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COMMENTS:

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**RUWAIS REFINERY
EXPANSION PROJECT**

**EPC-4 TANKAGE AND ASSOCIATED
INTERCONNECTING PIPING**

AGREEMENT No. 09-5578-E-4

DAEWOO E&C

PROJECT No. 5578

Doc: 5578-E4-HSE-HU-00026

Rev. 0

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INCIDENT INVESTIGATION & REPORTING PROCEDURE

AGREEMENT NO. : 09-5578-E-4

PROJECT NAME : Ruwais Refinery Expansion Project
EPC-4: Tankage & Associated
Interconnecting Piping

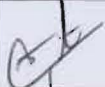



COMPANY : Abu Dhabi Oil Refining Company (TAKREER)

PMC : Mott MacDonald Ltd.

CONTRACTOR : Daewoo Engineering & Construction Co., Ltd.

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- (a) Revisions are denoted by a vertical line placed in the right-hand margin against the revised text.
- (b) PREP = Prepared by, CHKD = Checked by, REVD = Reviewed by, APP'D = Approved by.
- (c) In case of conflict between any requirements stipulated in this document with the contractual requirements, the contractual requirements shall prevail.

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1. INTRODUCTION

1.1 Purpose

The purpose of this procedure is to identify;

- Incidents and report in a logical manner through and including all relevant information.
- Establish effective immediate/basic and underlying causes.
- Establish means to prevent recurrence.

1.2 Scope

This procedure covers the reporting, investigation, follow-up and close out of all type of incidents. It details what happened, the key lessons learned, the recommendations and corrective action taken. It gives the guidelines on the methods of analyzing statistics. A safety Flash or Safety Alert will be raised as appropriate.

2. ABBREVIATIONS

LTI	Lost Time Incident
RWC	Restricted Work Case
MTC	Medical Treatment Case
FAC	First Aid Case
MVA	Motor Vehicle Accident
LTIA	Lost Time Injury Rate
TRIR	Total Recordable Incident Rate
SR	Severity Rate

3. DEFINITIONS

Contractor

A company that has been awarded the contract to build the project from start to hand over plant to owner

Employees

Members of the community expatriates or locals employed by companies to do a task and get remuneration for work done

HIPO

High Incident Potential Outcome. Any incident that has an unwanted outcome causing fatality, company reputation, damage to environment or loss of assets

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3.1 Incident

Any work-related event or event sequence, whether it results in loss, injury, illness, disease or none of these.

NOTE: An accident is an incident which has given rise to fatality, injury, illness or property damage.

The following incident types are distinguished:

Fatality

Fatality is the death of employee resulting from work related injury or illnesses regardless of time intervening between the injury and death.

Lost Time Incident (LTI)

Lost Time Incident is a work related injury which renders the injured person temporarily unable to perform any regular job or restricted job on any day after the day on which the injury was received.

Restricted Work Case (RWC)

Any work related injury other than a fatality or lost time injury case which results in a person being medically unfit for full performance of the regular job on any day after the occupational injury. Work performed might be:

- An assignment to a temporary job.
- Part time work at the regular job.
- Continuation full time in the regular job but unable to perform all the usual duties. Often a person is designated for "light duties".

Medical Treatment Case (MTC)

Any work injury that involves neither lost time nor restricted workdays but which requires treatment by, or under, specific order of a physician or could be considered in the province of a physician.

An incident will be a medical treatment case if there are complications requiring follow up medical treatment.

Examples of Medical Treatment

Treatment of infection.

Antiseptics during second or subsequent visits to medical personnel.

Treatment of second or third degree burns.

Use of prescription medications.

Soaking therapy (hot or cold) during second or subsequent visits to medical personnel.

Cutting away dead skin (surgical debridement).

Application of heat therapy during the second or subsequent visits to medical personnel.

Positive X-rays diagnosis (query fractures)

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Admission to a hospital for treatment (more than observation).

First Aid Case (FAC)

FAC is an injury, other than a lost time injury which may result in a partial absence from a shift but doesn't otherwise interface with job performance. Cases which are not sufficiently serious to be reported as Medical Treatment Cases (MTCs) and require minor first aid, e.g. dressing on a minor cut, burns, removal of a splinter, etc. before returning (usually immediately) to work. Such treatment and observation are considered First Aid, even if provided by a physician or registered medical professional personnel.

Near miss Case

Near Miss is an incident which potentially may or may not cause injury or occupational illness and/or damage (loss) to people, assets, the environment or company reputation. These are incidents which occurred without injury or serious damage to property. If the amount of loss resulted from damage to property is less than \$500, the case will be classified as a near miss case unless otherwise specified by the client.

Motor Vehicle Accident (MVA)

Motor Vehicle Accident is an Incident which has involved a vehicle and which has resulted in injury. Illnesses and/or damage (loss) to people, assets, the environment or the company reputation. This term shall be used as a secondary classification of an incident.

Environmental Incident

Any work related incident that can harm to environment such as water pollution, oil spill, noise pollution, damage to forest etc.

