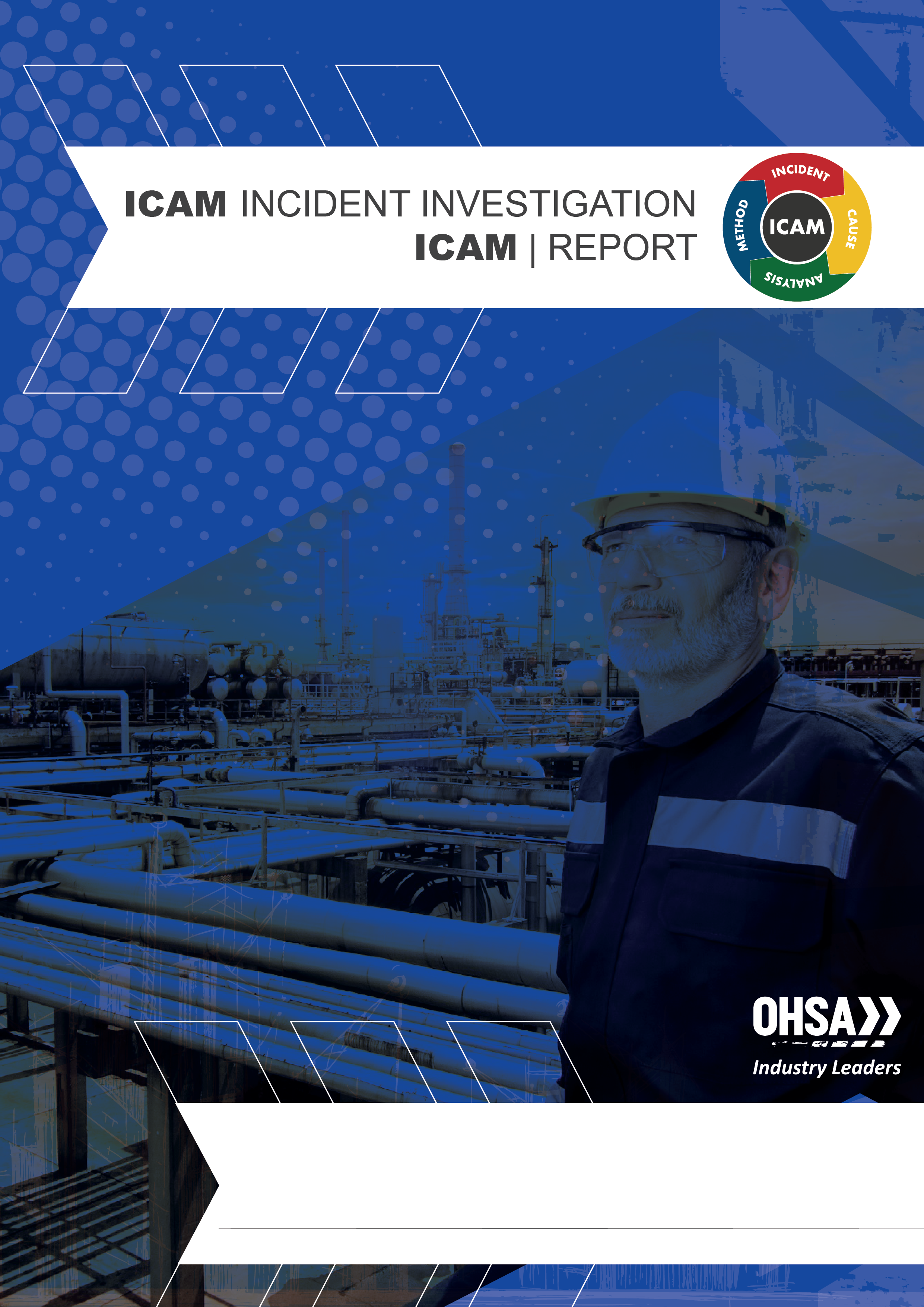
****

STUDENT NAME:

**Case Study Practical Questions:**

**To be completed on the incident you are using for your ICAM report.**

**The following questions are to align with the unit of competency requirements that need to be demonstrated for at least two practical cases, i.e. the forklift case study in your theory assessment document and also the incident covered in your face-to-face or Zoom practical day.**

1. List two (2) specific documents that might be applicable to this incident i.e. Acts / Regulations / SOP’s / JSA’s / Policies or Procedures.

