting any assumptions which have been made in calculating KM driven to ensure they are still valid.

c. Number of Near Misses / Potential Incidents

- Number of NMPI must be reported to the MU HSSE Managers monthly. NM/PI information must be shared as part of the HSSE portion of the business review.

b. Number of Total recordable Incidents (refer to chapter 9 Incident Investigation and Learning)

- Total Recordable Cases (TRC) must be reported to the MU HSSE Managers monthly. TRC information must be shared as part of the HSSE portion of the business review.

d. Hazardous Waste

- Controlled Hazardous Waste collected by the L2 Partner Organizations and their L3 Contractors that is generated exclusively from the Shell account, shall be reported to the MU HSSE Manager or reporting focal point quarterly.
- Local Partner Organizations to report this data to the local HSSE manager or reporting focal before the 15th day of March, June, September, and December for the preceding 3 month period.
- Global Partner Organizations are to report this data according to their Global Contract requirements

11 ALCOHOL AND DRUGS

The purpose is to manage the risk caused by the use of Alcohol and Drugs

REQUIREMENTS

There are 2 actions from the requirements of this Control Framework Manual

- 1) Establish and Maintain an Alcohol & Drugs Policy
- 2) Establish and maintain procedures to implement this Policy

Ad1) Establish and maintain an Alcohol & Drugs Policy

- Partner Organizations to establish and maintain an Alcohol & Drugs Policy and to ensure that Contractors also establish and maintain an Alcohol & Drugs Policy for their own Organization. Policy should include:
 - 1) Standards of Behaviour
 - 2) Awareness Training
 - 3) Testing*

Ad 2) Establish and maintain procedures to implement this Policy

- Partner Organizations to establish and maintain procedures to implement an Alcohol & Drugs Policy and to ensure that Contractors also establish and maintain procedures to implement an Alcohol & Drugs Policy for their own Organization. Procedures should include:
 - 1) Design of Alcohol & Drugs testing *
 - 2) Disciplinary Measures

Explanation *:

Alcohol and / or Drug testing may be required where the contractor Staff appearance, actions, or behavior suggest that they may be affected by drugs and/or alcohol ("Reasonable Cause"). In practice there should usually be at least two people who have seen the person and have reason to believe that the person may be affected by drugs/alcohol, and that the person may be a source of actual or potential harm to themselves or others in the workplace.

Persons involved in an incident (vehicle & mobile equipment incidents, injuries, property damage and near miss incidents) should also be tested if this is required in the investigation of the incident.

Of course legal law and regulations should be taken into consideration.

It is up to the Partner Organizations to take more proactive steps like random tests to all personnel working on a Site (including visitors). This is however not mandatory

12 ASBESTOS and REFRACTORY CERAMIC FIBRES

Purpose is to manage risks associated with exposure of Asbestos and Refractory Ceramic Fibres on Shell assets, facilities, operations and projects.

Be Aware: Where ever it says Partner Organizations *in this particular Asbestos Manual* we mean: FMC, SGW and competent EPCM if allowed by EPCM's Corporate Policy

REQUIREMENTS

There are 3 actions coming from the requirements of this Control Framework Manual

- 1) Identify where we have Asbestos on our Sites and maintain a Register
- 2) Manage Asbestos on Site and make the risks as low as reasonably practicable
- 3) Develop a Procedure to remove the Asbestos

Ad1) Identify where we have Asbestos on our own Sites and make a Register

Identify where we have Asbestos on our Sites by:

- Partner Organizations to do a Desk Top Exercise; find out where we could have Asbestos on Shell Retail Sites. Register should be made per country based on the local legal requirements.

Per OU there should be list of:

Category 1 - Sites where we think that there is Asbestos.

Category 2 - Sites where we think there is no Asbestos but we are not sure.

Category 3 - We know that there is no Asbestos on Site.

Reasonable Criteria Partner Organizations can use to define the risk categories are:

- i. Any previous asbestos identified at site
- ii. Local knowledge
- iii. Local documentation
- iv. Global documentation
- v. Type of construction i.e. steel work and no materials used have history of containing asbestos
- vi. Age

- 1) If any of the above indicates that there is Asbestos Containing Materials on site we would categorise as Category 1 Sites - Definitely have asbestos identified
- 2) If above indicates that there is no Asbestos however potential for asbestos i.e. age, history of asbestos on site but removed , type of construction indicates ACM could have been used it would categorize them as Category 2 Sites - potential to have asbestos however not thought to
- 3) If above states that there is definitely no asbestos then it categorise them a Category 3 Sites - no Asbestos

- If there are any Category 1 Sites, Partner Organizations or their certified Contractor should carry out an onsite survey to identify Asbestos on site - this would cover identifying asbestos which could be damaged or disturbed by normal activities
- If there are any Category 2 Sites, Partner Organizations or their certified Contractor should carry out a survey to identify Asbestos.
- Partner Organizations to appoint a certified Contractor to identify and document a register of Asbestos on the High Risk

Sites and also to mark the Asbestos so that Site Staff knows where the Asbestos is. This Register will include location, condition and quantity for as much as this is possible.

- FMC should be owner of the Register and should share it with Shell, EPCM and other Partner Organizations involved
- HSSE CoE to inform Site Staff working for High and Medium risk Sites about the risks.
- Partner Organizations will create a generic Register for the medium risk Sites. In this generic Register we will mention the typically places where Asbestos could be located.
- Partner Organizations will train Contractors to be aware of Asbestos and to identify Asbestos when they are working on Site. If Asbestos is found they should stop the maintenance or construction activities and Partner Organizations should ask the certified Contractor to do an assessment on the Asbestos (condition quantity, type and location), remove it when possible or mark it.
- Partner Organizations to determine what frequency of inspection is required to determine the condition of the Asbestos which is to remain in-situ
- The Partner Organizations should be aware that if there is any construction or Knock down rebuild (KDR) occurring on a Retail Site where Asbestos is present, the procedure to remove the Asbestos (see Ad 3) needs to commence in order to remove the Asbestos before the construction begins.
- If the Asbestos, during the Site Visits, can be removed without any construction, a procedure to remove this Asbestos (see Ad 3) needs to be documented by the Partner Organizations and their approved Contractor in order to remove the Asbestos as soon as possible.