Fire Incident – any burning of property or equipment or equipment that belongs to the project. This term shall be used as a secondary classification of an incident.

Property Damage

Property damage to property of the Client, project property or Subcontractor resulting from an incident during construction activities, which the loss of damage is more than 500 dollars.

Security Related Incident

Any incident related to threat, robbery kidnapping, sabotage which involves company property or personnel working in the project. This term shall be used as a secondary classification of an incident.

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Category	Near Miss	Injury/illness	Environment	Property Damage	Report Form	Investigation Team
(1) Low Potential	Unlikely to have more severe consequences	Site first Aid	Non reportable spill less than 5 gallons of product, clean up by site personnel	\$500-- \$1000		-Site Supervisor
(2) Minor	Could have resulted in minor injury/ environmental spill/property damage	Medical First Aid	Reportable spill less than 25 gallons of product contained on site; will require clean up by outside contractor	\$1001-- \$5000		-Site Supervisor
(3) Moderate	High Potential(Hi-Po) Could have resulted in moderate(or more sever) injury/ environmental spill/ property damage	Recordable or restricted duty case	Reportable spill less than 25 to 100 gallons of product contained on site; will require clean up by outside contractor	\$5001-- \$50 000		-Site Supervisor - Operational Manager - Superintendent / Foreman or Site HSE Supervisor - Project Manager/ Facility Manager
(4) Serious	N/A	Multiple victims, lost time, hospitalization	Reportable spill of more than 100 gallons on site ; will require clean up by outside contractor	\$50 001-- \$1 000 000		- Area HSE Manager -HSE Manager (District / Region) -Operational Manager(District / Region) - Superintendent / Foreman or Site HSE Supervisor - Project Manager/ Facility Manager
(5) Major	N/A	Multiple LTA or Fatality	Any spill with offsite impact; will require clean up by outside contractor	\$ 1000 000--- XXX?		- Area HSE Manager or Corporate HSE Manager - HSE Manager (District/ Region) - Senior Operation Manager of the business Unit - Superintendent / Foreman or Site HSE Supervisor - Project Manager / Facility Manager

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3.2 Incident Statistic

The collection and interpretation of number of incident and the use of probability theory to analyze the incident trends in the project and the company as a whole. Statistics are analyzed annually as a minimum, causes are determined and corrective actions are monitored properly. It is also the guide for us (we use) to compare DEC's HSE performance against other company or other related institution.

The followings definitions and formulas will be used to measure the Rate on Incidence Recordability for the project;

Lost Time Injury Rate: LTIR

This Incident rate is based upon the total number of Lost Time Injury cases which resulted in death plus the number of Lost Time Incident per million man-hour, but exclude Restricted Work Day Case (RWC) and Medical Treatment Case (MTC);

$$\text{LTIR} = \frac{(\text{Fatality} + \text{No. of Lost Time Incidents}) \times 1,000,000}{\text{Total Man-Hours}}$$

Total Recordable Incident Rate: TRIR

This Incidence rate is based upon the total number of Recordable cases per million man-hour, any work-related injury and illness case requiring more than first aid that fall into any one of the following:

- Fatality
- Lost Time Incident
- Restricted Workday Case
- Medical treatment (other than first aid);

Total Recordable Cases are the sum of Lost Time Incident (LTI), Restricted Work Case (RWC), Medical Treatment Case (MTC) and Occupational Illnesses but excluding First Aid Case and Near miss Case:

$$\text{TRIR} = \frac{(\text{Fatality} + \text{LTI} + \text{RWC} + \text{MTC}) \times 1,000,000}{\text{Total Man-Hours}}$$

The type of Recordable Incident will be decided by joint agreement between Site HSE Manager and the Physician who administered the victim.

Severity Rate: SR

This Incident rate is based upon the total number of Lost Workdays per thousand man-hours:

$$\text{SR} = \frac{\text{Total number of Lost Workdays} \times 1,000}{\text{Total Man-hours}}$$

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3.3 Statistics Terms

Total Man-hours

Total man-hours are the total numbers of hours worked, including overtime and training, but excluding leave, sickness and absence.

Lost Work Days (Days Away from Work)

- Lost Work Days are those work days regardless, consecutive or not, on which the employee would have worked but could not because of occupational injury or illness, excluding the day of injury or onset of illness.
- The maximum number of days can be given to a single incident or event is 180 lost work days.
- A lost days work can only be charge to a single year where the incident took place.
- Example: LTI case happened 2006.12.15 the Doctor advised him to rest for 30 days, he can return to work on 2007.01.15, 30 Lost days work will be charged to the year 2006 and not anymore to 2007.
- Lost Workdays of Death: Each Death resulting from occupational injury or illness is automatically given a schedule charge of 7,500 days.

