

-

# Shell's Golden Rules

It is your responsibility to follow the HSE Golden Rules:

- Comply with the law, standard, and procedures.
- Intervene in unsafe or non-compliant situations.
- Respect our neighbours.

# The Rules that Save <a>Physical Content</a><br/>Lives

Follow the Life Saving Rules so that everyone gets home safely.



# Key Contact List

EMERGENCY	(780) 992-3666		
SECURITY	(780) 992-8999		
HEALTH CENTER	(780) 992-3946		
FIRE HALL	(780) 997-6333		
BREATHING AIR CENTRE	(780) 992-3933		
SLIP & SLIDE HOTLINE	(587) 783-9819		
SITE SHUTTLE DISPATCH	(780) 914-0711		
FACILITIES SERVICE DESK	(780) 992-2424		
SITE SUPERVISOR	(780) 992-5884 (587) 590-0069		

i

\_\_\_\_

This Handbook belongs to:

My Shell Contact is:

Phone:\_\_\_\_\_

# Table of Contents

# Table of Contents

Key Co	ntact List	1
Table o	f Contents	2
1.0 OV	ERVIEW	1
1.1 Intro	oduction	1
1.2 Orie	entation	2
1.3 She	ll Canada Health, Safety and Environmental Policy .	3
1.4 Pro	cess Safety Fundamentals	4
1.5 Life	Saving Rules	5
2.0 SC	OTFORD SITE RULES	8
2.1 Clea	an Building Policy	8
2.2 Cle	an Shaven Policy	9
2.3 Hai	r, body Piercings and Jewelry	9
2.4 Hor	seplay and Conduct	9
2.5 Lan	guage	10
2.6 Sm	oking and Lighters	10
2.7 Por	table Electronic Products (PEPs)	10
2.8 Per	sonal Protective Equipment (PPE)	10
2.9 Visi	tor PPE	12
2.10	Site Age Restriction	13
2.11 Pec	Vehicles/Powered Mobile Equipment /Spotters/ Bi lestrian	
2.12	Food and Drink	14
3.0 Em	ergency Procedures	15

ii

	DA SCOTFORD HEALTH & SAFETY RULES & REGULATIONS			
3.2 Emergency Action				
3.2.1	Site Emergency Assembly Alarm15			
3.2.2	All Clear16			
3.2.3	Unit Alarms (Local Alarms)17			
3.2.4	Site Alarm Testing18			
3.3 Severe	Weather			
3.4 Adminis	stration/Control Building Evacuation Procedures19			
4.0 Industri	al Hygiene19			
4.1 Workplace Hazardous Materials Information System (WHMIS) 19				
4.1 Chemic	al Handling21			
4.2 Hydrog	en Sulphide22			
4.3 Benzen				
4.4 Ethylen	e Oxide			
4.5 Sulphur Dioxide				
4.6 Radioactive Materials				
4.7 Handling of Material (Push, Pull, Lift)23				
5.0 SAFETY				
5.1 Safety I	Programs24			
5.1.1	STEP (Safety Through Employee Participation)24			
5.1.2	Stop the Drop24			
5.1.3	Hand Injury Prevention H.I.P. Program24			
5.2 Safe Work Practices (SWPs)25				
5.2.1	Injuries and Exposures25			
5.2.2	Incident Reporting26			
5.2.3	Access into Process Areas			

iii

28
29
29
29
30
30
30
31
31
31
32
33
34
34
34
35
35
36
36
36
37
38
39
39
39
39
40

iv

SHELL CANADA SCOTFORD HEALTH & SAFETY RULES & REGULATIONS 7.4 Search Policy	.40
7.5 Off-Boarding Personnel	.41
7.6 Alcohol, Drugs	.41
7.7 Cameras	.41
7.8 Weapons	.42
Firearms and weapons of any kind are prohibited on site	.42
7.9 Respectful workplace Policy	.42
7.10 Violence in the Workplace	.43
7.11 Clean Desk Protocol	.43
8.0 ENVIRONMENT	.43
8.1 Environmental Protection/Spills	.43
8.2 Wildlife	.44
8.3 Waste Management	.45
NOTES	. 46
9.0 INDEX	.47
11.0SITE MAPS & PRODUCTION UNIT LIST	.49
11.0SITE MAPS & PRODUCTION UNIT LIST	. 50
10.0 SHELL SCOTFORD	.51
10.1 PROCEDURE	. 54
10.1.1 ALARMS EMERGENCY ACTION	. 54

v

# 1.0 OVERVIEW

# **1.1 Introduction**

At Shell Scotford our Goal Zero values are about protecting people and the environment - no harm, no leaks, and no excuses. Achieving Goal Zero starts with each of us committing to work safe and keep our coworkers safe through every task and activity. We strive to reduce risks, with a particular emphasis on the risks with the most serious consequences. This approach helps ensure we Fail Safely in the event that something goes wrong.

The Life Saving Rules and Process Safety Fundamentals presented in this handbook are mandatory. These rules are key enablers that minimize the potential for any serious incidents, so that we can safely return home to our families, while keeping the community and environment safe, each and every day. Site processes and procedures supplement these rules to provide the necessary work execution criteria to achieve Goal Zero.

Shell conducts its business to meet or exceeds legislative requirements pertaining to health, safety, security and the environment. The health & safety rules and associated Safe Work Practices referenced in this handbook are consistent with regulations under the Alberta Occupational Health and Safety Act, Regulation and Code.

Your commitment to Goal Zero is key. Collectively, this commitment will ensure we ultimately protect our people, community, and environment.

1

SVP, Scotford

# SHELL CANADA SCOTFORD HEALTH & SAFETY RULES & REGULATIONS 1.2 Orientation

Orientation is required for all personnel entering the site.

The following table defines which level of orientation is required at the Scotford Site:

Level	Requirements	Repeat after	Training
Visitor	Visitors, Vendors, Hot Shots, Equipment/Material Drop off/ Delivery.	90 Days	Available at Security
	<ul> <li>Cannot receive or be on a safe work permit.</li> </ul>		
	<ul> <li>(No Hands-on Work)</li> </ul>		
	Requires an escort with full site orientation		
Full	III • Full time Shell Employee or Repeat if there has		Online and in person North Hub 44 Complex
	<ul> <li>Any persons performing work -Truck drivers requiring permits to off-load or to load (There may be exceptions on a case-by- case basis, HSSE department to evaluate)</li> </ul>	been an absence of ≥1 year.	

- Full orientation allows people to sign on to permits, not receive or issue.
- If a person is required to receive a permit, they must also complete the Permit Vision Requestor/Holder training.
- If a person is required to issue permits they must take the above training as well as the Permit Vision Verify and Authorize training

# 1.3 Shell Canada Health, Safety and Environmental Policy

Shell Commitment and Policy on Health, Security, Safety, the Environment (HSSE) and Social Performance (SP).

#### Commitment

In Shell, we are all committed to:

- Pursue the goal of no harm to people;
- Respect nature by protect the environment, reducing waste, making a positive contribution to biodiversity, and reducing Greenhouse Gases;
- Use material and energy efficiently to provide our products and services;
- Respect our neighbours and contribute to the societies in which we operate;
- Develop energy resources, products and services consistent with these aims;
- Publicly report on our performance;
- Play a leading role in promoting best practice in our industries;
   Manage HSSE & SP matters as any other critical business
- activity; and
- Create a working environment which psychologically safe and enables learning in support of this commitment.

In this way we aim to achieve a performance we can be proud of, to earn the confidence of customers, shareholders, and society at large, to be a good neighbour and to contribute to sustainable development.

#### Policy

Every Shell Company:

- Has a systematic approach designed to ensure compliance with the law and achieve continuous performance improvement;
- Sets targets for improvement and measures, appraises and reports performance;
- Requires Contractors to manage HSSE & SP in line with this policy;
- Requires joint ventures under its operational control to apply this policy, and uses its influence to promote it in its other ventures;
- Engages effectively with neighbours and impacted communities; and
- Includes HSSE & SP performance in the appraisal of staff and rewards accordingly.

Originally published in March 1997 and January 2023.