Ad 2) Manage Asbestos on Site and make the risks as low as reasonably practicable

- Shell will inform and explain to Site Staff how to handle Asbestos via the Site Policy and Procedure Manual, this is the HSSE manual for the Retailers

Ad 3) Develop a Procedure to remove the Asbestos

- Partner Organizations to appoint an authorized and approved Contractor per Market Unit for work on or removal of Asbestos.
- Partner Organizations to create an exposure prevention procedure which describes the process that is required if we find Asbestos on Site (intrusive Survey)
- This approved Contractor should be issued an approved Permit to Work every time Asbestos is worked on or removed.
- This approved Contractor should have a Job Hazard Analysis (JHA) and Work Procedure that requires :

- 1) Enclosure, segregation and signposting of the work area that may be contaminated
 - 2) Protective clothing and respiratory protection
 - 3) Personal hygiene facilities
 - 4) Waste collection, labeling and disposal
 - 5) Exposure monitoring and clearance testing
- And where appropriate
 - 1) Ventilation or Air filtration equipment
 - 2) Decontamination Unit
 - The approved Contractor should inform the Partner Organizations when the Asbestos is encountered so that the Partner Organizations can update the Register.
 - Contractors should not introduce Asbestos or Refractory Ceramic Fibres into new construction or existing Retail Sites.

13 FITNESS TO WORK

The purpose is to reduce the risk of Injury, Illness or Incidents be evaluation of fitness to Work

For Retail Contractors this Manual applies to:

- Crane Operator Work
- Activities where we need respiratory protection (a tight seal) to protect the user

REQUIREMENTS

There are actions coming from the requirements of this Control Framework Manual:

- Partner Organizations to verify that the Contractors are familiar with these requirements of having a Fitness to work certificate before they can start doing their work.
- Contractors doing activities which apply to this manual should have a Fitness to Work process to ensure that the Contractor worker is deemed unfit for the works until the Fitness to work evaluations are completed and the person is deemed fit.

14 HEALTH RISK ASSESSMENT

The purpose is to avoid harm to people due to Health Hazard by carrying out Health Risk Assessment (HRA) and implementing the control and recovery measures specified

For contractors, the inclusion of identified health hazards and controls in JHAs is sufficient - a specific HRA will not be required if this is completed.

This Manual applies to

- Contractor activities
- All Health Hazards associated with work

REQUIREMENTS

- The Contractor is responsible for implementing the following requirements:
 - Include identified health hazards and how to manage those Health Risks associated in all JHA's (hazards and controls can be found in the Safe Work Guidelines in GIDS)
 - Ensure all required Material Safety Data Sheets are on site
 - Update JHAs periodically

15 HEARING CONSERVATION

The Purpose is to prevent Noise Induced Hearing Loss in the workplace

REQUIREMENTS

There are 8 actions coming from the requirements of this Control Framework Manual:

Partner Organizations to identify and assess through Health Risk Assessment those tasks and areas where Noise Levels could result in Noise Induced Hearing Loss.

- a. Update noise assessments when equipment or conditions change in a way that may increase the exposure of personnel to noise.

Contractors to reduce noise exposure to As Low As Reasonably Practicable in the workplace using the following Hierarchy of Controls.

- a. Beginning with the first Control, assess each in turn to select a control or controls that reduce exposure to noise to As Low As Reasonably Practicable:
 - i. First: Eliminate equipment that makes noise.
 - ii. Second: Substitute equipment with other equipment that makes less noise.
 - iii. Third: Isolate equipment that makes noise.
 - iv. Fourth: Apply engineering Controls to equipment that cannot be eliminated or substituted to reduce Noise Levels in the workplace to less than 85 dB (A).
 - v. Fifth: Apply procedural Controls to reduce duration or magnitude of exposure.
 - vi. Sixth: Provide personal hearing protection.

- b. Do maintenance to keep Noise Levels in line with the equipment design criteria.

Keep peak Noise Levels in the workplace below 140 dB(C).

- a. This value applies irrespective of the duration of the exposure or the use of hearing protection.

Keep the exposure of personnel to noise below 85 dB (A) for an eight-hour Noise Dose.

Do the following when hearing protection or procedural Controls are used to maintain exposure below 85dB(A) for an eight-hour Noise Dose:

- a. Establish hearing protection zones based on a Noise Contour of 85 dB (A) and identify them with marking/signage.
 - i. When portable equipment is the source of the noise use location drawings, equipment marking or other controls to identify hearing protection zones.
- b. Partner Organizations to train the Contractors to train personnel who enter hearing protection zones about noise hazards, describing:
 - i. how to identify areas where hearing protection is required;
 - ii. the correct use and maintenance of hearing protection;
 - iii. the effect of noise on hearing; and
 - iv. how to prevent Noise Induced Hearing Loss.
- c. Partner Organizations to advise Contractors in selecting hearing protection that fits, and reduces exposure of personnel below 85dB (A) for an eight-hour Noise Dose.
- d. Partner Organizations to advise Contractors to identify typical Noise Levels for all equipment and work activity at site and identify where hearing protection or procedural controls are necessary.

Partner Organizations to advise Contractors to provide hearing protection to everyone who may enter identified hearing protection zones.

Partner Organizations to instruct Contractors to wear hearing protection at all times when entering or working in an identified hearing protection zone and verify use.

Partner Organizations to instruct Contractors to select equipment that will reduce Noise Levels to As Low As Reasonably Practicable.

16 LEGIONELLA

The Purpose is to manage risks associated with exposure to Legionella in the Workplace.

GIDS 04.008 vs.1.1: Legionella Bacteria - Prevention at Retail Sites

REQUIREMENTS

There are 3 actions coming from the requirements of the Control Framework Manual

- 1) Identify and document water systems and equipment on a Retail Site that are a potential source of Legionella
- 2) Assess these Water systems and equipment for the risk of Legionella.
- 3) Determine a monitoring and control program for Legionella in water systems at the Retail Site and in equipment at risk, and document results.

These 3 Actions must lead to an implementation of a Legionella Management Program which needs to be implemented in every MU.

Ad 1) Identify and document water systems and equipment on a Retail Site that are a potential source of Legionella

- FMC to identify and document possible Legionella sources on a Retail Site. (Key Factors to identify possible Legionella sources - see GIDS 04.008 vs. 1.1 Chapter 5).
- FMC is the owner of this document and also responsible for updates



LEGIONELLAS
HACCP_2013.docx

Here is a risk assessment document that can be used to assess the risk of Legionella

Ad 2) Assess these Water systems and equipment for the risk of Legionella.

- FMC to assess these water systems for the risk of Legionella.
 - 1) FMC to evaluate risk factors, including water aerosol formation, stagnant water, dead zones, water temperature, mineral deposits and visible Biofilm
 - 2) FMC to reassess the Legionella risk if there is a change in design or operational change.

Ad 3) Determine a monitoring and control program for Legionella in water systems at the Retail Site and in equipment at risk, and document results.