4. RESPONSIBILITIES

4.1 Project Manager

- Ensure that all-serious incidents are reported immediately to the Client, Head Office and where applicable, to the statutory authorities.
- Ensure all incident reports are reviewed and where necessary, promptly instigate additional investigations.
- In the case of a serious incident or fatality, organize an Investigation Team.
- Regularly review incident reports and implement any changes required to improve site HSE performance. (i.e., safety plan update, work practices revision, additional training etc.
- Review the Monthly HSE report and issue to Head Office.

4.2 Site Manager

- If requested, participate with the Investigation Team.
- Coordinate with the investigation group regarding all the necessary data needed for easy determination of the root causes of the incident.
- Review the incident reports and implement any recommendation stipulated in the report.
- Closely monitor the implementation of the action to be taken, making sure that his subordinates are following the HSE procedures.

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4.3 HSE Manager

- Ensure that an initial Incident Report is completed within 24 hours of any incident.
- Review all Incident Reports and monitor incident trends and ensure that recommendations are followed up through Line engagement.
- Where appropriate, recommend to the Project Manager that an Investigation Team be instigated.
- On receipt of an initial verbal serious incident report, immediately send out SMS notification to Emergency Contact person for EPC 4 RRE Project.
- Submit site Weekly, Monthly & Annual HSE report and review the information to identify trends.

4.4 Section Manager

Ensure that all incidents that occur in his area of responsibility are properly investigated.

- If requested, participate with the Investigation Team.
- Coordinate with the investigation group regarding all the necessary data needed for easy determination of the root causes of the incident.
- Review the incident reports and implement any recommendation stipulated in the report.
- Closely monitor the implementation of the action to be taken, making sure that his subordinates are following the HSE procedures.

4.5 Injured person

It is the responsibility of all workers to report all and any injuries, near misses or incidents. It is the responsibility of an injured person to listen and tell the truth to the best of his knowledge how an injury occurred. It is the responsibility of an injured person to take his medication responsibly and take the recommended rest period prescribed by Doctor for healing.

4.6 Supervisor of Injured person

It is the responsibility of the injured person's supervisor to inform according to the emergency response procedure, the injured person's supervisor must contact the person responsible for calling and implementing the stages of the emergency procedure. The supervisor must make sure the injured person is in no immediate danger. The injured person should not be moved if he is not in danger and is made as comfortable as possible. The supervisor is also responsible to make sure the injured person is not overwhelmed by spectators. The supervisor shall be taking notes of times and any relevant information. The supervisor should also escort the injured person if there is no medic for some unforeseen circumstances to medical centre for identification of company, injured persons personal information until higher level person in the company arrives to relieve the supervisor.

4.7 Medic on site

The medic on site is responsible for the best medical first aid care he can supply when faced with an injured person. The medic once on the scene must evaluate condition and administer first aid only, the medic shall relieve the supervisor of all personal documents belonging to the injured person if need be for medical centre or hospital delivery. All medical reports must go through the clinic and the medic

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4.8 Head Office

- Upon receipt of incident report, carefully analyze the causes and action to be taken to prevent recurrence of the incident.
- If the investigation report is not clear, request for a more thorough investigation report and other supporting evidence needed (photos, medical report, witness statement etc.)
- If it is a critical accident, conduct a site visit and participate in the investigation or send a representative who is also competent to handle the situation.
- Immediately report the critical incidents to the Project/Managing Director all the details of the incidents and the action to be taken to prevent recurrence.
- Analyze all the statistics in overseas project sites. Incident trends, Leading indicators and Lagging indicators shall be reviewed.
- Compile all the summary records and statistics of the project sites.
- After analyzing the entire incident and the recommendation, a feedback system shall be implemented. Lessons learned from any incident shall be distributed to all sites for information and reference to prevent the recurrence of the said incident.

5. INCIDENT INVESTIGATION

It should be understood by all Management that:

- The incidents that downgrade our business are caused: they do not just happen;
- The causes of loss can be determined and controlled.

In order to better understand the circumstances, which lead to the causes of incidents, the Project Manager has a prime responsibility for organizing an Investigation Team, and shall appoint the members of the Investigation Team.

5.1 Organizing an Investigation Team

An Incident Investigation Team to be facilitated by the Site HSE Manager will be organized when any one of the following incidents has taken place.

- All LTI cases.
- Near miss that could result in serious consequences.
- Failure or collapse of facility
- Serious environment damage or property damage

For all other incidents as investigation report is required, including all learning points. The manpower required is depending on the damage, serious environmental damage, or serious loss of reputation.

Investigations should be carried out as soon as possible after the incident, because the quality of evidence can deteriorate rapidly with time.

In principle, the Investigation Team should consist of the following:-

1. Area Manager, Responsible for the area where the incident happened.

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2. Engineer/Supervisor responsible for the work that was carried out.
3. HSE personnel responsible for the area where the event happened.
4. Subcontractor Site Manager.
5. Subcontractor Supervisor and crew leader carrying out the work.
6. Subcontractor HSE Manager.
7. Witness of the event, if any.
8. Client Representative.