# **1.4 Process Safety Fundamentals**



a i

**PSF 1**: Always use two barriers for hydrocarbon and chemical drains & vents.

**PSF 2**: Do not leave an open drain or critical transfer unattended.

**PSF 3**: Take interim mitigating measures in case of failure of Safety Critical Equipment.

**PSF 4**: For all defined high-risk activities, follow the procedures and sign off after each step.

**PSF 5**: Walk the Line – Verify and validate any lineup change.

**PSF 6**: Do not make a change without a proper MOC.

**PSF 7**: Verify for complete tightness after maintenance work.



**PSF 8**: Always check that equipment is pressure free and drained and provides safe isolation before starting maintenance work.

**PSF 9**: Perform MOC and install backflow protection when connecting utilities to process.



# 1.5 Life Saving Rules

## Work Authorization

Work with a valid permit when required.

- I have confirmed if a permit is required.
- I am authorized to perform the work.
- I understand the permit.
- I have confirmed that hazards are controlled, and it is safe to start.
- I stop and reassess if conditions change.

The Safe Work Permit (Permit) system at Shell Scotford (SCT) is in place to ensure safety of personnel who perform work in Production and Non-Production Zones. **Refer to Safe Work Practice PTW-WI-001** 

# Line of Fire

Keep yourself and others out of the line of fire.

- I position myself to avoid:
  - Moving objects
  - Vehicles
  - Pressure releases
  - Dropped objects.
- I establish and obey barriers and exclusion zones.
- I take action to secure loose objects and report potential dropped objects.

Line of Fire hazards are not always obvious or constant and can be introduced as the task progresses.

### **Energy Isolation**

Verify isolation and zero energy before work begins.

- I have identified all energy sources.
- I confirm that hazardous energy sources have been isolated, locked, and tagged.
- I have checked there is zero energy and tested for residual or stored energy.

Isolation separates you from dangers such as electricity, pressure, toxic materials, poisonous gas, chemicals, hot liquids, or radiation to keep you safe. Examples of isolation include process isolation, mechanical isolation, and electrical isolation. **Refer to** 



#### SHELL CANADA SCOTFORD HEALTH & SAFETY RULES & REGULATIONS Safe Work Practices SWP-WI-3304 and SWP-WI-4404



# Confined Space

- Obtain authorization before entering a confined space.
- I confirm energy sources are isolated.
- I confirm that the atmosphere has been tested and is monitored.
- I check and use my breathing apparatus when required.
- I confirm there is an attendant standing by.
- I confirm a rescue plan is in place.
- I obtain authorization to enter.

A confined space such as a vessel, tank or pipe can contain explosive gas, poisonous air, or other dangers such as a lack of oxygen. **Refer to Safe Work Practice SWP-WI-0002 and SWP-WI-0007** 

### Bypassing Safety Controls

.

Obtain authorization before overriding or disabling safety controls.

- I understand and use safety critical equipment and procedures which apply to my tasks.
- I obtain authorization before
  - Disabling or overriding safety equipment
  - Deviating from procedures
  - Crossing a barrier

Safety critical equipment must work correctly to keep you safe. Examples of safety critical equipment include Isolation devices/emergency shutdown valves, trip systems, relief valves, fire and gas alarm systems, certain level Controls, alarms, and crane computers. Refer to Safe Work Practices, SWP-WI-0011 and SWP-WI-0012).

#### Persons carrying out the work must:

Obtain authorization from the Supervisor or person in charge of the work before overriding or disabling safety critical equipment.



SHELL CANADA SCOTFORD HEALTH & SAFETY RULES & REGULATIONS Working at Height

Protect yourself against a fall when working at height.

- I inspect my fall protection equipment before use.
- I secure tools and work materials to prevent dropped objects.
- I tie off 100% to approved anchor points while outside a protected area.

Fall protection must be in place if there is the potential to fall a vertical distance of equal to or greater than 1.8m (6.0ft) or when there is an unusual possibility of injury from a lesser height.

# Fall Distance Calculator on back inside cover of book. Refer to Safe Work Practice 4414

# Safe Mechanical Lifting

Plan lifting operations and control the area.

- I confirm that the equipment and load have been inspected are fit for purpose.
- I only operate equipment that I am qualified to use.
- I establish and obey barriers and exclusion zones.
- I never walk under a suspended load.

The boom and hook are not considered part of the suspended load. Refer to Safe Work Practice 4412 and 6604.



Control flammables and ignition sources

- Identify and control ignition sources.
- Before starting any hot work
  - Confirm flammable material has been removed or isolated.
  - Obtain authorization.
- Before starting hot work in a hazardous area confirm:
  - Gas testing has been complete.
  - Gas will be monitored continually.



# Driving

Follow safe driving rules.

I always wear a seatbelt.



SHELL CANADA SCOTFORD HEALTH & SAFETY RULES & REGULATIONS

I do not exceed the speed limit and reduce my speed

- for read conditions.
- I do not use phones or operate other devices while driving.
- I am fit, rested and fully alert while driving.
- I follow journey management requirements.

Two-way radios and mobile phones may be used in vehicles in the following situations:

- In case of emergencies and/or personal safety or security situations.
- As part of convoy management, not including shuttle buses.
- Only in safe areas and at safe driving speeds during either an emergency or time sensitive operation, when needed to maintain safe control of equipment or processes; and the communication is of short duration during the emergency.

#### Passengers must:

Intervene if a Driver is exceeding the posted speed limit or using a phone or other communication device during a journey. **Refer to Safe Work Practice SWP-WI-4403** 

# 2.0 SCOTFORD SITE RULES

# 2.1 Clean Building Policy

At Scotford, we want to ensure that we maintain the healthiest work environment that can be achieved. One way of accomplishing this is ensuring that the generation and spread of contamination from industrial materials is minimized wherever possible.

Contamination prevention at Scotford includes the following:

- No soiled and/or contaminated coveralls (or other clothing), hard hats, or gloves, footwear are permitted in any eating area or the health center.
- Mats are provided at doorways of permanent buildings. It is expected that contamination such as dried mud, etc. is wiped off on these mats.
- Boot Cleaners (straight edge and stationary bristles)



- SHELL CANADA SCOTFORD HEALTH & SAFETY RULES & REGULATIONS are provided at some building entrances for boot cleaning.
  - If personal clothing becomes contaminated, it is to be removed and laundered at Scotford. Arrangements can be made through your Shell contact.
  - Contaminated skin is to be cleaned immediately. Know where your washing facilities are including emergency resources such as showers and eyewashes.
  - Work clothing should be removed prior to entering a personal vehicle. Don't bring contamination home to your family/friends.

# 2.2 Clean Shaven Policy

The Scotford site has a Clean-Shaven Policy for anyone entering a process area. Anyone doing work where the use of Respiratory Protective Equipment maybe required or those located in areas where donning of RPE in an emergency maybe necessary.

- No beards.
- Sideburns neatly trimmed and cannot extend greater than ½" below the earlobe.
- Moustaches must be trimmed to the corners of the mouth.
- Soul patches must be neatly trimmed and cannot extend greater than a 1" square below the bottom lip.

# 2.3 Hair, body Piercings and Jewelry

Hair longer than collar length must be tied back as it may catch in or on equipment and machinery. (Example maintenance shops, rotating equipment)

Body piercings or jewelry (rings, chains etc.) that interfere with PPE (SCBA masks, etc.) or get caught in equipment or machinery must not be worn on site.

# 2.4 Horseplay and Conduct

Horseplay, rowdiness, practical jokes, and fighting have absolutely no place at Scotford and are grounds for

SHELL CANADA SCOTFORD HEALTH & SAFETY RULES & REGULATIONS disciplinary action and/or removal from the site. Running is prohibited.

# 2.5 Language

Shell Scotford's operational and instructional language is English.

If Workers are to be utilized that are non-fluent in English, a written plan must be submitted to Shell Safety that identified the conditions, controls, and requirements for the workers to perform their work safely. The employer is responsible for ensuring that the employees understand all relevant Health, Safety, Security, Emergency and Environment rules and regulations.

# 2.6 Smoking and Lighters

All employees and contractors who smoke must become familiar with the Smoking Safe Work Practice. SWP-WI- 6610.

