



PCS PTE. LTD.



SECURING THE HEALTH AND SAFETY  
OF OUR WORKFORCE  
SAFEGUARDING OUR COMMUNITY

# RESPONSIBLE CARE® OBJECTIVES & TARGETS 2024

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Health, Safety & Environment cum Quality Control Manager

Annual PCS-Contractors HSE Meeting 2024  
12 January 2024



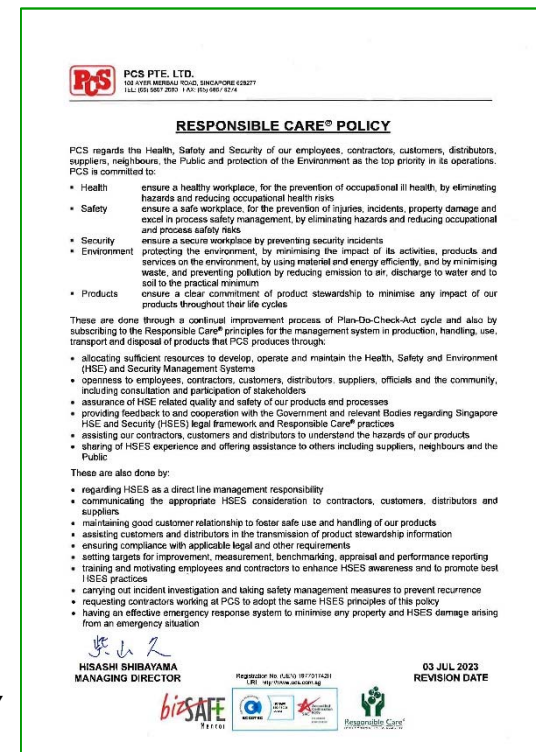
# Responsible Care®



1. global chemical industry's commitment
2. continuous improvement in health, safety and environmental performance
3. open and transparent communication

- signatory since October 1999
- PCS RC Policy\* spells out **philosophy and principles**
  - ➔ governing all decisions related to health, safety and environment, in all business activities
- applies to all employees and contractors
- mindset of identifying and removing hazards at workplace

\* *Responsible Care® Policy is PCS' manifestation of generic "Health, Safety & Environment Policy", as PCS is a signatory of Responsible Care®*



# Objectives & Targets 2024 - 1



## 1. Maintain a Healthy, Safe Workplace and best in class Environment

Zero Lost Time Incident	
Total Recordable Case Frequency $\leq 1.4$	TRCF, per million hours worked
Zero Environmental Incident	RAM* Consequence > Rating of 3 <i>* see slide 4</i>
Zero Hazardous Exposure leading to Occupational Diseases	
Zero Process Safety Incident	RAM Consequence > Rating of 3

# Risk Assessment Matrix



Potential Consequence					Probability of Occurrence				
					A	B	C	D	E
Rating	People	Asset	Environment	Reputation	Very Unlikely Never heard of in our industry	Unlikely Heard of in our industry	Likely Has occurred in PCS	Occasional Occurred several times per year in PCS	Routine Occurred several times per year in PCS
0	No injury	No damage	No effect	No impact					
1	Slight injury	Slight damage	Slight effect	Slight impact					
2	Minor injury	Minor damage	Minor effect	Limited impact					
3	Major injury	Localised damage	Localised effect	Considerable impact					
4	Single fatality	Major damage	Major effect	Major national					
5	Multiple fatalities	Extensive damage	Massive effect	Major international					

ZONES -  LOW RISK     MEDIUM RISK     HIGH RISK

## HARM TO PEOPLE

RATING	DESCRIPTION
0	No injury or health effect.
1	Slight injury or health effect (including First Aid and Medical Treatment cases) - not affecting work performance or causing disability.
2	Minor injury or health effect - affecting work performance, such as restriction on activities (Restricted Workday Case). Limited health effect, which is reversible, eg. skin irritation, food poisoning.
3	Major injury or health effect - affecting work performance, such as Lost Time Injury, or a need to take a few days to recover. Irreversible health damage without loss of life, eg. noise induced deafness, chronic back injury.
4	Single fatality or Permanent Total Disability (including Permanent Partial Disability) - from an incident or occupational illness, eg. poisoning, cancer.
5	Multiple fatalities - from an incident or occupational illness, eg. poisoning, cancer.