5.2 Preparation for the Investigation

Factual information relating to the event should be collected for effective investigation. It shall include the following:

- Drawings showing the location of the scene of the event
- Work Procedures/ Method of Statement/Risk Assessment relating to the event
- Job Safety Analysis
- Records of instructions/briefings given at Toolbox Meetings, etc
- Records of Work Permits, if applicable
- Work Organization (command structure and persons involved)
- Personal Data of the victim etc.

5.3 Fact Findings

Incidents and other problems are seldom,if ever, the result of a single cause; thus collecting information as much as possible is required to establish causes which are assumed to have contributed to the events.

The investigators should inquire into five main areas:

- Environment
- Equipment
- People
- Materials
- Method Statement/Risk Assessment/Job Safety Analysis

In each of these areas, conditions, actions or omissions should be identified which could be factors contributing to the incident or damage or loss.

The initial stages of an investigation normally focus on conditions and activities immediately relating to the incident and only immediate causes may be identified at first.

However, the conditions underlying these causes also need to be identified.

The Principal Fact Finding sources are:

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- Examining the scene of the accident
- Interviewing personnel concerned and witnesses if available
- Reviewing Written instructions and procedures
- Records; and information should be carefully examined and systematically analyzed, particularly discrepancies in statements made by different witnesses should be verified by supporting evidence to help deduce the real course of what and how the event happened.

After fact finding it should be possible to:

- give a precise description of the incident, its background and the events leading up to it
- describe working environment
- identify the equipment in use, its capabilities and any failures
- describe the locations of key personnel and their actions immediately before the incident
- list all pertinent instructions
- level of response to the incident (rescue, shutdown, fire fighting, etc.)
- make an inventory of all the consequences of the accident (injury, damage; and loss).

5.4 Inspection of the scene of the incident

- It is always a good idea to look over the scene and the environment around the incident. This gives a mental picture to seek and discuss information.
- The big picture is an orientation to the elements involved, such as people, equipment, materials and environment.
- The scene of the incident must be preserved 'as is' until at least a preliminary examination has been completed to collect physical evidences that can help to collect factual aids, especially when witnesses are not available.
- Photographs and/or video film should be effectively used to assist the investigation and to provide visual aids and records.
- Furthermore, physical evidence can help victims and witnesses to clearly recall what happened.

Items to check include:

- the position of equipment/vehicle in relation to other equipment and facilities
- the condition of tools/equipment/facilities relating to the incident
- other activities ongoing in proximity at the time of the incident
- activity of the victim or equipment/vehicle etc. at the time of the incident
- state of congestion and accessibility
- illumination of the location/site

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- state of housekeeping
- presence or absence of warning signs/notices
- effect of weather
- presence of witnesses
- presence of unauthorized people

Where no incident team has been established the incident scene shall only be released upon written instruction from the Site HSE Manager.

5.5 Interviews

- A Witness is anyone who knows something related to what happened. Some witnesses are eye witnesses to the incident as it happened while others are people involved. It is best to start with eye witnesses and the people involved because they are the most likely to know the details of what happened. They are also the most likely to forget these details if not questioned promptly.
- The first details from these witnesses give the investigation team the symptoms of the problem. They are the starting point on the path to basic causes. Peoples memories as well as their willingness to talk can be affected by the way they are questioned.
- Victims, witnesses, and colleagues may have different impressions of what happened, therefore interviews shall be conducted as privately as possible so that witnesses are not influenced by each other's memories.
- Witnesses' interviews should be conducted step by step, sequentially based on the facts available.
- When there are significant differences of opinion, follow-up interviews may be needed.
- Avoid interviewer comments, leading questions; accusations shall be avoided.
- The interview information should be recorded, without any modification by the interviewer's preconceptions.
- Records, Drawings, Written Instructions and Procedures can help witnesses sort out relevant facts in their minds.
- Records, such as inspection and maintenance records of equipment and facilities, safety training records, work permits, and measurements of environmental conditions may provide information relevant to the investigation.
- Written instructions and procedures provide evidence of pre-planning and individual responsibilities.
- The investigation should try to establish the extent to which written procedures and instructions were understood and acted upon, as these can indicate the effectiveness of training and supervision. Experience shows that procedures are frequently not fully applied in practice.

5.6 Analysis of findings

- The Incident Investigation Team shall have meetings to analyze and identify the sequence of critical events, underlying causes of the incident, scrutinizing findings collected, the survey records of the scene of the incident, outputs through the interviews with all witnesses, documents concerned, etc., and establish the causes and summarize recommendations to prevent recurrence of similar accidents.

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- The causes of incidents consist of immediate causes which could have contributed directly to the incident, and underlying basic causes such as the lack of management, and human factors and job factors, and/or a combination of these thus, the cause of an incident is usually complicated even when the cause seems to be obvious, the investigator should remain skeptical until all possibilities have been investigated.
- First, look for any immediate causes which could have contributed directly to the incident. The immediate causes consist of usually substandard actions and substandard conditions.
- In addition to the immediate causes above, the basic/ underlying causes which are “causes behind the causes” also shall be investigated. The basic/underlying causes are classified as personal factors such as inadequate capability, lack of knowledge, etc., and job factors such as lack of management, inadequate leadership and/or supervision, inadequate engineering, maintenance system, etc...
- Any assumptions made during the analysis should be clearly identified in the report.
- The progress and results of the meetings shall be recorded.
- The details of the check items of basic/underlying causes are shown in the above reference.