# 2.7 Portable Electronic Products (PEPs)

PEPs are devices such as: cell phones, tablets, personal gas detectors, portable media players, laser pens, flashlights, cameras, personal medical devices, car key fob, smart watches, e-cigarettes, etc.

Non-approved PEPs such as cell phones (on or off) taken into process areas must be controlled and specifically listed on a hot work permit.

If you are using an intrinsically safe device, it must be approved by the Shell Electrical department and listed on the approved PEP list. Refer to Safe Work Practice SWP-WI-4410

# 2.8 Personal Protective Equipment (PPE)

Standard PPE is required at Scotford includes Shell approved hardhat, safety footwear, hearing protection, safety glasses with side shields, gloves, and fireretardant clothing (FRC) with long sleeves. FRC with reflective stripes is to be worn as the outer layer. The worker must ensure flame resistant 10

SHELL CANADA SCOTFORD HEALTH & SAFETY RULES & REGULATIONS or natural fiber clothing (e.g., cotton) is against the skin. Hardhat liners, balaclavas, and neck warmers are required to be FRC.

Boots, gloves, and other specialized safety PPE are not required to be FRC rated.

Hearing protection (CSA Class A) is required within all process areas except for the Tank Farm areas. Additional areas may be posted to require the use of regular or double hearing protection. Hearing protection may be required in non-process areas and parts of the tank farm where noise levels are greater than 82 dBA.

Further information and guidance on PPE are available in the Scotford PPE manual.

Standard PPE Exceptions are:

- No PPE is required in control rooms or offices except while carrying out maintenance or project work.
- 2. No PPE is required while transiting to and from the change room and/or the parking lot at the beginning and end of the shift only.
- 3. Maintenance shops:
  - No hardhats required unless working with overhead crane or imminent overhead danger exists.
  - Safety glasses are the only PPE required if staying within the yellow and green lines.
- 4. Warehouse:
  - Only safety glasses are required to access the issue counter.
  - Individuals may perform tasks without gloves only after performing a written risk assessment (FLRA) to justify sufficient controls are in place to prevent injury.
- 5. Footwear requirements outside of Production Zones.
  - Safety Boots are required to be worn in trailer complex areas when performing 'work' as defined by applicable safe work practice.
  - Open-toed and footwear exceeding 1.5" heel height is not permitted outdoors onsite including

<sup>11</sup> 

- SHELL CANADA SCOTFORD HEALTH & SAFETY RULES & REGULATIONS the North Hub (i.e., when walking to/from trailer complexes, designated smoking areas; or when walking to/from buildings at beginning & end of shift)
  - Scotford site requires closed toe footwear with a heel less than 1.5 inches. This does not apply inside control rooms and administration b uildings; however, it is strongly recommended that people always wear suitable footwear.
  - 6. Site Shuttle Bus Requirements:
    - On site, passengers are required to wear the standard PPE for the Scotford site.
      - **Exceptions:** when transiting to buildings at beginning of day and when leaving site at end of workday.
      - Standard PPE is NOT required when taking the shuttle outside of the site (i.e., Admin North doors to North Hub, SAC, Chemicals, Admin via Range Road 214)
  - 7. Traction Aids:
    - During winter weather conditions, until slip hazards (snow/ice) are removed, traction aids must be worn. This includes parking lots.
    - When issuing/receiving a permit and/or completing a FLRA, under "Additional PPE Req." section, there will be a conversation about work area ground conditions and traction aids are required until slip hazards (snow and/ or ice) are removed.
    - For all workers not working under a permit or FLRA, accountability is on the individual to wear traction aids until slip hazards (snow and/ or ice) are removed.

# 2.9 Visitor PPE

Site visitors who do not enter process areas are not required to wear standard PPE if they are transported in a vehicle (roadways, control rooms, trailers, etc.). However, the Shell Safety department has the discretion to decide whether PPE is required in such cases.

SHELL CANADA SCOTFORD HEALTH & SAFETY RULES & REGULATIONS Standard PPE is required in process areas. Additionally, traction aids are required during winter weather conditions.

### 2.10 Site Age Restriction

Anyone under the age of 14 years may be permitted beyond the access points controlled by Scotford Security if they are always accompanied by an employee with written authorization from the employee's line manager and submitted to Scotford Security. This includes the North Hub, Recreational Vehicle lot and Quest wells.

# 2.11 Vehicles/Powered Mobile Equipment /Spotters/ Bicycles/ Pedestrian

#### Vehicles

- Speed limit is 30Km/hr. unless otherwise posted.
- All parking lot speeds are 20 km/hr.
- Personnel are not permitted to sleep in parking lots or staging areas on Scotford property.
- Do not park vehicles in a manner that will block roads, gates, doors, or in any way hinder access to firefighting or other emergency equipment.
- Entry into operating areas by vehicles is strictly prohibited unless authorized under a Safe Work Permit.
- Vehicles parked within plant areas must be left with keys in the ignition turned off.
- Keys do not have to be in place for vehicles parked in a dministration building parking lot and in properly marked parking spots unless otherwise posted.

During cold weather, vehicles can be left running long enough to clear windows and warm up. (Exception is emergency vehicles).

#### Powered Mobile Equipment.

All powered mobile equipment must be operated by certified personnel and must be directed by an experienced signal person when required.

Spotters are required when backing up if there are 2 or more people in the vehicle and when operating powered mobile equipment with in two (2) meters of production equipment, the driver will be guided into position by a spotter.



## **Bicycle Operation**

Bicycles must be operated safely and adhere to the same traffic rules as vehicles. The bike must be inspected prior to use. Personnel riding bicycles must wear a hardhat with chin strap. Bicycles operated in Production Zones must exercise extreme caution. Light loads may only be carried in the basket. Cell phones and radios are not allowed to be operated while riding a bicycle. **Refer to Safe Work Practice SWP-WI-4418** 

# Pedestrians

When walking along roadways you must walk facing traffic unless there is a designated walkway established.

You must follow the Life Saving Rules and Safe Work Practice SWP-WI-4403

# 2.12 Food and Drink

Food and Drink are not permitted in Process Area

#### SHELL CANADA SCOTFORD HEALTH & SAFETY RULES & REGULATIONS (BRMs exempt). Refer to Safe Work Practice 6608 for exceptions.

# 3.0 Emergency Procedures

# 3.1 Emergencies

Report all emergencies (fire, serious injury, spills, explosions, etc.) by:

- Emergency telephone number (780)992-3666, or
- Radio "Emerg" channel (by pressing orange button on site radio, or
- In person at Security, or
  - · Emergency phones in process units, or
  - In person to an Operator, or
  - Emergency pull stations (if available)

Provide the following information:

- Your name, location, and the unit you're in with street address.
- The nature of the emergency

Ensure a team member meets the emergency vehicles to direct them to the location if safe to do so. After contacting emergency services, notify Operations of any emergency/incident in a production zone or the job owner in non-production zone.



Pull Station

# 3.2 Emergency Action

# 3.2.1 Site Emergency Assembly Alarm

The alarm, when sounded, is an electronic siren that changes pitch (like an emergency vehicle siren).

SHELL CANADA SCOTFORD HEALTH & SAFETY RULES & REGULATIONS <u>PERSONNEL ACTIONS</u>

When the Site Emergency Assembly Alarm is activated:

- All work must be immediately shut down and if safe to do so, any ignition source neutralized.
- All vehicles (except for vehicles working under the direction of Emergency Services) must be pulled over to the side of the road and shut off. Keys must be left in the ignition.
- Check wind direction via windsocks, flags, smokestacks, etc. Always walk cross wind or upwind if source is known and toward the nearest Emergency Assembly Area.
- Walk on roadways or designated pathways, and do not cut through process areas or barricaded roads.
- All site personnel must report to either an Emergency Assembly Area (identified on site map) or a Site Assembly Reader station (within buildings).
  - Swipe your site access card on a Site Assembly Reader (inside or outside)
- One person at the Emergency Assembly Area must be assigned to answer the phone/radio. The Emergency Operations Centre will be contacting each Emergency Assembly Area.
- Remain at the Emergency Assembly Area or within the building with the Site Assembly Reader station, unless directed by Emergency Services or the ALL CLEAR siren sounds.

If the reader is malfunctioning or anyone at an Emergency Assembly Area is without their swipe card, the assigned person shall record those names and report them to the Emergency Operations Centre.