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2. What would the scope and objective of this investigation be?

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3. Would this incident be a notifiable incident in your jurisdiction? Explain your decision by reference to the legislative section.

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4. What should have been the initial actions at the scene of the incident (i.e. safety and first aid)?

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5. List two items you should implement to ensure the investigation is conducted in a safe manner.

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6. As part of the investigation plan, please respond to the following questions.

6.1 List two witnesses/people you would interview or get statements from for this incident.

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6.2 Give an example of what video, audio recordings you might obtain for this investigation relating to the scene, plant or equipment?

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6.3 List three (3) items you might photograph/video for this incident.

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6.4 List one (1) sketch, diagram or scale drawing you would include as part of the investigation.

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6.5 What further information or research might you investigate to assist in this incident investigation? List one (1) internal source of information within the workplace and one external course of information outside the workplace.

|  |
| --- |
| One (1) internal source of information |
|  |
| One (1) external source of information. |
|  |

7. List four (4) categories of people you might engage to investigate this incident. (eg line supervisor)

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8. What methods could you use to collect and maintain the evidence so that it isn’t altered or tainted?

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9. What tools, resources or processes would you use to collect, test or verify relevant evidence?

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10. List three (3) barriers which may occur during the investigation and explain how you could respond to those

|  |  |
| --- | --- |
| Potential Barrier | How to control or address the potential barrier |
|  |  |
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**ICAM INVESTIGATION REPORT**



|  |  |
| --- | --- |
| **Report Title:** |  |
| **Date:** |  |
| **Student Name:** |  |

|  |  |
| --- | --- |
| **Report Status: Preliminary report / Final Report** | |
| **Investigation Team** | |
| **Name:** | **Position** |
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**Control Page**

*This document has been prepared on behalf of and for the exclusive use of insert business entity name*

|  |  |  |  |
| --- | --- | --- | --- |
| **Rev. #** | **Date** | **Section** | **Description** |
| E.g. 1. | 03/01/2022 | *All* | Draft report |
|  |  |  |  |
|  |  |  |  |

|  |  |  |
| --- | --- | --- |
| **Report Agreed/Approved** | | |
| Sponsor Manager Name/s: | Signature: | Date: |
|  |  |  |
|  |  |  |
| *Comments:* | | |

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# **Executive Summary**

(Summary of Incident Description, Findings, Recommendations)

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# **Incident Description**

## **2.1 Location details**

|  |  |
| --- | --- |
| Location: |  |
| Time: |  |
| Date: |  |

## **2.2 Details of injured person/s**

|  |  |
| --- | --- |
| Name: |  |
| Company: |  |
| Injuries sustained: |  |
| Medical treatment: |  |

## **2.3 Details of damage/impact**

|  |  |
| --- | --- |
| Damage to equipment: |  |
| Environmental impact: |  |

## **2.4 Risk rating**

|  |  |
| --- | --- |
| Actual consequence level: |  |
| Potential consequence level: |  |

## **2.5 Incident Description**

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## **2.6 Photographs of incident / scene**

If using the case study scenario, you won’t need to add in photos.

## **2.7 Timelines**

Class exercise example can be inserted into here or in Appendix 1. You may choose to develop your own using either the template sample in Appendix 1 or you may choose to use your own company timeline if they have one. If using the class/team generated example, please state ‘Refer to class example’

# **Key Findings**

## **3.1 Immediate Cause: ( List what you think is the immediate cause of the incident, not the underlying/latent factors)**