- A program should be set up by the FMC to
 - 1) Minimize water misting, stagnant water and dead zones (action FMC)
 - 2) Manage water temperature (Retailer to monitor and FMC to support)
 - 3) Implement a preventative maintenance and inspection program to monitor equipment (action FMC)
 - 4) Conduct Legionella testing of water systems and equipment (sampling by Retailer and FMC)
- Restrict access and apply corrective action to clean and disinfect Legionella contaminated systems and equipment when

Legionella water test exceed local requirements or exceed more than 100 CFU/ml. (action FMC via certified Contractor)

- Appoint certified L3 Contractor for work activities (trained and experienced) on Legionella contaminated systems and equipment (action FMC)
- Establish alerts to inform Site Staff and Customers about the presence of Legionella contamination and the measures to be taken (CoE HSSE to update SPPM)

17 **MALARIA**

Note for Canada and USA - Canada and the US are considered by the world health organization to be a Malaria free zones. Therefore risk management is not required.

The Purpose it to manage the risk of Malaria

REQUIREMENTS

There are 5 actions for Partner Organizations coming from the requirements of this Control Framework Manual:

- 1) Partner Organizations to develop a Malaria program based on an assessment of Malaria Risk according to the Malaria Zone Classification provided by Shell Health.
 - a. Partner Organizations to appoint or obtain an Authorized Subject Matter Expert for Malaria to lead the development of the Malaria program based on the local Risk.
 - b. Partner Organizations to provide the resources required for the Malaria program.
- 2) Partner Organizations operating in the following countries, categorized as Zones 1 - 4, must have a program in place to manage the risk of Malaria:

List of Malaria Endemic Countries in DS1 Retail

Country	Area	Risk Zone	Controls
Argentina	LA	2	A,B,C,D
China	East	2, 4	A,B,C,D,E
India	East	3, 4	A,B,C,D,E
Indonesia	East	4	A,B,C,D,E
Malaysia	East	4	A,B,C,D,E
Pakistan	East	4	A,B,C,D,E
Philippines	East	4	A,B,C,D,E
Thailand	East	1, 4	A,B,C,D,E
Turkey	CSE	2	A,B,C,D
South Africa	SOPAF	4	A,B,C,D,E

Zone 1 - Limited risk

Zone 2 - Low risk

Zone 3 - Medium risk

Zone 4 - High risk

- 3) Partner Organizations to implement the Malaria program as shown in the table below, based on the ABCDEF principles and the Malaria Zone Classification.

Recommended Controls

Principles of Malaria Prevention	Zone			Responsible Person / People
	1	2 & 3	4	
A: Awareness: Make all personnel aware of Malaria risks and prevention	Y	Y	Y	Supervisor
B: Take Personal Bite Control measures	Y	Y	Y	Personnel
C: Take Chemoprophylaxis as prescribed (anti-malarial drugs)	N	Y	Y	Non-immune
D: Make available diagnosis and treatment and a referral capability	Y	Y	Y	Health Professional
E: Emergency Treatment	N	N	Y	Non-immune

- 4) Partner Organizations to review the Malaria program when changes to operations or Organizations are proposed, as described in Management of Change.
- 5) Partner Organizations should:
 - a. communicate to all Contractors how to manage risk of Malaria when Malaria risk is identified through international SOS, WHO and local media/Agency
 - b. Inform L3/L4 Contractors to initiate fogging and housekeeping inspections on regular basis.
 - c. Advise L3/L4 Contractors to ban worker accommodation (if possible) to avoid vector breeding
 - d. Inform L3/L4 Contractors that diagnosis and treatment provisions should not be provided at site and all suspected cases should be referred to nearby medical facilities.

18 OCCUPATIONAL EXPOSURE LIMITS

The Purpose is to manage the Health Risk of occupational exposure to chemical and physical agents by using Occupational Exposure Limits (OELs).

This Manual Section covers Occupational Exposure of Contractors to chemical and physical agents at Shell facilities and installations (like Retail Sites)

COMPLAINEE PROCESS

There are actions coming from the requirements of this Control Framework Manual:

- Shell to manage occupational exposure to chemical and physical agents to whichever of the following is lower
 - 1) Occupational Exposure limits set by legislative authorities (HSSE Manager to check)

- 2) Shell Occupational Exposure limits (see below)
- Contractor is responsible for implementing the following requirements:
 - 1) Contractors must manage the exposure of their personnel to Chemical and Physical Agents to whichever of the following is lower:
 - OEL's set by local legislative authorities
 - For Retail, specific OEL's for **Benzene** as shown below:

Shell Benzene OEL: 0.5 ppm or 1.6 mg/m³ (8 hour time weighted average Limit)
 2.5 ppm or 8 mg/m³ STEL (15 min short term exposure limit)

Ethylene Oxide: 1 ppm or 1.8 mg/m³ (8 hour time weighted average limit)

19 ASSET INTEGRITY – PROCESS SAFETY MANAGEMENT

The Purpose is to:

- Prevent Process safety Incidents resulting from unintentional release of energy or Hazardous Substances
- Define the requirements in technical standards for design and construction that have a direct relationship to Process Safety
- Prevent reoccurrence of known major Process Safety Incidents by focusing on their main causes and key barriers

This Manual Section applies to:

- Automotive LPG, CNG, H₂, and LNG at CO sites (irrespective of who owns the equipment)
- Any HSSE Critical Shell owned equipment at any operating platforms.

REQUIREMENTS

Application of the manual requirements relevant to Engineering in Retail includes

- Standards for new HSSE Critical equipment
- Minimum standards for existing HSSE Critical equipment
- A requirement for each site to have a "statement of fitness" confirming that the LPG, CNG, H₂, and LNG equipment and operations meet minimum requirements
- Inspection and test programs
- Minimum competence requirements for HSSE Critical Roles

All relevant standards are currently stored in the following portal

<https://eu001-sp.shell.com/sites/AAAAA2137/LPG/default.aspx>

The engineering standards are also in GIDS sections 9 & 10. Critical equipment inspection and testing standards are applicable to more than one control framework manual and are defined in GIDS 04.011.