# Objectives & Targets 2024 – 2a

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## 2. Maintain Good HSE Performance and Management System

- Maintain zero major non-conformity in external and internal HSE audits
- Enhance Contractor Companies bizSAFE capacity building through PCS Maintenance Contractors HSE Committee's (PCC) championship as bizSAFE Mentor
- Ensure Safety Case Cycle 2 written presentation as a live document
  - ✓ propagate its purpose as knowledge management and retention
  - ✓ competency development of newer workforce

# Objectives & Targets 2024 – 2b

## 2. Maintain Good HSE Performance and Management System

- Emphasise *Safety Accountability, Focus and Empowerment (SAFE)*\* measures; alignment with Ministry of Manpower programme to strengthen Workplace Safety and Health (WSH) ownership fundamentally and sustainably
- Promote technology-enabled HSE
  - ✓ mind-set change to further digital transformation in health, safety, environment and productivity

\* see slides 7 & 8

### Safety Accountability, Focus and Empowerment (SAFE) measures

Strengthen ownership at:

#### Sectoral Level

- ✓ Demerit point system for Manufacturing Sector



#### Company Level

- ✓ Increase Corporate Leaders' accountability
- ✓ Top Executive WSH Programme for CEO or Board Director
- ✓ Enhanced Workplace Health Surveillance Programme



#### Worker Level

- ✓ Empowering workers to raise WSH issues
- ✓ Safety Orientation Course to include high-risk work activities



Strengthen WSH ownership fundamentally and sustainably



# Safety Accountability, Focus and Empowerment (SAFE) measures

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- SAFE measures are a package of sectoral and broad-based measures by the Multi-Agency Workplace Safety Taskforce to strengthen WSH ownership fundamentally and sustainably at the sectoral, company and worker level
- Measures to strengthen ownership at the sectoral level
  - demerit point system for manufacturing sector
  - video surveillance system for construction sector
  - safe use of machineries and combustible dust
  - more stringent safety requirements and new measures in Government construction tenders

# Safety Accountability, Focus and Empowerment (SAFE) measures

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- Measures to strengthen ownership at the **company** level
  - increase corporate leaders' accountability
  - CEO or Board Director to attend the Top Executive WSH Programme (TEWP)\*
  - enhanced Workplace Health Surveillance Programme
  - WSH resources to support SMEs
- Measures to strengthen ownership at the **worker** level
  - empowering workers and members of public to raise WSH issues
  - online micro-learning component to Safety Orientation Course Recertification assessment

\* see slide 9

*More info at*

<https://www.mom.gov.sg/workplace-safety-and-health/safe-measures>





# Top Executive WSH Programme

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- TEWP aims to focus corporate leaders' attention on how to meet their WSH responsibilities and ways to develop their company's WSH capabilities
- CEO or Board Director of companies in higher-risk sectors are required to attend the TEWP before **1 March 2024**
- Programme includes
  - Approved Code of Practice for chief executives and board of directors' WSH Duties
  - root cause analysis of top incident types
  - ways to prevent accidents
  - legal responsibilities of top executives under WSH Act
  - business benefits and value of WSH
  - how top executives can shape WSH culture and system
  - how to avoid common workplace incidents
  - where to get help to build WSH capabilities



# Objectives & Targets 2024 – 3a

## 3. Ensure a HSE competent Workforce

- Emphasise empowerment and nurture ownership in health, safety and environment
  - ✓ awareness of Workplace Safety and Health (WSH) legislations and regulations, including Codes of Practices

FRIDAY, OCTOBER 14, 2022 1

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First published in the *Government Gazette*, Electronic Edition, on 14 October 2022 at 5 pm.