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## **3.2 Contributing Factors** (List three (3) only for **EACH** of the following causal factors for this assessment)

|  |  |  |  |
| --- | --- | --- | --- |
| **Category** | **Code** | | **Contributing Factor Type** |
| **Absent or Failed Defense** | DF1 |  | Awareness – hazard identification |
| DF2 |  | Awareness – communication |
| DF3 |  | Awareness – competence/knowledge |
| DF4 |  | Awareness – supervision |
| DF5 |  | Awareness -work instruction/procedure |
| DF6 |  | Detection – visual warning systems |
| DF7 |  | Detection – aural warning systems |
| DF8 |  | Detection -speed/movement detectors |
| DF9 |  | Detection – vigilance/fatigue |
| DF10 |  | Detection – gas/substance |
| DF11 |  | Control and Recovery – procedures |
| DF12 |  | Control and Recovery – bypass valves/circuits |
| DF13 |  | Control and Recovery – emergency shut down |
| DF14 |  | Protection and Containment – PPE |
| DF15 |  | Protection and Containment – fire fighting |
| DF16 |  | Protection and Containment – spill response |
| DF17 |  | Protection and Containment –bunding/barricading/exclusion zones |
| DF18 |  | Escape and Rescue – safe access/egress |
| DF19 |  | Escape and Rescue – emergency planning/response |
| DF20 |  | Escape and Rescue – emergency communication |
| DF21 |  | Other… |
| **Evidence: (detail evidence for each box ticked above)** | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Category** | **Code** | | **Contributing Factor Type** |
| **Individual Team or Action** | IT1 |  | Supervisory error or violation |
| IT2 |  | Operating authority error or violation |
| IT3 |  | Operating speed |
| IT4 |  | Equipment use error or violation |
| IT5 |  | PPE use error or violation |
| IT6 |  | Procedural compliance |
| IT7 |  | Change management error |
| IT8 |  | Equipment/materials handling error or violation |
| IT9 |  | Horseplay/thrill seeking error or violation |
| IT10 |  | Hazard recognition/perception |
| IT11 |  | Hazard management error or violation |
| IT12 |  | Work method error or violation |
| IT13 |  | Occupational hygiene practices |
| IT14 |  | Other… |
| **Evidence: (detail evidence for each box ticked above)** | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Category** | **Code** | | **Contributing Factor Type** |
| **Task / Environment Conditions - WORKPLACE** | TE1 |  | Task Planning / Preparation / Manning |
| TE2 |  | Hazard Analysis / Job Safety Analysis / Take 5 |
| TE3 |  | Work Procedures availability and suitability |
| TE4 |  | Permit to work availability and suitability |
| TE5 |  | Abnormal operation situation / Condition |
| TE6 |  | Tools / Equipment condition / Availability |
| TE7 |  | Materials availability and suitability |
| TE8 |  | Equipment integrity |
| TE9 |  | Housekeeping |
| TE10 |  | Weather conditions |
| TE11 |  | Congestion/ Restrictions / Access |
| TE12 |  | Routine / Non-routine task |
| TE13 |  | Fire and / or explosion hazard |
| TE14 |  | Lighting |
| TE15 |  | Equipment / Material temperature / Conditions |
| TE16 |  | Noise |
| TE17 |  | Ventilation |
| TE18 |  | Gas, dust or fumes |
| TE19 |  | Radiation |
| TE20 |  | Chemical |
| TE21 |  | Wildlife |
| TE22 |  | Surface Gradient / Conditions |
| TE23 |  | Reduced / Restricted visibility |
| TE24 |  | Other Factor… |
| **Evidence: (detail evidence for each box ticked above)** | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Category** | **Code** | | **Contributing Factor Type** |
| **Task / Environment Conditions HUMAN FACTORS** | HF1 |  | Complacency/motivation/desensitization to hazard |
| HF2 |  | Drugs/Alcohol influence |
| HF3 |  | Familiarity with task |
| HF4 |  | Fatigue |
| HF5 |  | Situational awareness |
| HF6 |  | Time/productivity pressures |
| HF7 |  | Peer pressure/supervisory example |
| HF8 |  | Physical capabilities |
| HF9 |  | Mental capabilities |
| HF10 |  | Physical stress |
| HF11 |  | Mental stress |
| HF12 |  | Confidence level |
| HF13 |  | Secondary level |
| HF14 |  | Personal issues |
| HF15 |  | Distraction/pre-occupation |
| HF16 |  | Experience/knowledge/skill for task |
| HF17 |  | Competency |
| HF18 |  | Behavioral beliefs (gains – risks) |
| HF19 |  | Personality/attitude |
| HF20 |  | Poor communications |
| HF21 |  | Poor shift patterns & overtime working |
| HF22 |  | Passive tolerance of violations |
| HF23 |  | Perceived license to bend rules |
| HF24 |  | Change of routine |
| HF25 |  | Reliance on undocumented knowledge |
| HF26 |  | Other Human Factor… |
| **Evidence: (detail evidence for each box ticked above)** | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Category** | **Code** | | **Contributing Factor Type** |
| **Organizational Factors** | HW |  | Hardware |
| TR |  | Training |
| OR |  | Organization |
| CO |  | Communication |
| IG |  | Incompatible Goals |
| PR |  | Procedures |
| MM |  | Maintenance Management |
| DE |  | Design |
| RM |  | Risk Management |
| MC |  | Management of Change |
| CM |  | Contractor Management |
| OC |  | Organizational Culture |
| RI |  | Regulatory Influence |
| OL |  | Organizational Learning |
| VM |  | Vehicle Management |
| MS |  | Management Systems |
| **Evidence: (detail evidence for each box ticked above)** | | | |