There are actions coming from the requirements of this Control Framework Manual:

- All Partner Organizations and Contractor workers working on LPG, CNG, H₂, and LNG should be trained
- FMC must ensure that all LPG, CNG, H₂, and LNG equipment should have a "Statement of Fitness" Certificate
- FMC must ensure that all HSSE Critical Equipment on a Site (Shell owned, any operation platform) should be maintained and inspected according to the Engineering Guidelines or local legal requirement
- Local FMC must have an overview of all legal requirements on inspection or maintenance of Shell owned Equipment (a global overview of the HSSE critical equipment can be found in GIDS website)
- Local FMC must have a procedure in place that ensures that changes in the legislative requirements or new laws concerning inspection or maintenance of Shell owned Equipment

20 CLEANING OF STORAGE TANK

The purpose is to manage the risk associated with the cleaning of Storage tanks

REQUIREMENTS

There are actions coming from the requirements of this Control Framework Manual:

- FMC/EPCM to apply the Hierarchy Of Control as follows:
 - First:** Minimize the need for or reduce the frequency of tank cleaning.
 - Second:** Use Online Cleaning methods that do not require the opening of, or entry into tanks.
 - Third:** Use mechanical cleaning options that do not require workers to enter tanks.
 - Fourth:** Allow personnel entry and manual cleaning of tanks where supported by a documented Risk Assessment. Reference Confined Space Work.
- Contractors to establish and maintain Procedures for tank cleaning in accordance with Internationally Recognized Standards.
 - Procedures must include:
 - 2.1.1. Pre-cleaning inspection to assess the tank contents and roof condition.

2.1.2. Precautions during gas freeing to include vehicle and personnel access restrictions, control of ignition sources and weather conditions.

2.1.3. Emergency Response arrangements during tank cleaning.

- Contractor to apply the Permit to Work for all tank cleaning and recognize, as a minimum, the following Hazards:
 - 1) fire and explosion;
 - 2) toxic substances and asphyxiation;
 - 3) static electricity due to steam and water jetting and grit blasting; and
 - 4) pyrophoric scale.

- FMC/EPCM to select a specialist Contractor for tank cleaning
- Approvals must be obtained from the GM network development and GM of retail engineering prior to tank entry.

21 CONFINED SPACE WORK

The purpose is to prevent or reduce the consequences of Incidents related to planning, preparing, executing and supporting Confined Space Work including Gas Confined Space Entry

REQUIREMENTS

This section applies to work in Confined Spaces. A Confined Space is a fully or partially enclosed space:

- that is not designed and constructed for continuous human occupancy, and
- has limited or restricted means for entry or exit, and
- where there is a risk of injury or health effect from hazardous substances or conditions.

See Appendix 2 of the Retail Permit to Work system for examples of Confined Spaces at Retail locations. For specific requirements related to tank entry, see the Global Standard for Manned Entry and Non-Manned Entry of USTs for Cleaning and Inspection.

The Contractor is responsible for implementing the following requirements:

- Identify Confined Space work (CSW) and implement procedures to manage the risk of CSW:
 - o The CSW procedure must describe local requirements, responsibilities, competence, training and monitoring
 - o All CSW must be controlled by the Permit to Work process
 - o Supervisors must make sure that personnel are informed of the existence and hazards of Confined Spaces and ensure those carrying out entry work are trained
- Reduce risk by applying the Hierarchy of Controls:
 - First:** Eliminate the need for CSW

Second: Avoid the need for Respiratory Protection or skin protection for CSW by eliminating or minimizing flammable, toxic, asphyxiant or other hazards through emptying, flushing, clearing, and ventilating. Avoid the need for hearing protection, fall protection, lifelines or other types of personal protective equipment by removing or controlling hazards.

Third: Specify Respiratory Protection and/or other protective equipment and apply working methods that reduce the exposure time of people in the Confined Space.

The contractor is responsible for implementing the following requirements (to be confirmed by the Permit Issuer prior to issuing the Permit and maintained by the contractor / Permit Holder during the work):

- Verify that the Confined Space is isolated from all potential sources of hazardous material and energy.
- Verify that atmospheric conditions meet the following criteria before entry, and are maintained throughout the work:

	Without Respiratory Protection	With Respiratory Protection
Oxygen %	20 to max. 21.5	>16 to max. 21.5
Toxics	< ½ <u>OEL</u>	< <u>IDLH</u>
Flammables % of <u>LFL</u>	Not detectable (<1)	<10 For hot work - not detectable

- An Authorised Gas Tester must carry out the gas test before the Permit is issued. The test must be documented and provided with the Permit.

All persons involved in gas testing should be adequately trained in the use of gas testing equipment and the interpretation of results, prior to being authorised to undertake gas tests and certify results. The Permit Issuer must ensure

- The work area is clear of flammable and combustible materials before the work starts.
- The tester is competent/trained (incl. a record)
- The equipment has been calibrated and tested.

- The Authorised Gas Tester must test atmosphere continuously to establish that the Confined Space remains free of flammable materials during the work, by means of an Authorised Gas Tester or flammable gas monitoring equipment so occupants in the Confined Space are protected from atmospheric hazards.

Investigate any deviation in the oxygen level or in the contaminant level of toxics or flammables, assess the risks and take appropriate action.

- Allow entry into Confined Spaces, with respiratory protection, only when the source,

nature and concentration of the hazardous atmosphere are understood. A competent person must approve the selection of respiratory protection. A competent person must verify the quality of air supplied from bottles, compressors or ventilators.

- If contaminants or heat in the Confined Space can affect entrants' health, provide a plan for ventilation or other controls prior to entry, list the controls with the Permit and verify that the controls are put in place. Do not use oxygen or oxygen-enriched air to ventilate a Confined Space.

- Include in the Permit the controls required to manage the risks from any energy sources used inside the Confined Space. If electrical equipment is needed inside the Confined Space (e.g. lighting) use low voltage equipment if available. If low voltage equipment is not available, an earth leakage current device or ground fault circuit interrupter must be used to protect entrants against electric shock.

- Verify that lighting in the Confined Space allows entrants to see well enough to work safely

and to exit the space quickly in an emergency.

- Establish a rescue plan for recovering people from the Confined Space. All equipment and other resources including trained responders needed for a rescue must be readily available whenever people are in the Confined Space.

- Indicate the entry points to be used, and barricade or use signs at all other openings to prevent unauthorized entry.

- Station an Attendant outside the Confined Space.

- Verify that the Attendant is present at all times while entrants are in the Confined Space.

Before people enter the Confined Space establish effective means of communication

between the people inside the Confined Space and the Attendant outside.

The Contractor is responsible for implementing the following requirements (to be maintained by the Attendant during the work):

- Prevent unauthorized entry and take action if conditions change.

- Maintain a record of numbers and names of people in the Confined Space.

- Monitor the Confined Space from outside at all times while entrants are inside, and maintain communication with the entrants.

- Stop the work and evacuate the Confined Space if ventilation systems fail, contaminants exceed agreed limits, conditions become unsafe, or other emergencies at the site require evacuation.