No. 2861 — WORKPLACE SAFETY AND HEALTH ACT 2006

WORKPLACE SAFETY AND HEALTH  
(APPROVED CODES OF PRACTICE)  
NOTIFICATION 2022

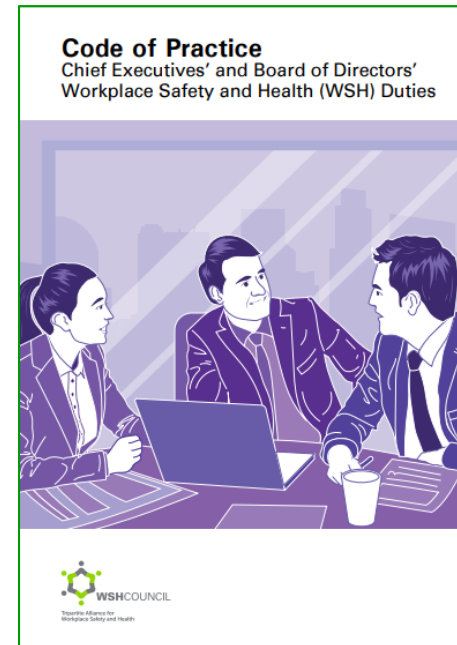
In accordance with section 40B(3) of the Workplace Safety and Health Act 2006, the Workplace Safety and Health Council hereby notifies that the Council has approved the Codes of Practice set out in the Schedule, with effect from 31 October 2022.

2. The approved Codes of Practice may be inspected at the place and time and on such days as follows:

Place: Workplace Safety and Health Council  
1500 Bendemeer Road, #04-01  
Ministry of Manpower Services Centre  
Singapore 339946

Day: Mondays to Fridays  
(public holidays excepted)

Time: 9.00 a.m. to 1.00 p.m.  
2.00 p.m. to 5.00 p.m.



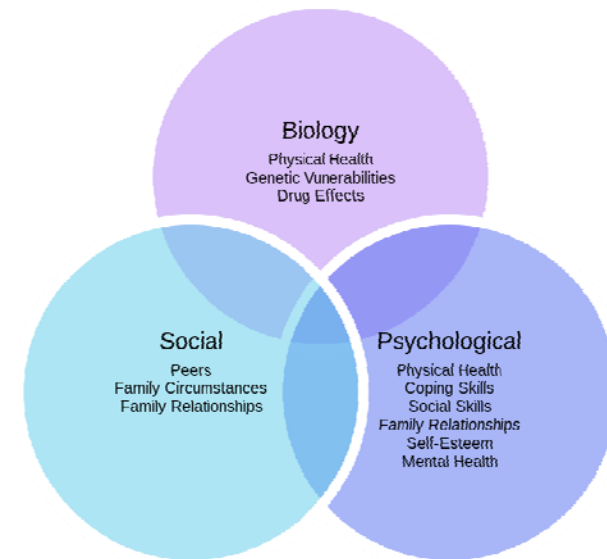
issued  
Oct 2022

# Objectives & Targets 2024 – 3b

## 3. Ensure a HSE competent Workforce

- Keep workforce competencies current to address business and operational challenges
  - ✓ preserve and enhance knowledge flow
- Explore gaps and programme in keeping older workers healthy and safe
  - ✓ fill knowledge gaps to better understand biological and psychosocial factors