5.7 Recommendations

Recommendations shall be made to identify actions to prevent recurrence.

All recommendations shall be in the form of a practical Action Plan which clearly indicate the party responsible for action so that effective follow-up can be achieved. Deadlines for actions should be specified for subsequent endorsement by the action party.

The following SMART factors shall be kept in mind when preparing recommendations:

- Specific
- Measurable
- Achievable
- Relevant
- Time Bound

The recommendations to eliminate basic and immediate causes and to improve HSE management shall also be reported and explained to the Client, to the Head Office, and when required, to the local authorities.

After receiving permission, recommendations for remedial actions shall be implemented

Detailed execution procedures for recommendations shall be explained to, and fully understood by all the employees concerned

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5.8 Follow-Up

The Leader of the Investigation Team should organize follow-up inspections and the progress in implementation of the recommendations shall be periodically monitored by the Investigation Team Members until all items are completed.

5.9 Actions Immediately after an incident

Supervisors shall take the following Initial Actions whenever any incident has occurred because the success of an investigation often comes in the first few moments.

Supervisor's initial actions vary for every incident. The person on the scene must be the judge of what is critical.

These steps are guidelines to apply as appropriate.

Take Control at the Scene

- Incidents make people act differently. People are curious and they want to help, but often they are irrational and do more harm than good.
- Unless a Senior Manager is present, a supervisor needs to take charge.

Ensure first aid and call for emergency services. People's lives and their wellbeing come first.

Have someone raise the alarm for medical assistance. Control potential secondary incidents Secondary incidents are usually even more serious because the normal controls over loss exposures have been weakened by the incidents. Positive temporary actions need to be taken after quick, but careful, thought of the consequences.

Identify sources of evidence at the scene. Things can change quickly and information lost forever. Items can be moved during emergency response or attempt at rescue work. Supervisors need to notice these things while taking other initial actions.

Preserve evidence from alteration or removal

- If there seems to be significant loss potential, good investigation is more important than getting back to work. Supervisors have authority to keep things from being moved. They should also keep people away from the incident site so nothing is disturbed before they get to look it over.
- Incident sites shall not be changed or cleaned up unless a release letter has been issued by the Leader of the Investigation Team (where one has been formed) after the consent of all members of the Investigation Team.
- The relevant Area Manager is responsible to ensure that no changes or clean up of incident sites will occur prior to a written release of the incident site by the Investigation Team.

Investigate to determine the loss potential. What could happen is vital to future loss prevention. Supervisors should make a prompt appraisal of how the incident could have happened and how likely it is to occur again.

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6. INCIDENT REPORTING

All incidents on the RRE Project will be recorded referencing Takreer guidelines and forms. See attached incident report format.

All incidents will be immediately reported to all relevant person on the Emergency contact list see attached, via SMS notification from the HSE Manager. This measure will be utilized up until a fully functional Emergency Call centre is operating with a one call emergency number.

6.1 Incident Initial Reporting

Reporting to Client

CONTRACTOR will submit Part 1 and 2 of the attached incident report format within 24 hours of the incidents occurrence. This should include brief facts relating to the incident.

This will initially be reviewed by CONTRACTOR and COMPANY HSE Manager before distribution to all persons on the emergency contact list.

Reporting to Head office

In the event of an occurrence of an incident like fatality or multiple hospitalizations (more than 3 people) or injuries requiring medical attention which results in lost time or above, the incident shall be immediately notified to the head office with an initial written report within 24 hours.

6.2 Incident investigation Report

A detailed Incident report that comprises the results of the investigation, Part 3 and 4 of the attached incident report format, shall be compiled and produced to the Head office & Client.

- The Incident Investigation report should be made by a designated HSE Supervisor focusing on the coordination of all incidents on site, together with the Investigation Team formed by the Project Manager and submitted to the Head Office & Client upon the completion of investigation. This shall first go through a review process by the HSE Manager.
- The HSE Manager should review the contents of the report and submit to the Project Manager for approval.
- The Incident Investigation report should also contain recommendations to prevent recurrence of the incident.

6.3 Near Miss Report

All Near Miss cases should be reported to the Head Office. Potential consequences should be highlighted for effective preventive measures against recurrence to be taken.

Near Misses will be recorded on the attached incident report format, based on Takreer guidelines.

6.4 Incident Data Base

An electronic data base shall be used to register incidents to track the status of follow-ups.

- They shall be compiled systematically and sequentially.
- Records shall include, but may not limited to

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- First Information (informer, date, time, receiver)
- First Actions Taken
- Members of the Incident Investigation Team
- Records of all interviews
- Minutes of incident investigation meeting
- Recommendations for rectification
- Approval of recommendation
- Comments by the Client and/or Authorities if any
- Implementation of recommendations
- Follow-up results

The Site HSE Manager shall retain the data base until the completion of the Project and transfer data to Head Office and to the Client, if requested.