- Activate the emergency response plan in the event of emergency.

- The Attendant must not attempt a rescue unless it is defined in the rescue plan.

22 ELECTRICAL SAFETY

The Purpose is to manage the risk to people from electrical Hazards

This section applies to:

- construction, installation, operation, inspection and maintenance; and
- isolation, earthing and testing

REQUIREMENTS

The Contractor is responsible for implementing the following requirements:

- Use a person who is competent in electrical safety to develop and maintain the Electrical Safety Rules for each site. The Electrical Safety Rules of the site must be in line with Internationally Recognized Standards and local legislation.
- Define which people can work on electrical equipment.
- Set responsibilities and requirements for operation, maintenance, identification (labeling) and inspection of electrical equipment.
- Identify the Internationally Recognised Standards, legislation, or requirements to use for equipment design and for control of electrical craftwork.
- Set requirements for electrical work at construction sites.
- Require use of Lock out / Tag out and personal protective equipment to prevent contact with exposed, energized equipment and to protect people from arc flash (see section 18 for further details on Lock out / Tag out).
- Use only people that are competent to work on electrical equipment and authorised to carry out the assigned work in line with the Electrical Safety Rules.
- Use equipment or work instructions that control static electricity to prevent:
 - 1) discharge or arc flash that could harm people or damage HSSE Critical Equipment; or
 - 2) arc flash, fire or explosion due to static discharge from equipment used in Hazardous Areas.
- Manage work on or near electrical equipment and provide safe isolation:
 - 3) De-energize and isolate equipment as required in the Safe Isolation (LO/TO) Section. Verify that there is no voltage and when required use earthing.
 - 4) Use physical barriers, protective equipment, special tools or other controls to prevent harm to personnel when it is not possible to de-energize equipment.
 - 5) Obtain a Permit prior to conducting any high risk live electrical work per the Retail PTW system.

6) Manage work, equipment and use of ladders near underground and overhead electrical hazards to prevent contact with energized lines or equipment.

- Manage electrical work in design and construction:
 - 7) Provide a system to review and approve the design, installation and bringing into service of permanent or temporary electrical systems and facilities.
 - 8) Approve whether newly constructed electrical equipment may be connected to electrical power distribution and generation systems.
 - 9) Verify that electrical drawings are provided and maintained.

See latest version of Retail PtW in GIDS HSSE for the uses of Electrical devices

23 EXCAVATION

The Purpose is to manage the risk of excavation activities

This section applies to:

- Excavations greater than 1.2 meters (4 ft.) deep

This section does not apply to:

- Well drilling or blasting.

REQUIREMENTS

The Contractor is responsible for implementing the following requirements:

- Reduce risk by applying the hierarchy of controls:
 - First:** Eliminate the need for excavation by applying trenchless technology.
 - Second:** Apply Maximum Allowable Slopes or Benching.
 - Third:** Use Shoring or Trench Shields.
- Control excavations in line with the Retail Permit to Work System.
- Apply the Confined Space Work section when working in a confined space.
- Establish and maintain procedures for excavation which must:
 - o State that an Authorised Person for excavation must be appointed for each job.
 - o Specify safe distances from the edge of excavation for the placement of spoil to avoid collapse for different types of surface or soil.
 - o Define means of avoiding underground and overhead infrastructure including:
 - Identification and marking the route of cables, live lines, pipelines or other Hazardous infrastructure; and

- use hand probing and hand tools only (i.e. no powered excavators) within 0.5 meters (1.6 ft.) of a live line, pipeline or power cable, to prevent damage.
- o Specify means and conditions for soil testing and classification.
- o Define maximum allowable slopes or benching or shoring for excavations greater than 1.2 meters (4 ft.) deep.
- o State the restrictions on the placement and movement of excavation machinery to avoid collapse or risk to personnel, including the use of reverse alarm, mirrors and a flag person when maneuvering near an excavation.
- o Specify measures to minimize the impact of adverse weather conditions.
- o Specify barriers and safety signs.
- o Define safe access and exit for personnel.
- o Define a rescue plan and rescue equipment.

On Greenfield sites where the risk of striking underground services is small, the Contractor shall agree with the Partner Organization in which areas and how deep permit control is not required. Excavations deeper than 1.2 meters shall be considered as a confined space and subject to permit control, both on existing and Greenfield sites.

The Authorised Person for excavation (Permit Issuer) is responsible for the following requirements:

- Implement the procedures established for the type of excavation, including the following:
 - o Identify and mark the route of cables, live lines, pipelines or other hazardous infrastructure.
 - o Confirm the location of underground and overhead infrastructure before starting work.
 - o Apply the specified procedures for soil testing and classification.
 - o Inspect excavations and shoring, including areas adjacent to the excavation, for signs of ground instability before each shift, before resuming work after adverse weather conditions and following any incident that may affect its stability.

Note:

If sewers or other underground pipes need to be broken into as part of the work, rats (as they are attracted to wet places) can become a problem and could cause Health issues like Leptospirosis. Leptospirosis is transmitted via direct contact with the body fluid of an acutely infected animal or by exposure to soil or fresh water contaminated with the urine of an animal infected.

The Purpose is to manage the risk of ignition of flammable materials during Hot Work

This section applies to:

- Management of ignition sources during work in, or adjacent to, classified / hazardous areas (as defined by Appendix 3 of the Retail Permit to Work System) and equipment that could contain flammable materials.

This section does not apply to:

- The management of:
 - Health Hazards arising from Hot Work;
 - Ignition potential from permanently installed electrical equipment within a Classified Area; and
 - Ignition in permanently installed operating equipment such as furnaces, boilers and flares;
 - establishing Classified Areas.

REQUIREMENTS

There are actions coming from the requirements of this Control Framework Manual:

The Contractor is responsible for implementing the following requirements:

- Reduce risk by applying the hierarchy of controls:
 - First:** Eliminate hot work whenever possible. Consider the objective of the project and confirm if there is not another means to accomplish; avoid retrofit work that requires cutting into hydrocarbons. Seek alternative methods that could be used such as mechanical fittings or cold cutting techniques.
 - Second:** Carry out work outside the classified area or when the classified area is free of flammable materials
 - Third:** Eliminate ignition sources by selecting alternative work methods or equipment.
 - Fourth:** Implement controls to avoid co-existence of flammable materials and ignition sources during hot work. Additional Controls must include continuous monitoring of the hazardous area to assure gas free before starting any Hot works and through the duration of the Hot Work Activities. PPE must include Flame Retardant upper body and lower body clothing (coveralls are acceptable). All PPE used for Hot works must be non-static charge generating and meet the requirements of Section 26 of this document. Adopt Hot Works isolation philosophy and Site Temporary Closure Criteria that is defined in GIDS 08.080 in the Fuels Design and Procedures Section.
- People who operate, inspect and maintain equipment to be used for hot work in classified areas must be competent to do so.