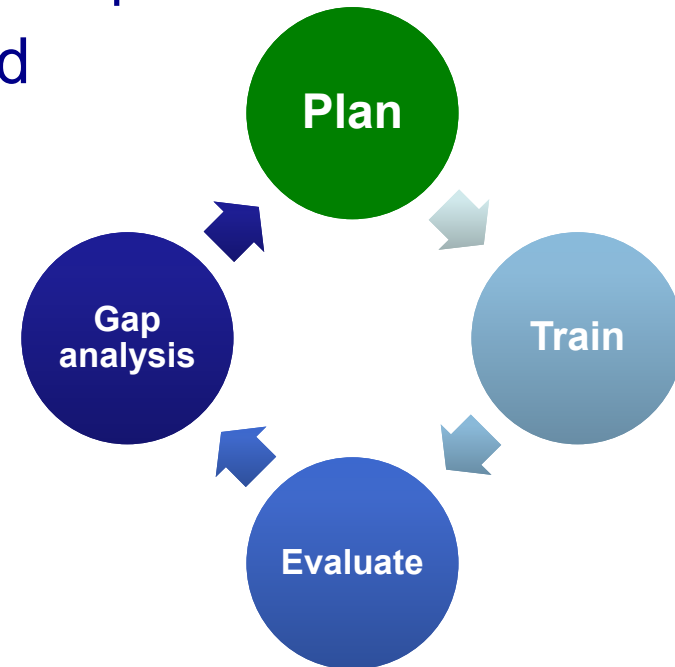
*\* see slide 12*



# Training and Competency



- Section 12 of Workplace Safety and Health Act 2006
  - “...such measures as are necessary to ensure the safety and health of the employer’s employees at work”
    - “...ensuring that those persons at work have adequate instruction, information, training and supervision”
- Different types of expertise required
- **Competency** is a combination of **Knowledge, Ability** and **Skill**
  - ✓ written training programme
  - ✓ compiled by competent person
  - ✓ given prior to start of work, changes
  - ✓ records to be kept
  - ✓ refresher training every 3 years



# Objectives & Targets 2024 – 4a

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## 4. Strengthen Responsible Care<sup>®</sup> Practices

- *Continue outreach activities, sharing practical and sustainable approaches in Responsible Care<sup>®</sup> programmes as Responsible Care<sup>®</sup> Leader*
  - ✓ *embed Responsible Care<sup>®</sup> in marketing collateral and outreach programmes*
- *Active support and participation in national workplace health and safety initiatives*



# Objectives & Targets 2024 – 4b

## 4. Strengthen Responsible Care® Practices

- Explore carbon capture, utilisation and storage (CCUS) opportunities, including renewable energy sources
  - ✓ alignment with national net-zero greenhouse gas emissions target
- Active outreach / sharing of HSE experience / expertise, within Complex, and through SCIC / industry avenues



Public Utilities Board



SIA Engineering Company



# Objectives & Targets 2024 – 5

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## 5. Ensure Compliance with Legal and Other Requirements

- Ensure workplace health and safety awareness and compliance through regular site inspection\* *\* see slide 16*
  - ✓ identify and control potential risk situations to eliminate injuries
- Ensure alignment to WSH 2028 Vision\*\* (MOM Tripartite Strategies) *\*\* see slide 17*
  - ✓ incorporate WSH 2028 strategies in programmes and activities
- Ensure Contractor Companies demonstrable commitment to, and competence in, the proper management of HSE\*\*\* *\*\*\* see slide 18*
- Review risk control measures
  - ✓ promote greater vigilance, ownership and accountability