This procedure applies to Site Emergency Assembly situations and intended to help facilitate a quick efficient head count of all site personnel.

#### 3.2.2 All Clear

The "All Clear" is a solid or flat signal that is sounded for approximately 30 seconds. When the "All Clear" is sounded, all non-process personnel must obtain

#### SHELL CANADA SCOTFORD HEALTH & SAFETY RULES & REGULATIONS permission from Production to re-enter an operating area. **All Permits (both copies) must be revalidated** before any work is continued. The "all clear" only occurs after a Site Emergency Assembly Alarm.

### 3.2.3 Unit Alarms (Local Alarms)

Unit alarms alert people of a hazardous event in a unit. There are many local emergency alarm systems associated with the Process Units (local siren or horn). Alarms are activated by automated detection systems, or manually.

#### UNIT ALARM BEACONS

Different beacons have different meanings:





Blue Beacon – toxic gas alarm/O2 deficient

Yellow Beacon – ventilation alarm

MEG Alarm sounds like a church bell and has red lights.

#### PERSONNEL ACTIONS

#### If you are working under a Safe Work Permit:

Upon hearing any of the unit alarms, all work must be immediately shut down and if safe to do so, any ignition sources. If ignition sources cannot be neutralized, the Permit Issuer must be notified (communicate type of ignition source, and location).

Promptly clear the area and report to the safest Unit Muster Point.

Permit Holder must account for their crew members signed onto the permit.

Permit Holder must report any personnel not

accounted for to Security via phone (780)-992-3666 or site radio emergency channel.

Remain at the Unit Muster Point until a Production Unit Operator has communicated that it is safe to revalidate their respective permits.

Upon the Unit Alarm being cleared, report back to the Permit Issuing location and have **Permit Re-Validated** 



# SHELL CANADA SCOTFORD HEALTH & SAFETY RULES & REGULATIONS prior to returning to work.

#### If you are signed into a unit:

Upon hearing any of the unit alarms, report to the Permit Center if safe to do so and sign out. The Unit Operator will initiate a search for anyone who is not accounted for.

Once alarms have been cleared (audible and strobe lights), you may report back to the Permit Issuing location and request to sign back in to resume work (permission to re-enter the unit after a Unit Alarm is at the discretion of the Unit Operator based on the unit status). NOTE: The audible alarms may be turned off for operations to respond, however, the strobe lights will still flash.

#### 3.2.4 Site Alarm Testing

Every Monday at noon security will announce an alarm test identifying which site alarm will be tested. (Emergency Assembly or All Clear)

# 3.3 Severe Weather

Shell Scotford has a lightning prediction tool that predicts the probability of a lightning hazard in the area and is designed to maximize safety and productivity while limiting unnecessary shutdowns.

Boltek evaluates the threat of lightning in a 2.5-mile radius providing warning before the first lightning strike. Should Boltek go into red alert, the following will occur:

- Security will inform the site of any severe weather by providing an "all announce" on the radios and messaging through the site PA system.
- All applicable permits are suspended, and employees are to take shelter.
- Once the red alert has cleared Security will inform the site by providing an "all announce" on the radios and messaging through the site PA system.

Following the announcement, suspended permits must be revalidated, and the job site conditions verified to be safe by the Permit Issuer prior to work crews re-



SHELL CANADA SCOTFORD HEALTH & SAFETY RULES & REGULATIONS commencing work activities. Refer to Safe Work Practice 6608

# 3.4 Administration/Control Building Evacuation Procedures

A Building Fire Alarm (bell) is used in the many onsite buildings. Upon hearing the fire alarm, employees must evacuate the buildings from the appropriate emergency exit as per the evacuation plan for that building.

The "all clear" must be given by the on-scene commander prior to returning inside the building. This is verbal communication.

# 4.0 Industrial Hygiene

# 4.1 Workplace Hazardous Materials Information System (WHMIS)

All chemicals brought on site must be approved by the Shell Industrial Hygiene and Environment Department prior to delivery to site. Follow the Shell Product Approval Procedure.

All workers on the Shell site who interact with hazardous products must have completed WHMIS training or refresher training within three years. Information about hazardous chemicals (known as controlled products in WHMIS legislation) will be provided in three forms:

- Labels on the products
- Safety Data Sheets (SDS)
- Worker education

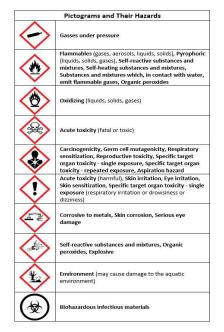
All controlled products which have been approved to be brought onsite will be labeled with a supplier label. If the supplier label is damaged or lost, a workplace label is permitted. If the SDS information is not contained in the Shell electronic database for Scotford, the owner of the material must maintain a printed copy onsite and communicate this to workers. **Please contact your Shell Contact or Industrial Hygiene if you need assistance with any SDS.** 

# Supplier Label.



# Workplace Label





# 4.1 Chemical Handling

Consult the Safety Data Sheet (SDS) prior to chemical handling. SDSs are available through all Shell personnel. For field purposes, consult the unit Operator. Hygiene, or Safety if further clarification is required on safe handling of a chemical.

Employees must take every precaution when working with and handling equipment or material that is in chemical service. Ensure you follow work procedures and SDS precautions. Before lines or equipment in chemical service are opened, they must be drained, flushed, and tested to ensure that they are free of chemicals.

SHELL CANADA SCOTFORD HEALTH & SAFETY RULES & REGULATIONS If exposure to a hazardous material is suspected, contact your supervisor for appropriate follow-up.

# 4.2 Hydrogen Sulphide

Hydrogen sulfide is a colorless, flammable, extremely hazardous gas that is heavier than air with a "rotten egg" smell. Hydrogen Sulfide is found as a by-product in the Upgrader and Refinery processes and can be found in process systems, equipment, and sewers. Everyone working on site should be familiar with **Safe Work Practice SWP-WI-1102.** 

### 4.3 Benzene

Benzene is both a toxic and flammable product, which has been classified as a known human carcinogen. It is a clear liquid and vapor above 5 °C with an aromatic odour at high concentrations. Benzene is found in the production of Gasoline at the Refinery and in the production of styrene at the Chemical plant at Scotford.

Anyone working with or around equipment or piping containing Benzene should refer to Safe Work Practice SWP-WI-1104.

Contact Industrial Hygiene for specific PPE recommendations or more information when working with benzene.

#### 4.4 Ethylene Oxide

Ethylene oxide (EO) is a flammable, colorless gas at temperatures above 10 °C that smells like ether at toxic levels. EO is found in the production Ethylene Glycol in the Chemical Plant at Scotford.

#### How can ethylene oxide harm your heath?

In addition to eye pain and sore throat, exposure to EO can cause difficult breathing and blurred vision. Exposure can also cause dizziness, nausea, headache, convulsions, blisters and can result in vomiting and coughing. EO is a carcinogen that may cause leukemia and other cancers. EO is also linked to spontaneous abortion, genetic damage, nerve damage, peripheral paralysis, muscle weakness, as well as impaired thinking and memory. In liquid form, EO can cause severe skin

SHELL CANADA SCOTFORD HEALTH & SAFETY RULES & REGULATIONS irritation upon prolonged or confined contact. For more information on EO refer to Safe Work Practice SWP-WI-1105 or contact Industrial Hygiene.

# 4.5 Sulphur Dioxide

Sulphur dioxide is a nonflammable, colorless gas at ambient temperature and pressure with a very strong, pungent odor. Most people start to detect sulphur dioxide at levels of 0.3 to 1 ppm with a metallic taste. Vapours are heavier than air and may migrate to lower areas. At Shell Scotford, SO<sub>2</sub> may be produced as a byproduct of combustion and burning sulphur-containing materials. Sulphur dioxide is severely irritating to the eyes, mucous membranes, skin, and respiratory tract. Some examples of situations that may result in SO<sub>2</sub> release include (but not limited to): sulphur fires, burning of H<sub>2</sub>S, molten sulphur operations, and formed when pyrophoric iron sulphide is exposed to air.