# **Recommendations**

## Recommendations from Contributing Factors – Corrective Action Plan (List at least 5)

|  |  |  |  |
| --- | --- | --- | --- |
| **Item Ref** | **Corrective Action** | **Responsible Dept/Person** | **Completion Date** |
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| **PCBU’s Close Out of Corrective Actions:**  Comments:  Name: Signature: Date: | | | |

# **Observations while conducting the investigation (List 1)**

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# **Positive observations during the investigation (List 1)**

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# **Significant Learnings (List 2)**

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# **8.0 References**

The following documentation has been referenced as part of this investigation. **(List 5)**

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**9.0 APPENDICES**

**Group 1: Essential:**

* Appendix 1 – Timeline (Essential to provide for all scenarios for assessment – an alternative timeline template may be used)

**Group 2: Plus At least two of the following three options is required for assessment. You may refer to the class exercises conducted during the course.**

* Appendix 2 – Five Why’s – Event and Condition Chart
* Appendix 3 – PEEPO
* Appendix 4 – ICAM Factor Analysis

**Group 3: Additional information**

* Appendix 5 – ICAM Codes (to assist in coding/analysis etc)

# **Appendix 1: Timeline**

# **Appendix 2: Event & Condition Chart (‘Five Whys’)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Date:** | **Event** |  |  |  |  |  |
| Condition  WHY |  |  |  |  |  |  |
| WHY |  |  |  |  |  |  |
| WHY |  |  |  |  |  |  |
| WHY |  |  |  |  |  |  |
| WHY |  |  |  |  |  |  |
| WHY |  |  |  |  |  |  |

# **Appendix 3: PEEPO Analysis – List 5 for each**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| PEOPLE | EQUIPMENT | ENVIRONMENT | PROCEDURES | ORGANISATION |
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# **Appendix 4: ICAM FACTOR ANALYSIS – (List three for each causal factor)**

# **Appendix 5: ICAM CODES**

|  |  |
| --- | --- |
| **CODE** | **Contributing Factor Types**  **ABSENT / FAILED DEFENCES** |
| DF1 | Awareness – hazard identification |
| DF2 | Awareness – communication |
| DF3 | Awareness – competence/knowledge |
| DF4 | Awareness – supervision |
| DF5 | Awareness -work instruction/procedure |
| DF6 | Detection – visual warning systems |
| DF7 | Detection – aural warning systems |
| DF8 | Detection -speed/movement detectors |
| DF9 | Detection – vigilance/fatigue |
| DF10 | Detection – gas/substance |
| DF11 | Control and Recovery – procedures |
| DF12 | Control and Recovery – bypass valves/circuits |
| DF13 | Control and Recovery – emergency shut down |
| DF14 | Protection and Containment – PPE |
| DF15 | Protection and Containment – fire fighting |
| DF16 | Protection and Containment – spill response |
| DF17 | Protection and Containment –bunding/barricading/exclusion zones |
| DF18 | Escape and Rescue – safe access/egress |
| DF19 | Escape and Rescue – emergency planning/response |
| DF20 | Escape and Rescue – emergency communication |
| DF21 | Other… |