# Formal inspections

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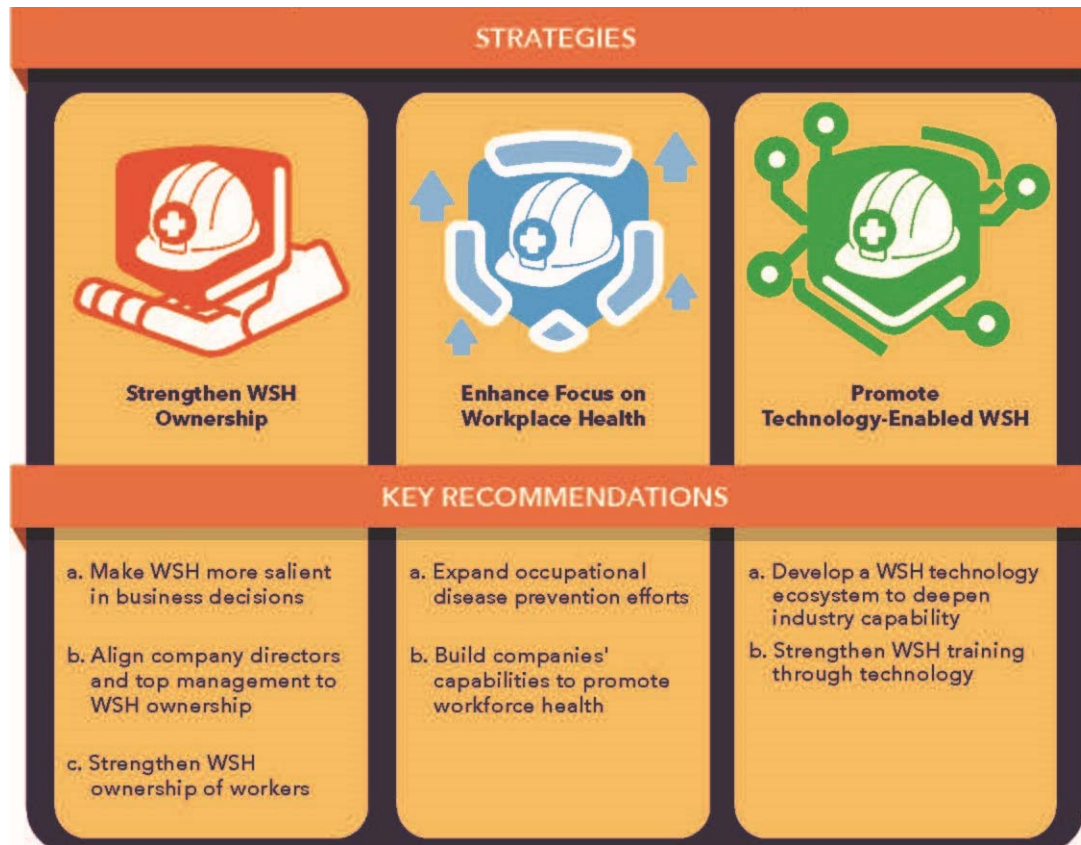
- Monthly
  - √ Management Team
  - √ Safety & Health Working Committee
  - √ PCS Maintenance Contractors HSE Committee (PCC)
- Bi-weekly
  - √ HSE Officer, support functions (Technology & Optimization, IT & Plant Services, Maintenance, Contractor)



# WSH 2028



***Vision – A Healthy Workforce in Safe Workplaces;  
A Country Renowned for Best Practices in  
Workplace Safety and Health***