## 4.6 Radioactive Materials

Observe warning signs of radioactive materials and stay away from areas where they are used. Radioactive materials are only to be handled by qualified personnel. A Safe Work Permit is required before work with radioactive materials can proceed. See Industrial Hygienist (Radiation Safety Officer) for additional information.

# 4.7 Handling of Material (Push, Pull, Lift)

Do not push, pull or lift more than you can safely handle. Ask for help if necessary and use mechanical equipment to move the item whenever possible. When lifting from overhead, use a proper platform so you do not have to reach. When manually lifting a heavy object:

- Crouch as close to the object as practical.
- Keep feet apart and bend your legs.
- Lift slowly by straightening your legs. Keep back relatively straight – your leg muscles, not your back, should do the work.

To set the load down, bend your legs, not your back. Set one corner down first, then slide your hands out so they



# SHELL CANADA SCOTFORD HEALTH & SAFETY RULES & REGULATIONS will not get pinched.

Reference SCT-IH-M-002 for more information.

# 5.0 SAFETY

# 5.1 Safety Programs

# 5.1.1 STEP (Safety Through Employee Participation)

STEP is Scotford's behavior-based observation process. The most tangible impact of STEP observations is the peer-to-peer interaction creating a culture of caring and looking out for one another. The observers positively reinforce safe work behaviors, provide coaching and discuss solutions to at-risk exposures, if any. Management has committed that no disciplinary action will result from a STEP observation as it is a no name no blame process.

Observation information is analyzed to identify trends that could result in harm so that we can pro- actively create awareness of the hazards and remove any barriers that may be preventing people from being empowered to work safely. When approached for a task observation always be respectful to observers, they are looking out for your safety. If you want to become involved as a STEP observer on site, talk to your supervisor.

### 5.1.2 Stop the Drop

Scotford requires that for all work at heights, no work shall start unless hazards have been identified and controls put in place to prevent dropping/falling objects (including pre-existing materials in the work area). Any dropped objects from heights must be reported and entered in to Sphera (incident reporting system). Please refer to Safe Work Practice SWP-WI-6613 regarding Dropped Object Prevention.

#### 5.1.3 Hand Injury Prevention H.I.P. Program

Scotford has a Hand Injury Prevention Program with 5 key fundamentals which provide a structured approach to reducing hand and finger injuries:

- ii. We don't put hands on loads.
- iii. We use only handles or hands-free tooling.
- iv. Our hands are off until energy is controlled.
- v. We use approved task-specific gloves.

The minimum glove standard is Cut Level 3, Impact Level 2. Refer to SWP-WI-6606 for further information and to view the Scotford Glove Matrix.

### 5.2 Safe Work Practices (SWPs)

At Scotford all workers share the responsibility for safe and efficient operation. To prevent injury and other incidents each worker must know and understand the correct work procedures for each task to be performed. To maintain this awareness in all workers, "Safe Work Practices Work (SWP) Instruction (WI)" have been developed as a reference source, outlining many basic procedures to be followed. These are general statements of good practices that apply under normal conditions; any deviations from these practices must be done with proper approval. It is the expectation, all workers affected by these SWPs will be completely knowledgeable of their content and always adhere to them. The Safety Department will serve as advisors or consultants for clarification of any items associated with SWP. SWPs are available on the Scotford websites and the Contractor Portal.

#### 5.2.1 Injuries and Exposures

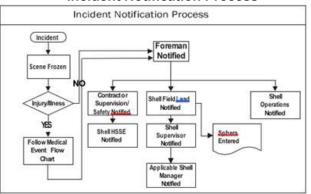
All illnesses, injuries and exposures occurring at the worksite are to be reported and recorded immediately. It is the employee's responsibility to report, as soon as possible, any occupational injury, illness or exposure to their immediate supervisor and then proceed to the Health Centre, located in the Administration 1B Building. The Health Centre is open Monday to Friday from 0700-1700 and 24 hours during Turnarounds and major outages. When the Health Centre is not open, Emergency Services will provide First Aid.

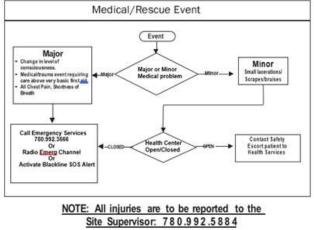
All injuries must be reported to the Site Supervisor at (780) 992-5884.

# SHELL CANADA SCOTFORD HEALTH & SAFETY RULES & REGULATIONS 5.2.2 Incident Reporting

All incidents and near misses on Shell property or on Shell business must be reported to Supervision, Permit Issuer (as applicable), and the Shell contact immediately. Report all unsafe working conditions to your supervisor and take corrective actions if safe to do so. If you witness any suspicious activity or event, please contact security.

#### SHELL CANADA SCOTFORD HEALTH & SAFETY RULES & REGULATIONS **Incident Notification Process**





27

# 5.2.3 Access into Process Areas

All person's other than the responsible Production personnel wanting to enter a Process Area shall observe the following requirements:

- Personnel, who are working in these areas, under a safe work permit do not use the unit sign-in. Any person that is not named on a safe work permit, must use the unit sign-in.
- Contact Production Shift Team Member of the unit you want to enter to request permission to enter by going to appropriate control room or permitting area.
- Write "Full" name(s) and entry time of each person going into the Process Areas on the unit sign-in.
- After leaving these areas, return to control room or permitting area to advise the unit Production Team Member you are out of the unit and sign out of the unit.
- 5. For entry into pipe racks within a Production Zone sign-in at the responsible unit sign-in. Non- intrusive entry into pipe racks outside of Production Zones does not require a permit. Shortcutting through units is not permitted.

### Refer to Safe Work Practice SWP-WI-0001

### 5.2.4 Emergency Equipment Locations and Use

Before the job commences, all personnel must be made familiar with the locations of emergency equipment such as fire extinguishers, fire blankets, safety showers/eyewash stations, self-contained breathing apparatus and spill kits. Supervisors are responsible for ensuring personnel are familiar with the location of emergency equipment. Always keep access to emergency clear and equipment must not be used for non- emergency purposes.

#### SHELL CANADA SCOTFORD HEALTH & SAFETY RULES & REGULATIONS 5.2.5 Fire Protection and Road Closure

Fire Protection Authorization (FPA) is required for all fire water use, road closures and impairments to fire protection systems as described in the safe work practice. This must be obtained from Emergency Services Department prior to receiving a Safe Work Permit. **Refer to Safe Work Practice SWP-WI-0011** 

### 5.2.6 Fire Watch

A Fire Watch is required for all burning, grinding, or welding which produces sparks/slag/embers which could impact an adjacent location. The general duties of the person designated as Fire Watch are to alert the work crew to any fires or dangerous situations, which may develop. Only those who are trained to Shell standards can be a Fire Watch. **Refer to Safe Work Practice SWP-WI-3301** 

#### 5.2.7 Hazard Flagging

Hazards associated with your work shall be clearly identified to guard against the entry of other personnel not familiar with the hazard. Flagging must be 3-Dimensional and properly tagged on all sides/access points with appropriate hazard information.

Yellow flagging means "Caution" enter area only if you are aware of potential hazards and it is safe to do so.

# Red flagging means "Danger Do Not Enter"

enter only with permission from the flagging owner.

Radiation flagging, when the potential for creating a radiation hazard exists the use of warning signage stating "DANGER – RADIATION – RAYONNEMENT" is required, in addition 3- Dimensional area control must be in place. The signage must include the trefoil, which is the universal radiation symbol (3 blades and central disk). **Refer to SWP-WI-6604.** 



## SHELL CANADA SCOTFORD HEALTH & SAFETY RULES & REGULATIONS 5.2.8 Ground Disturbance/ Excavation

Prior to any ground disturbance or excavation at the Scotford site, the Job Owner must evaluate if an excavation permit is required. For further information, refer to Safe Work Practice SWP-WI-3306.

#### 5.2.9 Loading/Unloading Product

Shell Scotford receives, produces, and stores materials that are flammable and possibly toxic. Therefore, it is essential that tank truck drivers and railway crews comply with the special precautions and procedures required for tasks carried out within plant limits.

Before loading or unloading product please refer to **Safe Work Practice SWP-WI-4402**.