6.5 Distribution

The Incident records are consolidated into the HSE section of the Monthly Construction Report for wider distribution.

The incident investigation report will be introduced at the Monthly HSE Committee Meeting as a lesson learned.

Full detail of the Incident Investigation report shall be submitted to Head Office immediately.

Once all action items are closed out on the final incident report, CONTRACTOR and COMPANY HSE Manager will sign the report off as complete, then submit officially through the RRE document control system for record keeping.

7. MEDICAL REPORT

A Completed Medical Report shall be recorded for all incidents on site resulting in injury.

Medical Report shall be updated, as soon as any further or new treatment is given by the physician and shall be issued to the site HSE Manager complying with medical confidentiality guide lines.

The HSE Manager is responsible for submitting an updated Medical Report to the Head office & Client without delay.

A Medical Report comprises of 3 sections:

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Personal Details	Supervisor shall complete personal details.
Accident Details	The immediate Supervisor of the injured party or other individuals who may be assigned the work shall complete the incident details. Details shall include all items specified on the Form including date and time of incident, weather conditions and location.
Injury Details	The Site Doctor shall complete details, confirm injury type, body part and details of any medical treatment given.

8. WEEKLY HSE REPORTS

The HSE Manager shall submit to the Head Office the HSE Weekly report. The period that will be covered starts Sunday and ends Saturday and the report shall be submitted not later than Tuesday of the following week.

In case of any incident occurring within this period, a detailed incident report with relevant attachment, photos must be submitted together with the weekly report.

Head Office shall distribute all the summary of all the Incidents and Lessons Learned to all sites in-charge.

9. MONTHLY HSE REPORTS

The HSE Manager will regularly monitor HSE performances and prepare a Monthly HSE Report which will include Incidents and Environment statistics to ensure that Project Manager, Head Office and Client management are fully aware of the overall HSE performances, achievements, and future aspects of HSE plan.

This document will be reviewed monthly by the HSE Committee to make all members recognize the reality of their performances and to highlight any areas requiring improvement or commendation for good performance.

This report will include the following items and form a part of the overall Monthly Construction Report.

- Project details.
- Project Incident Statistics.
- Performance Indicators.
- HSE Audit/Inspection
- HSE meetings & Drills
- Awards & Infringements

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9.1 Reporting Inputs

- Monthly total man-hours will be given by the Project Control group and only those hours will be used as the formal exposed hours for the Project.
- The number of incidents occurred during the month of reporting will be closed on the end of each month.
- Significant HSE activities (i.e. Training Programs, HSE audits etc.) will be included.
- Areas of concern will be highlighted.
- Incident Trends, such as sudden increase in the number linked to a common cause will be analyzed and included.
- Exposure – Man-hours returns will include exposed hours of the reporting month, year to date, project to date with respect to the project.

The report will include the following information.

1. Total Hours of the month/year/project.
2. Numbers of Fatalities.
3. Numbers of Lost Time Incidents.
4. Numbers of Days Lost.
5. Numbers of Restricted Work Cases
6. Numbers of Medical Treatment Cases.
7. Numbers of First Aid Cases.
8. Numbers of Near miss occurrences.
9. Numbers of Property Damage occurrences.
10. Numbers of Environmental Incidents.
11. Numbers of Motor Vehicle Accidents occurred.
12. Numbers of Security related Incidents.
13. Number of Fire Incidents.

9.2 Report Distribution

The Monthly HSE Report will be prepared for distribution on or before the 5th day of each month and forwarded to the Head Office upon approval of the Project Manager.

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10. ANNUAL HSE REPORT

At the end of each year, every site must submit their annual summary of work related incidents within ten (10) calendar days of the following year. All the necessary information should be provided based on the actual records on the site.

The Site HSE Office will retain an electronic database of the report throughout the Project.

11. REFERENCES

- OSHA Regulations (Standards - 29 CFR Part 1904)
- Applicable UAE laws / Ministerial order
- TAKREER HSE control procedures
- ADNOC code of practice

Applicability shall be for the most stringent amongst local laws / regulations, codes and standards of the company control procedures

12. ATTACHMENTS

Attachment 1: Incident Report Format

Attachment 2: Injury Attachment Format (Takreer Form)

Attachment 3: Emergency Contact list RRE Project EPC4

Note: Clients Forms can be used in submitting Incident reports as long as it can provide the necessary data needed and meeting DEC requirements.