- Select, inspect and maintain equipment to be used as a Control for hot work in classified areas.
- Manage hot work in line with Retail Permit to Work requirements, and include a Job Hazard Analysis (JHA) as part of planning the work.

Before the Hot Work starts:

The Contractor is responsible for implementing the following requirements (to be confirmed by the Permit Issuer prior to issuing the Permit and maintained by the contractor / Permit Holder during the work):

- Confirm that equipment which could contain flammable materials is gas free and isolated in line with LOTO Manual section before the work begins.
- Clear the work area of flammable and combustible materials before the work starts. Use visual inspection and test the atmosphere.

During the Hot Work:

- Test the atmosphere continuously to establish that the area remains free of flammable materials during the work, by means of an Authorized Gas Tester and flammable gas monitoring equipment.
 - o Intervene if flammable gas concentrations exceed the established set points.
Stop the work and investigate reasons for deviation.
 - o Define and communicate corrective action before resuming the work.
- Maintain a fire watch throughout the hot work.
 - o The Permit Issuer and Permit Holder must establish means of communication
between the fire watch and the workers performing the hot work.

Minimum Specific PPE requirements for working in Hydrocarbon/Hazardous Zones (e.g. Non-static and Flame Retardant) must be defined and implemented.

Examples of PPE requirements for working in hazardous zones can be found in GIDS.

25 LIFTING AND HOISTING

The Purpose is to manage the risks of Lifting and hoisting operations

This section applies to:

- All aspects of lifting and hoisting using pedestal cranes, mobile cranes, overhead and gantry cranes, A-frames, jib cranes, derricks, hoists, and special hoist-supported personnel lifting devices.

This section does not apply to:

- Jacking
- Well operations
- Earth moving
- Fork lift trucks

- Mobile work platforms
- Vehicle maintenance lifts
- Manual lifting

REQUIREMENTS

The Contractor is responsible for implementing the following requirements:

- Establish competence assurance requirements for people who supervise or perform lifting and hoisting operations and who inspect and maintain lifting equipment.
- Equipment to be used for lifting and hoisting must be inspected, maintained and certified in line with the manufacturer's specifications and local legislation. Use equipment only for its intended purpose and within its designed operating limits.
- Apply procedures that are approved by a subject matter expert for lifting and hoisting, which must include the following:
 - **Assign an Authorised Person** for the lifting and hoisting operation, **and a Person In Charge Of The Lift.**
 - Conduct a specific JHA to define the lift plan;
 - Assess site factors to define logistics, crane stability, and radius of operation;
 - Assess load factors to define load integrity and stability.

The Authorised Person (Permit Issuer) for lifting and hoisting is responsible for the following:

- Check the lifting and hoisting equipment before all lifts and confirm that:
 - Equipment is suitable for its intended purpose; and
 - Safety devices are installed and operational.

The Person In Charge Of The Lift is responsible for the following:

- Ensure equipment on site is the same as that specified in the lift plan
- Confirm that required controls are in place and the lift is carried out as per the applicable lift procedure.
- Keep people clear of overhead loads and areas of potential impact.
- Assign a flagman when moving cranes near overhead electrical lines, reversing or maneuvering in an area with plant, machinery or personnel.

26 PERSONAL PROTECTIVE EQUIPMENT

The Purpose is to manage the risk to people where personal protective equipment is used

This section applies to:

- Contractor workers at Shell Retail locations; and

- All visitors entering the active work area

This section does not apply to:

- Shell staff, site staff, customers; their requirements are described in the HSSE MS and SPPM

REQUIREMENTS

At a minimum, all contractor workers must wear a high visibility vest, Safety helmet, eye protection gloves and safety boots at all times. Other PPE including hearing protection, chemical splash protection, breathing protection etc. must be used as required by the contractor's risk assessment (i.e. Work Clearance Form / JHA/JSA) or by the Partner Organizations' PPE Guidelines. Any exceptions to minimum PPE requirements must be fully documented through a risk assessment by the partner organization and recorded on the work clearance form unless previously agreed to by Shell. Temporary removal of items such as gloves to write notes, eye protection for cleaning, or a hard hat to adjust the fit are considered customary and permitted if it is safe to do so and the PPE is immediately returned to use.

All Contractor workers must use the following Hierarchy of Control to manage additional PPE use:

First: Eliminate the Hazard or exposure.

Second: Substitute materials or equipment to reduce the Hazard or exposure.

Third: Use engineering controls to keep the hazard from reaching the worker

Fourth: Use procedural controls to keep the hazard from reaching the worker

Fifth: Use PPE

In cases where PPE must be used, All Contractor workers must have a procedure to manage PPE usage.

This procedure must:

- Specify where and when PPE must be used
- Specify the types of PPE to be used
- Specify methods for making people aware of when and where PPE must be used
- Specify how people are fitted for PPE
- Specify how people are trained to put on and use PPE and trained in the limitations of its use
- Specify how people verify that PPE remains effective when the hazard, exposure or controls change
- Specify how to issue, inspect, maintain, store and replace PPE
- Document the arrangements for people to have fitness evaluation prior to the use of Respiratory Protection in line with Fitness to Work

27 SAFE ISOLATION – LOCK OUT TAG OUT

The Purpose is to manage the risk of exposure of people to Energy and hazardous substances by isolating of equipment and placement of locks and tags

This section applies to:

- Work on equipment in assets, facilities, operations and projects.

This section does not apply to:

- Equipment with flexible wiring and a plug (to insert into a socket) under the exclusive control of the user;
- Isolation of equipment using emergency response procedures;
- Testing of energized electrical equipment (see section 22.0 Electrical Safety)

REQUIREMENTS

There are actions coming from the requirements of this Control Framework Manual:

The Contractor is responsible for implementing the following requirements:

- Protect people from energy and hazardous substances by isolation of equipment, locking movable isolation devices and placing a tag at each point of isolation.
- Establish and maintain isolation and lock out tag out

procedures that include the

Requirements below:

- o Specify the people who are authorised to isolate, lock out and tag out equipment.
- o Identify the types of work that need to be controlled by lock out and tag out and the methods of isolation.
- o Specify the method to place and remove locks and tags at each point of isolation and the method to control locks and keys.
- o Specify the additional controls required and the method of removal that will
 - Maintain an equivalent level of protection when the person who placed a lock or tag is not available to remove it (i.e. if the person is forced to leave the site unexpectedly).