#### 6.0 TOOLS & EQUIPMENT SAFETY

Inspect all equipment prior to use. Ensure equipment is in good working order and meets original manufacturers' requirements. Defects or damaged equipment must be tagged with appropriate information and reported to your supervisor or shell contact.

Modified tools or equipment are not permitted on site without engineering approval.

All hoses, lifting devices and fall protection equipment must be certified annually. The following is the Scotford Materials management main tool crib certification color coding chart used to mark year of <u>certification</u> for hoses, lifting devices and fall protection: NOTE: Contractor tools and equipment maybe tagged differently.

2024	Green	
2025	RED	
2026	YELLOW	
2027	BLUE	
2028	GREY	
2029	TAN OR BROWN	
2030	WHITE	

#### 6.1 Fire Extinguishers

A fire extinguisher of the correct type must be kept within easy reach of all cutting, welding and other open flame jobs. All mounted extinguishers are for emergency use only. They are to be not used for fire watch.

Fire extinguishers are required to have yearly inspections, in addition a monthly inspection is required by the area owner. If a fire extinguisher is discharged, an incident report must be filled out, the extinguisher tagged and returned to the Breathing Air Centre.

#### 6.2 Guards and Warning Signs

Machinery guards, barriers, signs, alarms, or any other device to protect workers from hazardous conditions must always be in place, except in cases when routine repairs are required. The person making the repairs must properly safeguard the location or equipment until the repairs are complete. Ensure rotating/mobile equipment and portable tools are equipped with protective guards. Use such equipment according to the manufacturer's instructions.

#### 6.3 Knives

Use of safer alternatives to knives such as scissors or a hacksaw must be considered first. If it is necessary to use a knife, a "knife use evaluation form" must be completed. Cut resistant gloves must be worn or a FLRA completed if not used. Nonretractable knives must be carried in a protective case.

A Shell approved competency program for use of knives may replace the requirement of the "knife use evaluation form." The competency program must follow the guidance provided in the Contractor Competency Assurance Manual (available on the Contractor HSSE Management Webpage) and be approved by Shell Safety.

## SHELL CANADA SCOTFORD HEALTH & SAFETY RULES & REGULATIONS 6.4 Ladders/Scaffolding

Anyone using ladders or scaffold to perform work must be familiar with Safe Work Practice **SWP-WI-4406 Ladders and Scaffolding** and **SWP-WI-4414 Working at Heights**.

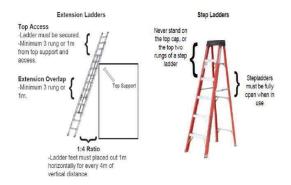
Only one person should use a ladder at any time. Wait for the person ahead of you to exit the ladder before ascending or descending yourself.

Stepladders must be fully open when in use. It is not permitted to work from either of the two top rungs of a step ladder. Do not straddle stepladders.

You must read the tag to understand the hazards prior to using the scaffold.

SHELL CANADA SCOTFORD

HEALTH & SAFETY RULES & REGULATIONS



**Scaffolds** shall be erected, modified, maintained, and dismantled only by qualified personnel as per the Scotford Safe Work Practice. A green scaffold tag means that the scaffold was safe for use at its last inspection. A yellow scaffold tag means that the scaffold is acceptable for use, but there is a potential or unusual hazard or a restriction present. A red scaffold tag means that the scaffold is unsafe and must not be used.



SHELL CANADA SCOTFORD HEALTH & SAFETY RULES & REGULATIONS Work shall only be performed on a scaffold if it has a green or yellow tag and has been inspected within 21 days (observing limitations indicated on the tag).

You must read the tag to understand the hazards prior to using the scaffold.

#### Refer to Safe Work Practice SWP-WI-4406



#### 6.5 Lifting, Hoisting and Rigging Equipment

Inspect all lifting and rigging equipment before performing any lift. Never use equipment that is worn, frayed, kinked, twisted, or showing any other signs of damage or weakness.

Equipment must have annual inspection markings. Eliminate all sharp edges for slings by installing softeners. Before using a winch or come along, ensure all workers are clear of the whip area while it is under tension. Chain slings shall not be used for rigging on Scotford site, except for permanently installed chains on submersible pumps located in below grade sumps, or manufacturer provided chain slings required for mobilization and demobilization on larger cranes. **Refer to Safe Work Practice 4412** 

SHELL CANADA SCOTFORD HEALTH & SAFETY RULES & REGULATIONS

#### 6.6 Tools (Electric and Pneumatic)

Before using any tools, you must be competent. Inspect the coupling and hose connections on pneumatic tools to see that they are in good condition.

Check the air supply before connecting pneumatic tools to be sure it is utility air. NITROGEN IS TO BE USED ONLY WHEN WORKING IN AN INERT ATMOSPHERE. All connections must have whip checks.

Inspect all cords on power tools to ensure they are in good condition. Cords on power tools must be double insulated and grounded. Always use a grounded extension cord.

Follow manufacturer's recommendations when using tools. Remove and tag out defective tools from service immediately and repair. When using electrically powered tools in tanks, vessels and boilers, the tools or the electrical panels must be equipped with ground fault interrupters. **Refer to Safe Work Practice SWP-WI-4408** 

#### 6.7 Tools (Powder Actuated)

Use of explosive actuated tools requires special permission from the Shell Representative and a Hot Work Permit. The operator of such tools must be competent. **Refer to Safe Work Practice 4408** 

#### 6.8 Refueling and Fuel Storage

If vehicles or any running equipment must be refueled while operating, it must be performed in accordance with manufacturer's specifications or approved by a professional engineer in the form of a procedure.

Use only CSA and/or ULC-approved fuel storage containers (preferably metal) to store gasoline and other flammable or combustible liquids.

Keep only working quantities of flammable or combustible liquids in the immediate job area. Keep bulk or reserve quantities in proper storage areas. WHMIS label as required. **Refer to Safe Work Practice 4403** 

#### SHELL CANADA SCOTFORD HEALTH & SAFETY RULES & REGULATIONS 6.9 Bonding and Grounding

Sandblasting, welding units, vacuum trucks, stress relieving and line thawing equipment and all other equipment capable of generating electrical charge shall be properly bonded and/or grounded. Such bonding and grounding must meet with the approval of the Shell Electrical Department. All non- permanent facilities that transfer hydrocarbon between tanks must be bonded and grounded. **Refer to Safe Work Practice SWP-WI-2203** 

## 6.10 Compressed Gas Cylinders and Gas Lines

All compressed gas cylinders must be stored and transported as per Manufactures specifications. These cylinders must be secured whether they are empty or full. Cylinders should not be stored lying on their side, except permanently mounted breathing air cylinders.

All valve caps must be replaced when cylinders are not in use. All compressed cylinders MUST be secured to prevent dislodgement during transportation. A rack shall be used in vehicles used to transport cylinders. When compressed gas cylinders are not in use, they should be removed from the operating unit or stored in designated locations.

Oxygen cylinders must be stored at least 6.1 meters away from cylinders containing combustible gases (i.e. acetylene). **Refer to Safe Work Practice SWP-WI-4405** 

#### SHELL CANADA SCOTFORD HEALTH & SAFETY RULES & REGULATIONS 6.11 Welding and Cutting

Appropriate spark containment must be used whenever welding, gouging, grinding or other activities which create sparks.

- All precautions should be taken to prevent oil from coming in contact with hoses, regulators or fittings on the oxygen/acetylene torch equipment. Serious fire or injury may result.
- The mixing barrels must not be stored in gang or toolboxes when connected to hoses.

A fire watch must remain for ten minutes upon completion of welding to ensure no fires start. For more information on grinding and welding, refer to **Safe Work Practice SWP-WI-3301**.

#### 6.12 Transportation of Dangerous Goods (TDG)

A TDG certificate must be always carried upon a person when shipping or receiving dangerous goods. If unsure of requirements regarding the transportation of dangerous goods offsite, see Warehouse Personnel for details.