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12.1 Attachment 1: Incident Report Format

Incident Report No: 000001	INCIDENT REPORT PRELIMINARY NOTIFICATION FORM (ALL INCIDENTS INCLUDING INJURY)		Page 1 of 4	Wo Refine Right
A Description of Incident :				
Date of Incident :		Time of Incident :		
Brief Description of the Incident :				
Type of Incident				
Fatality	<input type="checkbox"/>	Environment	<input type="checkbox"/>	Property Damage
LTI	<input type="checkbox"/>	Fire	<input type="checkbox"/>	Security
RWC	<input type="checkbox"/>	MVA	<input type="checkbox"/>	NAD
MTC	<input type="checkbox"/>	NM	<input type="checkbox"/>	N/A
FAC	<input type="checkbox"/>			
Personal Information				
Employee Name:		Badge Number:	Nationality:	
Age:	Experience(Total Months):	Supervisors Name:	Company:	
Craft:	Body Part Injured:		Employee Task:	
Safety Category (See Codes):		Area:		
Immediate Action (s) Taken				
Actions / Measures to be taken to Prevent Recurrence of Incident				
Name & Signature (Originator)		Name & Signature HSE		
Name /Employee No :		Name /Employee No :		
Date / Time :		Date / Time :		
Signature :		Signature :		
Position:		Position:		
Comments Sub Contractor				
Name:		Position:	Signature:	
Name & Signature Immediate Supervisor		Name & Signature Management		
Name /Employee No :		Name /Employee No :		
Date / Time :		Date / Time :		
Signature :		Signature :		
B Incident Review				
EPC Contractor Comments				
Comments:				
Name:		Position:	Signature:	
PMC HSE Comments				
Comments:				
Name:		Position:	Signature:	RAM:
C Follow -Up				
Incident Owner as Per RAM		Distribution		
Risk Category	Incident Owner	Distribution (Tick and Name if relevant)		
Low	Sub Contractor	EPC HSE Mgr	EPC Proj Mgr	PMC HSE Mgr
Medium	Contractor	EPC HSE Mgr	EPC Proj Mgr	PMC HSE Mgr
High	Contractor	EPC HSE Mgr	EPC Proj Mgr	PMC HSE Mgr
				PMC Proj Mgr
				PMT Proj Mgr
				Takreer HSE
Attachment: Injury Repc <input type="checkbox"/> Work Permit Co <input type="checkbox"/> Photo <input type="checkbox"/> SKE <input type="checkbox"/> Stateme <input type="checkbox"/> Oth <input type="checkbox"/>				
Note :				
1. Part 1 and 2 should be completed and distributed within one working day of the Incident.				
2. Complete part 3 & 4 within 5 working days for Low risk and 10 working days for Medium & High risk.				