## Strategic Outcomes

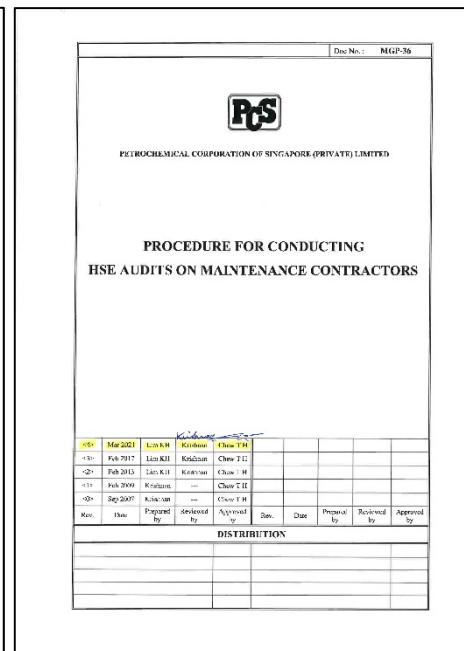
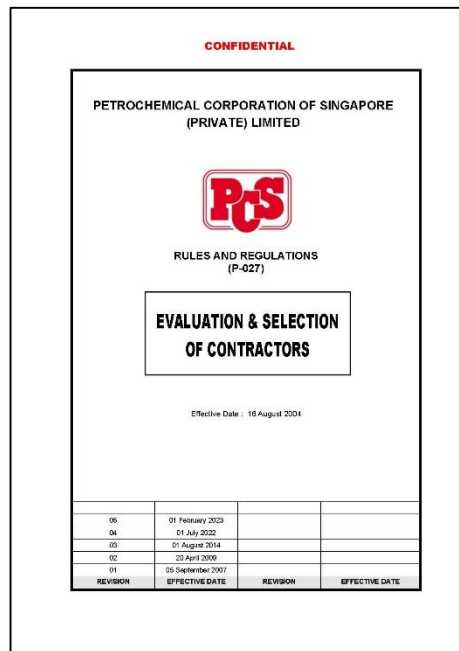


# Evaluation, Selection, Audit



- Regulations for Evaluation & Selection of Contractors

- Procedure for conducting HSE Audits on Maintenance Contractors



- 7.2 Contractors failing to achieve the minimum score of 75% may be subjected to one or more actions as given below, as decided by the Maintenance Manager –
- Re-audit within three months (only if there is reason to believe that the failure was due to administrative discrepancies and not due to inadequacy of their HSE Management System)
  - Eviction from PCS facilities (land, office or store)
  - Not considered for any new work under PCS Maintenance
  - Termination of contract and/or removal from the 'Approved contractor list' (this shall be on consultation with the Purchasing Manager)

Score in previous audit	Status	Audit
Score ≥ 85%	Star	4 years
85% > Score ≥ 75%	Passed	3 years
Score < 75% (Failed in 1 <sup>st</sup> attempt)	Failed	1 year

# Objectives & Targets 2024 – 6

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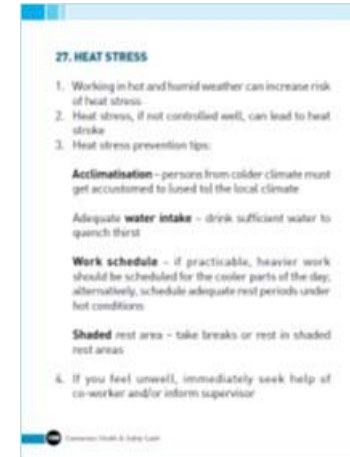


## 6. Achieve Safe and Successful Execution of Projects

- Ensure safe execution and completion of projects, including small Capex projects
- Ensure ongoing communication on HSE issues, coordination of activities and proper work interface
  - ✓ appropriate level of supervision and take prompt corrective actions
- Ensure contractors / subcontractors possess adequate knowledge and competency levels through training and mentoring system

# Heat Stress Management

- Working in hot and humid weather can increase risk of heat stress
- Heat stress, if not controlled well, can lead to **heat stroke**
- Prevent / minimise:
  - ✓ **Acclimatisation**
  - ✓ Adequate **water intake** – water stations
  - ✓ **Work schedule** – heavier work scheduled for the cooler parts of the day
  - ✓ **Shaded rest areas**



PCS guidebook



WSH Council guidebook

Allocation of Work in a Cycle of Work & Rest	TLV WBGT (in °C)			
	Light	Moderate	Heavy	Very Heavy
75% to 100% work	31.0	28.0	–	–
50% to 75% work	31.0	29.0	27.5	–
25% to 50% work	32.0	30.0	29.0	28.0
0% to 25% work	32.5	31.5	30.5	30.0

Table A1: TLV (WBGT) values for acclimatised persons.



Monitor Wet Bulb Globe Temperature (WBGT)

# Our CULTURE







THANK YOU



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