#### 6.13 Rail Car and Railway Safety

At Scotford there is an active rail car and track system that requires individuals to adhere to the following rules when working in and around the rail cars and tracks. They are:

- Any work within 4.6m (15 feet) of track <u>must</u> be permitted according to the applicable Safe Work Practice for Production Zone permitting.
- Any work within 4.6m (15 feet) of a track a spotter must be supplied, and work will <u>stop</u> when Rail movement is occurring.
- Stopping distance for all vehicles including bikes at all rail crossings is 4.6m (15 feet) from crossing.
- Any work above the tracks (i.e. pipe racks etc) Rail Operations must be notified.
- Pedestrians <u>must</u> cross at Railway Crossings unless a Safe Work Permit is issued.

<sup>36</sup> 

SHELL CANADA SCOTFORD HEALTH & SAFETY RULES & REGULATIONS • Must have permission to enter any Rail Yard

- Do not block rail crossings unless there is an emergency.
- Long or Heavy Load Traffic wanting to cross any rail crossing must get permission.

Care must be taken when approaching uncontrolled rail crossings. Trains have the right of way at all crossings. **Refer to Safe Work Practice SWP-WI-6601** 

#### 6.14 Hoses

Prior to use hoses must be inspected; damaged hoses to be tagged and taken out of service. Damaged and expired hoses shall be dropped off at the appropriate drop off locations.

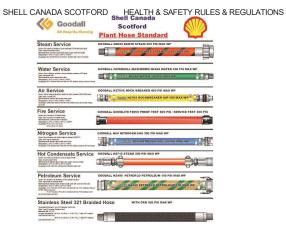
Hoses must be restrained, and whip checks used to prevent injury to workers if the hose fails or disconnects. This does not apply to fire hoses used in an emergency or vacuum hoses under a vacuum.

Hose selection must take into consideration the service it will be used for. Hoses must be rated for the pressure, temperature, and the type of product. Hose Fittings/Utility Stations shall not be modified.

Utility hoses will have an annual recertification and will be banded with current colour band for the year.

Refer to 7.0 Tools and Equipment Safety

Chicago fittings are only to be used for specialized work as approved by the Job Owner & Safety. Reference applicable practices.

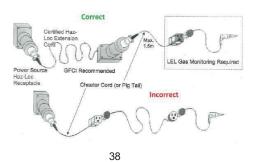


#### 6.15 Electrical Hazards/Precautions

Report all electrical problems. Do not perform electrical tasks unless you are qualified to perform this work as outlined in equipment practices. Ensure all electrical equipment is properly grounded.

Where non-classified extension cords are used, or adaptors from explosion proof to non-classified extension cords are used, such joints must be identified as part of the hot work permit.

#### Refer to Safe Work Practices 4404 and 4410



#### 6.16 Tie-ins/Connections to Existing Facilities

Contractors shall not open or tie their work into existing Shell pipelines or equipment, including sewer systems, electrical power circuits, air lines, water, steam, natural gas lines, product lines and other process equipment without specific approval by the Shell Representative. This type of work will be done in accordance with an approved Shell Safe Work Permit, Engineer Approved Procedures and Safe Work Practices.

The use of data/USB and mobile computing devices to process equipment is not permitted without Shell authorization. **Refer to Safe Work Practice 2202** 

#### 7.0 SECURITY

#### 7.1 Security Incidents

If you witness any suspicious behaviour or incident, please report this to your Shell contact or Security.

#### 7.2 Access Policy

The Shell Scotford Facility will ensure the implementation of security measures to deter the unauthorized introduction of personnel, vehicles, and dangerous substances or devices.

To control access to the facility the following is in place:

- Non-Operating employees are required to always sign in. Personnel without an access card must check in and out with Security.
- Any lost, misplaced, or damaged identification card must be reported to security immediately.
- If an access card is found, it must be returned to security immediately.
- All personnel are required to enter through a designated access point.
- All personnel shall prominently display identification cards while at the facility and should challenge anyone not displaying valid Shell identification.

- SHELL CANADA SCOTFORD HEALTH & SAFETY RULES & REGULATIONS
  - The Rapid Site Access Program (RSAP) is accepted at the Scotford Facility. This program provides for the random testing of affiliated workers, which enhances the safety of all team members. RSAP operates within the "Canadian Model For Providing A Safe Workplace" and is thus not a stand-alone alcohol & drug (A&D) program. RSAP also provides a comprehensive and reliable program to be used as an effective alternative to site access testing and is intended to be a tool used in the execution of a company's Alcohol & Drug Policy.
  - All turnstile entry points only permit one (1) individual entry per access card. Tailgating/Piggybacking is not permitted.

#### 7.3 Visitor Policy

A visitor to the Shell Scotford facility is defined as anyone who does not have the full site orientation and, accordingly, visitors shall:

- Be documented by name and issued an appropriate identification card for the facility by Security.
- Be escorted at all times by a company representative. The company representative is responsible for the safety and security of the individual for the duration of the visit.
- Obtain appropriate authorization before taking photographs.
- Follow all site standards, work practices and procedures set by Shell Scotford or identified by a Shell contact.
- Wear all the required Personal Protective Equipment (PPE) when and where required.

#### 7.4 Search Policy

The use, possession and/or the distribution of illicit drugs, alcohol, or drug paraphernalia or any possession of firearms and weapons of any kind are prohibited on any Shell worksite and will not be tolerated as such activities jeopardize the overall safety of the worksite.

As a part of an effort to create a safe work environment, Shell will utilize detection canines. The intent behind

SHELL CANADA SCOTFORD HEALTH & SAFETY RULES & REGULATIONS this strategy is to identify, deter and eliminate illicit drugs on the Scotford site.

A property inspection which is a preliminary visual examination of a vehicle, package, bag, or other container may also be utilized at any time. Cooperation with Security is mandatory.

#### 7.5 Off-Boarding Personnel

When an individual's work term is completed at the Shell Scotford site:

- The contract company must complete the necessary Site Restriction System documents and forward them to Security.
- Enforce the provisions of the Site Access System with all applicable site contractors and subcontractors.
- Ensure the prompt reporting of information to Security for all contractors that either resign or are dismissed.
- Cooperate with Shell in maintaining the Site Access System Database in a timely and complete manner.
- All personnel identification cards must be returned to Security at the end of a work term.

#### 7.6 Alcohol, Drugs

Working under the influence, or possession of alcohol or drugs at Scotford is violation of the Drug and Alcohol Policies for site. It is grounds for disciplinary action and/ or removal from the site. Any worker taking a medically prescribed drug which may impair performance or judgment must advise his/her supervisor to ensure safety on the job will not be compromised. Consultation with the Health Centre may be required. You may be tested if involved in an incident or suspected of being under the influence of drugs or alcohol.

#### 7.7 Cameras

A hot work permit is required for use of photography or video equipment within any process unit unless the equipment is approved by the electrical department. Posting of videos or photos taken at

### SHELL CANADA SCOTFORD HEALTH & SAFETY RULES & REGULATIONS Scotford is strictly prohibited.

#### 7.8 Weapons

Firearms and weapons of any kind are prohibited on site.

#### 7.9 Respectful workplace Policy

Shell Canada values its employees and contractors and their individual contributions and recognizes that they are most productive in an atmosphere of mutual trust, support, and respect. Shell also recognizes the inherent dignity and worth of each individual and their right to equal opportunity and treatment. Shell Canada believes that all employees and contractors, regardless of employment status, are entitled to work in a respectful workplace environment.

A respectful workplace supports:

- · Shell's commitment to diversity
- Shell's core values
- Shell's Code of Conduct

Shell's policy against discrimination and harassment deals with unlawful discrimination and harassment on the basis of a prohibited ground such as gender, religion, age, disability, or other grounds as provided for by legislation. Harassment includes comments or actions which are known, or should be known, to be unwelcome, and which ridicule or demean an individual or a group on the basis of a prohibited ground of discrimination. Discrimination and harassment violate human rights legislation and are contrary to Shell corporate policy. Discrimination and harassment will not be tolerated at Shell. Each of us at Shell has the responsibility to treat others with whom we deal during our work with respect, dignity, and fairness. This includes interactions on Shell premises and at non-Shell locations where Shell is represented. For complete information about the Respectful Workplace Policy and the complaint resolution process, please contact your HR rep or Shell contact.

#### 7.10 Violence in the Workplace

Shell will not tolerate threats or physical assaults carried out by employees, temporary staff, contractors, or third parties against others on Shell property or while at work.