|  |  |
| --- | --- |
| **CODE** | **Contributing Factor types**  **INDIVIDUAL / TEAM ACTIONS** |
| IT1 | Supervisory error or violation |
| IT2 | Operating authority error or violation |
| IT3 | Operating speed |
| IT4 | Equipment use error or violation |
| IT5 | PPE use error or violation |
| IT6 | Procedural compliance |
| IT7 | Change management error |
| IT8 | Equipment/materials handling error or violation |
| IT9 | Horseplay/thrill seeking error or violation |
| IT10 | Hazard recognition/perception |
| IT11 | Hazard management error or violation |
| IT12 | Work method error or violation |
| IT13 | Occupational hygiene practices |
| IT14 | Other… |

|  |  |  |
| --- | --- | --- |
| **CODE** | | **Contributing Factor Types**  **TASK / ENVIRONMENT CONDITIONS –**  **WORKPLACE FACTORS (May be coded as WF)** |
| TE1 Or WF1 | Task Planning / Preparation / Manning | |
| TE2 Or WF2 | Hazard Analysis / Job Safety Analysis / Take 5 | |
| TE3 Or WF3 | Work Procedures availability and suitability | |
| TE4 | Permit to work availability and suitability | |
| TE5 | Abnormal operation situation / Condition | |
| TE6 | Tools / Equipment condition / Availability | |
| TE7 | Materials availability and suitability | |
| TE8 | Equipment integrity | |
| TE9 | Housekeeping | |
| TE10 | Weather conditions | |
| TE11 | Congestion/ Restrictions / Access | |
| TE12 | Routine / Non-routine task | |
| TE13 | Fire and / or explosion hazard | |
| TE14 | Lighting | |
| TE15 | Equipment / Material temperature / Conditions | |
| TE16 | Noise | |
| TE17 | Ventilation | |
| TE18 | Gas, dust or fumes | |
| TE19 | Radiation | |
| TE20 | Chemical | |
| TE21 | Wildlife | |
| TE22 | Surface Gradient / Conditions | |
| TE23 | Reduced / Restricted visibility | |
| TE24 | Other Factor… | |

|  |  |
| --- | --- |
| **CODE** | **Contributing factor types**  **TASK / ENVIRONMENT**  **– HUMAN FACTORS** |
| HF1 | Complacency/motivation/desensitization to hazard |
| HF2 | Drugs/Alcohol influence |
| HF3 | Familiarity with task |
| HF4 | Fatigue |
| HF5 | Situational awareness |
| HF6 | Time/productivity pressures |
| HF7 | Peer pressure/supervisory example |
| HF8 | Physical capabilities |
| HF9 | Mental capabilities |
| HF10 | Physical stress |
| HF11 | Mental stress |
| HF12 | Confidence level |
| HF13 | Secondary level |
| HF14 | Personal issues |
| HF15 | Distraction/pre-occupation |
| HF16 | Experience/knowledge/skill for task |
| HF17 | Competency |
| HF18 | Behavioral beliefs (gains – risks) |
| HF19 | Personality/attitude |
| HF20 | Poor communications |
| HF21 | Poor shift patterns & overtime working |
| HF22 | Passive tolerance of violations |
| HF23 | Perceived license to bend rules |
| HF24 | Change of routine |
| HF25 | Reliance on undocumented knowledge |
| HF26 | Other Human Factor… |

|  |  |
| --- | --- |
| **CODE** | **Contributing Factor Types**  **ORGANISATIONAL FACTORS** |
| HW | Hardware |
| TR | Training |
| OR | Organization |
| CO | Communication |
| IG | Incompatible Goals |
| PR | Procedures |
| MM | Maintenance Management |
| DE | Design |
| RM | Risk Management |
| MC | Management of Change |
| CM | Contractor Management |
| OC | Organizational Culture |
| RI | Regulatory Influence |
| OL | Organizational Learning |
| VM | Vehicle Management |
| MS | Management Systems |