- o Specify the tests to prove that isolation is complete.

- Apply the following Hierarchy of Control for isolation to protect people from energy and hazardous substances:

First: Remove equipment from the sources of hazards, or create an air gap or physical break that prevents the hazard from contacting people.

Second: Isolate equipment from hazards by using a solid physical barrier.

Third: Move to the safe position and lock movable devices, electrical circuit breakers and valves that isolate hazards.

- o When applying this control to isolate electrical equipment, verify that electrical back feed is not possible.
- Control isolation and placement and removal of locks and tags by doing the following:
 - Shut equipment down and remove or drain any sources of stored energy.
 - Isolate equipment from hazards: either disconnect equipment or install or operate isolation devices as close as possible to the equipment being worked on.
 - Place locks and completed tags at isolation points to make it clear to anyone who wants to use or work on the equipment that it is isolated. Use locks and tags that:
 - are readily identified as being used only for isolation;
 - identify the person placing the lock and tag and the time the tag was
 - placed; and
 - are substantial, weatherproof and secure enough to prevent
 - Unauthorized or inadvertent removal.
 - Verify that the equipment is properly isolated and that no stored Energy or
 - Hazards remain.
 - When the work is complete, tell affected people about the plans to remove
 - Isolation and put equipment back in service.
 - Require each person to remove their individual lock, and the person(s)
 - Authorised to remove the tag or tags following an agreed plan to remove isolation and tags.
 - Tell affected people what equipment has been put back in service or energized.
- Require workers protected by isolation to comply with the following:
 - Maintain keys used for isolation in your sole possession or maintained safe in a Group LOTO Box.
 - Do not remove a lock or tag other than one you have placed unless you are
 - Authorized to do so by the lock out tag out procedure:
 - Do not operate or energize a device that is locked or tagged.

- Advise the person named on the tag, or your supervisor, of any tag that has fallen off, or is misplaced.
 - Remove and return tags as specified by the lock out tag out procedure.

28 WORKING AT HEIGHT

The Purpose is to prevent falls and reduce the consequences if a fall occurs when Working at Height

This section applies to:

- All contractor work at Shell Retail locations

REQUIREMENTS

There are actions coming from the requirements of this Control Framework Manual:

- See the Retail Working at Heights Requirements (Version 3.1 October 2016) in GIDS and the Global Procedure on Stand Alone Ladders and Steel Mobile Scaffold ban for further requirements.

29 OZONE DEPLETING SUBSTANCES

The Purpose is to manage the risk from the release of Ozone Depleting Substances

This manual section applies to:

- Shell Assets, facilities, operations, projects and activities.

This manual section does not apply to:

- Domestic-Sized Appliances or drinking water coolers containing Ozone Depleting Substances in sealed systems.

REQUIREMENTS

For more Information see also the GIDS Technical Bulletin 05.002 There are actions coming from the requirements of this Control Framework Manual:

The **FMC** is Accountable for the following requirements:

- o Identify Ozone Depleting Substances and maintain an inventory until they are eliminated.
- o Eliminate Halons and Hard CFCs in all operations by end-of-year 2010 and eliminate HCFCs by end 2020 in accordance with the Montreal Protocol.
- o Do the following until the substances in requirement 2 are eliminated:
 - Remove Ozone Depleting Substances from Non-Sealed Systems.

- Provide controls to prevent loss of Ozone Depleting Substances.
- Provide controls for recovery and destruction of Ozone Depleting Substances.
 - Do not transfer Ozone Depleting Substances to third parties for re-use. Where permitted by legislation, in-company transfers and transfer to Halon banks are permitted.
- Put controls in place so that new installations are not fitted with HCFCs from beginning of year 2010 onwards.
- Provide terms that comply with the requirements above in contracts for the purchase, service or disposal of equipment or refrigerant that contains Ozone Depleting Substances.
- Make Contractor Workers aware of any equipment that contains Ozone Depleting Substances and the controls required before they perform work that could release these substances.
- Apply the Permit to Work system to control work on, or disposal of, equipment that contains Ozone Depleting Substance in line with the requirements above.

30 SOIL AND GROUNDWATER

The Purpose is to manage risks due to soil and groundwater contamination

Retail compliance with Soil and Groundwater Manual is called the RBSAM (risk based site asset management) program.

REQUIREMENTS

There are actions coming from the requirements of this Control Framework Manual:

Standards applicable to RBSAM cover the site life cycle (Acquisition, Operation, Minimum equipment standards & disposal) managed by Real Estate, Environmental services , HSSE and Engineering.

For Engineering the applicable standards include

- GIDS 08.001 Governing principles for fuel systems
 - GIDS 08.024 Product loss investigation procedure
 - GIDS 08.040 UPSS minimum requirements
 - GIDS 04.011 Retail HSSE Critical Equipment Inspection and Testing Requirements
 - GIDS 04.012 NTS checklist
- FMC/EPCM should install and maintain equipment and/or comply with procedures to minimize the risk of leaks and spills.

- FMC to inspect and maintain leak detection and/or containment systems

31 WASTE

The Purpose is to minimize the generation and optimize the re-use of recycling and disposal of Waste

This manual section applies to:

- o All Waste material from Shell installations and activities as described in the different Business Models.

This manual section does not apply to:

- o discharges to surface water;
- o atmospheric emissions;
- o re-injected production water or gas.

REQUIREMENTS

Partner Organizations are Accountable for the following requirements:

- o Incorporate controls to reduce Waste generation into Procedures and working practices.
- o Identify opportunities to reuse Waste for the same or alternative applications, including in other industries, or return unused materials to suppliers.
- o Identify recycling and recovery opportunities for Waste material.
- o Identify, segregate and store Waste.
- o Transport and Dispose of Waste.
 - Verify that trans-national movement of Waste meets the requirements of the Basel Convention.
 - Verify that all other transport of Waste meets Internationally Recognized Standards.
 - When disposing of Waste use where appropriate, government-approved disposal sites, methods and contractors.
 - When disposing of Hazardous Waste maintain segregation from other Waste and use disposal sites that also meet Internationally Recognized Standards.
 - Conduct Land Farming only after considering the risks of leaching or build-up of hazardous substances, and implement appropriate mitigation measures to manage the risks.

- o Retain Waste tracking records for periods defined by local legal requirements and report Hazardous to the MU HSSE Manager.