If you are threatened or assaulted by anyone on company property, or believe you are at risk, tell your supervisor/manager. You are entitled to make a report to police. Your supervisor/manager will report the incident to Shell Management.

#### 7.11 Clean Desk Protocol

The Clean Desk Protocol establishes the rules for what must be removed from/secured on an employee's desk when the employee is away from their desk. This policy applies to all Shell Scotford employees and on-site contract companies. This means:

- 'Confidential' or 'Most Confidential' information, must not be left at any time in plain view and unattended in workstations/ offices, on walls, in meeting rooms, communal areas, or on printers.
- During office hours, laptops must be secured by a locking mechanism (e.g., Kensington lock). After working hours, laptops must be removed from plain view and locked away.
- If leaving the office area for more than a short period (> than 10 minutes), all mobile computing assets, regardless of content, such as mobile phones, portable hard drives, memory sticks, software, etc., must be physically secured or retained on your person. In addition, computer screen locked, or computer logged off.
- Secure all personal belongings (e.g., Wallets, purses, etc.) in locked cabinets or desk drawers. If a locking cabinet is not available, contact Real Estate to have one installed in your workspace.

#### 8.0 ENVIRONMENT

#### 8.1 Environmental Protection/Spills

Protecting the Environment is Everyone's Responsibility.

- SHELL CANADA SCOTFORD HEALTH & SAFETY RULES & REGULATIONS The most effective way to be environmentally responsible is to ensure that you are adequately prepared for the job. Prevention is the key.
  - Prevent all uncontrolled releases of hazardous material and products to the environment.
  - Use spill containment when opening process piping, flanges, connections, etc. as appropriate.
  - Ensure waste material that is generated is collected from your work site and disposed of in the proper containers.

In the event a spill does occur we must minimize the environmental impact.

- If safe to do so, contain the spill and try to prevent material from reaching soil/gravel areas, ditches and storm sewers.
- Immediately report all spills in process areas to the unit operator. If spill is in a non-production area notify the Site Supervisor.
- Secure the spill area, flag off the area to limit access to the spill area and keep non-essential personnel away.
- Refer to SDS for hazards and handling information and appropriate clean up measures.
- Have appropriate clean up measures completed.

**REMEMBER**-Immediate reporting of a spill is essential!

#### 8.2 Wildlife

If you encounter wildlife at Scotford:

- Do not approach the wildlife.
- Report any wildlife that appears injured or distressed to the Environment Department or Site Supervisor.
- · Report any nests to the Environment Department.
- Rope off the area do not touch or remove wildlife or nests.

#### 8.3 Waste Management

Everyone who generates waste streams on-site has an important role in properly identifying and segregating waste streams.

Waste management is important to:

- protect employees, public health and safety.
- minimize offsite environmental impacts.
- · minimize future potential liabilities with disposal; and
- comply with regulatory and Corporate HSSE requirements.

To avoid impacting the Safety of others when loading bins – Do not load above the fill line. Do not cross contaminate waste streams which could expose people to potential hazards. Do not slope load bins which could lead to partial shipments.

Scotford uses several types of containers to manage waste at specific locations across site, as follows:

Hute Container	
Red Drums	Hazardous materials, including oily waste, hydrocarbon- contaminated waste and contaminated PPE (liquids must be in bunged drums). Must have a waste label on them.
Yellow, Grey or Black Drums	Non-hazardous waste, such as non-regulated industrial waste, clean construction materials and domestic waste (liquids must be in bunged drums).
Temporary Lugger Bins	Storage for large amounts of hazardous materials, such as spent catalyst or adsorbent waste (no liquids)
Roll-off Bins	Non-industrial waste (as labelled), including scrap metal, wood, insulation and packaging.
Blue/Grey Plastic Carts	Paper shredding (No Cardboard)
Brown Bins	Cardboard
Green Bins	Domestic Garbage
Red 1M3 Bins	Organic Waste
Roll-off Bin at the cafeteria	Domestic Recycling

Large bins (15, 20, 30 and 40 yard) can be provided for Project work/larger scope and non –routine streams. For any questions, the Waste Management Team can be contacted on UPTA 1 TA14.

For any Environmental Regulatory issues or concerns please contact the Environment On-call by calling Security at 780-992-8999 and ask them to page the "Environment Team". Ensure to provide your name, contact number to be reach at and reason for the call.

<sup>45</sup> 

# SHELL CANADA SCOTFORD HEALTH & SAFETY RULES & REGULATIONS 9.0 INDEX

	10
Age Restriction	
Alcohol	
All Clear	
beards	
Benzene	
Bicycle	
Bonding	
Building Evacuation	
Cameras	
Certification	
Chemical Handling	
Clean Building Policy	
Clean Desk	
Compressed Gas	
Cutting	36
Drink	15
Drugs	41
Electrical	
Emergency	15
Ethylene Öxide	22
Excavation	30
Exposures	25
Fire Extinguishers	31
Fire Protection	
Fire Watch	29
Flagging	29
Food	
Footwear	11
Fuel	34
Ground Disturbance	
Grounding	
Hair	
Hoisting	
Horseplay	
Hoses	
Hydrogen Sulphide	
Incident Reporting	
Injuries	
Jewelry	
47	
17	

SHELL CANADA SCOTFORD H	EALTH & SAFETY RULES & REGULATIONS
Life Saving Rules	
Lighters	
Loading/Unioading Produc	t 30
PPE Exceptions	
Process Safety Fundament	als
Respectful workplace	
Site Alarm Testing	
Site Emergency Assembly	Alarm 16
Smoking	
Spills	
Spotters	
STEP	
Stop the Drop	
Sulphur Dioxide	
Supplier Label	

SHELL CANADA SCOTFORD	HEALTH & SAFETY RULES & REGULATIONS
Unit Alarms	
Vehicles	
Violence	
Visitor	
Visitor PPE	
Waste	
Weapons	
Weather	
Welding	
Wildlife	
Workplace Label	

#### **11.0 SITE MAPS & PRODUCTION UNIT LIST**

Upgrader South – Production Units (PU) 1&2

- PU1 RHC Units 221-229
- PU1 HMU Units 240-244
- PU1 Quest Units 246-249
- PU2 A&V Unit 211
- PU2 SRC Units 213-219, 272, TK-26137/38
- PU2 Utilities/Cogen Units 200, 205, 250-255, 284
- PU2 Water Block Units 257, 259, 261, 271, 273, 457, 459, 471

Upgrader North - Production Units (PU) 3&4

- PU3 RHC Units 421-427, 429
- PU3 HMU Units 440, 441, 443
- PU4 A&V Unit 411
- PU4 SRC Units 412-415, 417-419
- PU4 Utilities Units 451-454, 484
- PU4 Tank Farm Units 261, 456, 461, 472, 482

Distribution – Production Units (PU) 5

- PU5 Styrene Distribution Unit 04
- PU5 MEG Distribution Unit 37
- PU5 Refinery Distribution Unit 61
- PU5 Upgrader Distribution Unit 261

SHELL CANADA SCOTFORD  $\mbox{HealTH \& SAFETY RULES \& REGULATIONS } Chemicals - Production Units (PU) 6$ 

- PU6 EB Unit 01
- PU6 SM Unit 02
- PU6 Utilities Unit 03, 09
- PU6 Styrene Tank Farm Unit 04
- PU6 MEG Unit 30-37

#### **11.0 SITE MAPS & PRODUCTION UNIT LIST**

Refinery – Production Units (PU) 7&8

- PU7 DHT Unit 20 / DHU Unit 25
- PU7 SMR Unit 21
- PU7 PSA 2700 / PSA 2800
- PU7 HCU Units 22-24
- PU7 HCF Unit 26
- PU7 MCF Unit 50
- PU7 Utilities Unit 51, 56 (Nitrogen), 53 (Air), 57 (Raw water)
- PU8 NHT Unit 31 / CCR Unit 32
- PU8 SEU Unit 41 / HDA Unit 42 / HEX Unit 43
- PU8 ADU Unit 11 / HO Unit 15
- PU8 GRU Unit 12 / ATU-13
- PU8 Tank Farm Unit 61 & 71-72

## 10.0 SHELL SCOTFORD