32 DRIVER SAFETY

The Purpose is to manage the risk of driving and transportation of people and goods on Company Business

For Retail Contractors this manual applies to all Contractors who work and drive 100% for Shell and no other Company. Therefore L3 Contractors do not need to comply with this Manual and only L2 Partner Organizations' Staff who work 100% on the Shell Account potentially are subject to compliance with this manual. Private cars are out of scope as is commuting to and from work is out of scope.

REQUIREMENTS

There are 14 actions coming from the requirements of this Control Framework Manual:

- 1) Partner Organizations to identify which Contractors (Staff) work and drive 100% only for Shell
- 2) All these Drivers need to have a current driving license that is valid for the location, type of vehicle and, where appropriate, the cargo
- 3) All the Drivers need to be physically and mentally capable of operating the Vehicle
 - a. Be rested and alert to maintain attention throughout the trip
 - b. Stop the vehicle and take the rest break if attention is lost
 - c. Do not operate a vehicle while under the influence of alcohol, drugs, narcotics or medication that could impact driving ability
- 4) All the drivers not to make a call or answer a mobile phone or page, send or read a text message or use a hands free mobile phone device while driving a vehicle
- 5) All Cars (all types of vehicle) need to have a three point seatbelt system; the driver needs to use this and also make sure the passengers do so as well.
- 6) All Drivers not to allow unauthorized Passengers in the vehicle
- 7) All Drivers to attend an accredited defensive driving course within 3 months of assignment and refresh training every 2 years, if you drive more than 7500 km a year on Company business
- 8) All drivers need to visually inspect the vehicle daily for roadworthiness including tires and windscreen/windshield
- 9) All drivers need to drive with lights on during daytime except where prohibited by law

- 10) Use Vehicles (company cars, Lease cars, Rental cars, Private cars) equipped with
 - a. Seatbelts and head restraints
 - b. Anti-lock braking system, Vehicle Side Impact Protection and airbags for Company owned contracted, privately owned or leased light vehicle.
- 11) Partner Organizations to challenge the need for people to drive on Company Business
- 12) Drivers to prepare a Journey Management Plan and agree on driving and rest schedule for trips of more than 4 and a half hours. Drivers are not allowed to have trips for more than 10 hours or a combination of work and driving for more than 14 hours
- 13) Partner Organizations do not allow the use of motorbikes with 2 or 3 wheels for Company Business
- 14) Partner Organizations to maintain and equip Company owned or leased vehicles (if under contract for more than 3 months) so that they are
 - a. Fit for purpose based on an assessment of usage
 - b. Kept in safe working order in line with manufactures specifications and local legislative requirements
 - c. Equipped as described in requirement 10

33 ROAD SAFETY HIGH RISK ENVIRONMENT

NOTE: Canada and the US are not considered high risk road safety environments and therefore exempted from these requirements

The Purpose is to manage the risk of driving and transportation of people and goods on Company Business in Road Safety high risk areas

These requirements are additional to the requirements of the previous Manual (Driver Safety).

This manual applies to all Contractors who work and drive 100% for Shell so this means that L3 Contractor do not need to comply with this Manual only Partner Organizations' Staff who work 100% on the Shell Account (for example ROMs, PMs, FMC MTs, Brokers, etc.)

High Risk Areas are:

Argentina, Malaysia, China, India, Indonesia, Pakistan, Philippines, Thailand, Oman Australia, Bulgaria, Poland, Turkey, Russia and South Africa

REQUIREMENTS

There are 3 actions coming from the requirements of this Control Framework Manual:

- 1) HSSE CoE to define the Road Safety High Risk Area's

- 2) Partner Organizations to identify which Contractors (Staff) work and drive 100% only for Shell
- 3) For all Drivers in Road Safety High Risk Areas, provide the following in addition to the requirements that apply from Driver Safety.
 - a. Complete training, which includes
 - i. Induction Training
 - ii. Accredited Defensive Driving Course within three months of employment and refresher training at least every two years
 - iii. fatigue awareness training:
 - iv. product knowledge and associated Hazards training, if transporting Dangerous Goods; and
 - v. Driver Remedial Training
 - b. Comply with the duty, driving, and rest hours specified in the table below, or with local legislative requirements if evaluated by a process approved by the Group Technical Authority for road safety.

	At any time (continuous)	Per Day (24 hours)	Per 7 Days
Max Driving Hours	4.5	9 (extendable to 10 hours up to twice in 7 days)	56
Max Duty Hours		12	72
Max working Week			6 Consecutive days
Min. Break	45 minutes in 12 hours (can be split into 3 x 15 breaks)	11 consecutive hours (reducible to 9 hours up to 3 times in 7 days)	
Min. Shift Break	36 Consecutive hours when changing shift		36 Consecutive hours

- c. Periodically question and review the number of Journeys with the intent to eliminate Journeys and lower the risk. Reduce the risk to As Low As Reasonably Practicable by applying the following Hierarchy Of Controls. Beginning with the first

- Control, assess each in turn to select a Control that is Reasonably Practicable for the task:
- i. Eliminate the Journey.
 - ii. Change to a lower risk transportation mode.
 - iii. Apply Vehicle Controls
 - iv. Apply administrative and procedural Controls that guide Driver and passenger behavior including Driver Competence requirements and Journey management.
- d. Implement a Journey Management Plan (JMP) where a security assessment or local Risk Assessment identifies such a Control to be necessary
- i. The JMP must include the loading and discharge site (where applicable), authorized route, identification of route Hazards and communication requirements during the Journey
 - ii. The driver must understand the JMP before each Journey
 - iii. The Driver must report any change from the plan that occurred during the Journey, and changes must be reviewed to decide whether to update the JMP
- e. Use data from Vehicles equipped with an In Vehicle Monitoring System Or Vehicle Data Recorder (IVMS or VDR) as a monitoring method, where legislation allows, to:
- i. analyse and improve road transport planning and safety performance
 - ii. provide regular, formal feedback to Drivers
 - iii. apply consequence management that includes recognition for compliance, and sanction for non-compliance.
- f. Perform maintenance using qualified technicians/mechanics and document the work performed.
- g. Determine through Risk Assessment the situations where Light Vehicles must:
- 1. score at least 4 stars overall in New Car Assessment Program tests or
 - 2. which meet comparable Internationally Recognised Standards approved by the Technical Authority for road safety or
 - 3. which meet comparable Internationally Recognised Standards approved by the Technical Authority for road safety
- h. Provide a Rollover Protection Device where there is history of rollover, or where the centre of gravity of the Vehicle increases rollover risk.
- i. Provide Vehicles with elevated rear lights and brake lights for use off road or on gravel or dirt roads.