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Incident Report No:		INCIDENT INVESTIGATION FORM		Page 2 of 4	We Refine Right	
D Details of Injury /Illness and Initial Treatment (From Injury Report)					N/A	<input type="checkbox"/>
If more than one, copy page and complete for each person			Injury Report No. :			
Name of Person :			Employee No. :			
Job Title :		PMC	CONTRACTOR	Sub Contractor		
E						
Assessment			Notes			
Severity Rating						
People						
Assets						
Environment						
Reputation						
Overall						
Probability						
Risk As Per RAM						
F Incident Investigation (Please consult Page 3 of 4)						
Type of Event (Cause)						
1	Struck Against (See IC's 12,4,5,9,10,11,12,13,14,29,30)	7	Electric Shock (See IC's 1,3,5,6,7,8,9,10,11,13,16,17,18,19,22,26)	13	Equipment Failure (See IC's 1,4,6,10,13,14)	
2	Struck By (See IC's 12,4,5,6,8,9,10,11,12,13,19,25,31)	8	Fire / Explosion (See IC's 1,3,6,8,9,10,11,13,18,21,22,25,28)	14	Pollution/ Environmental (See IC's 1,2,3,4,5,6,10,13,17,18,19,21,24,26,27)	
3	Falling Objects (See IC's 3,5,6,7,8,9,10,11,16,21)	9	Hand Tool (See IC's 6,7,8,9,10,12,13,15,17,18,19,26)	15	Handling/Lifting (See IC's 1,3,4,6,9,10,11,12,13,17,18,19,28,30,31)	
4	Fall on Same Level (Slips, Trips & Falls) (See IC's 4,8,9,10,11,12,14,21,25,29,30)	10	Caught Between, Crushed or Amputated (See IC's 1,2,5,6,8,9,10,11,13,14,21,27,29,30,31)	16	Overstress,Overexertion,Overload, Overexposure, Ergonomics (See IC's 8,9,10,12,13,14,15)	
5	Caught In or On (See IC's 5,6,8,9,10,11,13,14,17,29,30,31)	11	Contact with (heat,cold, radiation, toxics etc) (See IC's 5,6,7,8,9,11,13,16,17,19,20,22,23,24,26,27,29)	17	Use of Machinery (See IC's 1,3,4,5,6,7,9,10,11,13,16,17,18,22,23,26,29,31)	
6	Crane Operations (See IC's 1,3,4,6,9,10,11,13,14,18,23,26,28,29,30,31)	12	Transport (See IC's 3,8,11,16,21,22,23,27,28,29,31)			
Possible Immediate Causes (IC)						
UNSAFE ACTS			UNSAFE CONDITIONS			
1	Operating Equipment without Authority (See BC's 3,4,5,7,9,10,15,17,18,22,23)	9	Under Influence of Alcohol and/or other Drugs(See BC's 2,3,4,5,9,10,15,17,18)	16	Inadequate Guards/Barriers (See BC's 5,7,8,9,10,11,12,13,14,15,16,17,18,19,20,22,23,24,25)	
2	Failure to Warn (See BC's 12,3,4,5,6,7,8,9,10,15,17,18,20,22,23)	10	Using Equipment Improperly/Unsafely (See BC's 12,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,23,24,25)	17	Inadequate /improper Protective Equipment (See BC's 3,4,5,7,8,9,10,12,14,15,16,17,18,19,20,21,22,23,24)	
3	Failure to Secure (See BC's 12,3,4,5,6,7,8,9,10,11,13,14,15,17,18,20,22,23,24,25)	11	Failure to Follow Procedure (See BC's 12,3,4,5,6,7,8,9,10,15,17,18,22,23,24)	18	Defective Tools, Equipment or Materials (See BC's 10,11,12,13,14,15,16,17,18)	
4	Operating at Improper Speed (See BC's 2,3,4,5,6,7,8,9,10,11,13,14,15,16,17,18,20,22,23,25)	12	Improper Physical Effort /Act (See BC's 12,3,4,5,6,7,8,9,10,14,15,17,18,19,22,23,25)	19	Congestion or Restricted Action (See BC's 2,10,11,15,19,21,22,25)	
5	Making Safety Devices Inoperative (See BC's 2,3,4,5,6,7,8,9,10,11,14,15,16,17,18,20,22,23)	13	Operating Without Adequate Training (See BC's 3,4,5,6,9,10,15,17,18,21,22,23,25)	20	Inadequate Warning System (See BC's 10,11,12,13,14,15,16,17,18,20,22)	
6	Using Defective Equipment(See BC's 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,20,21,22,23,24)	14	Riding Hazardous Equipment (See BC's 3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,20,22,23,25)	21	Fire and Explosion Hazards (see BC's 5,6,7,8,9,10,11,12,13,14,15,17,18,20,22,24)	
7	Failure to Use PPE Properly (See BC's 2,3,4,5,7,8,9,10,12,14,15,17,18,19,20,21,22,23)	15	Using Hand Tools Unsafely (See BC's 12,3,4,5,6,7,8,9,10,11,12,14,15,17,19,23,25)	22	Poor Housekeeping /Disorder (See BC's 5,6,7,8,9,10,12,13,14,15,17,23,25)	
8	Horseplay (See BC's 2,3,4,5,7,9,10,15,17,18,23)			23	Noise Exposure (See BC's 5,6,9,10,11,12,13,14,15,16,20,21,22)	
				24	Radiation Exposure (See BC's 5,6,8,9,10,11,12,13,14,15,16,17,18,20,21,22,23,24)	
				25	Temperature Extremes (See BC's 12,3,10,11,12,13,14,15,18,19,20,21)	
				26	Inadequate or Excessive Illumination (See BC's 12,10,11,12,13,14,15,19,22)	
				27	Inadequate Ventilation (See BC's 10,11,12,13,14,19,22,25)	
				28	Hazardous Environmental Conditions (See BC's 10,15,19,21,22)	
				29	Inadequate Visual Contact (See BC's 12,4,7,8,15,18,19,22,25)	
				30	Projection Hazard (See BC's 7,8,10,11,12,13,15,18,20,21,25)	
				31	Unexpected Movement Hazard (See BC's 12,5,7,8,11,12,13,14,15,16,17,19,20,22,23,24,25)	

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G Actions to be taken to Prevent Recurrence						
No.	Action Items	Priority (1 - 3)	Action By	Target Date	AIMS	
H Lessons Learnt						
N/A <input type="checkbox"/>						
What Went Wrong (Explain briefly the sequence of events and lessons learnt from the incident)						
PART 4						
I Signature						
Investigation Team						
Name	Employee No	Designation	Date	Signature		
J Close-out						
Attachment: Injury Report <input type="checkbox"/> Work Permit Co <input type="checkbox"/> Phot <input type="checkbox"/> Sk <input type="checkbox"/> Statem <input type="checkbox"/> Al <input type="checkbox"/>						
Contractor Management						
I swear that all actions as stated in this investigation report are closed as thoroughly and effectively as possible			Name:			
Position:			Signature:		Date:	
PMC Management						
I confirm that all actions are complet to PMC satisfaction and officiolly close this investigation			Name:			
Position:			Signature:		Date:	
This report should be distributed After completion as shown in Section C						

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SafetyCategory	Number
Hands	1
Body	2
Fall Protection	3
Eyes	4
Face	5
Cleaning Lines / Equipment	6
Non Destructive Testing	7
Pressure Test	8
Duct Works	9
Piping & Fitting	10
Steel Assembly	11
Formwork	12
Concreting	13
Openings / Holes	14
Isolations	15
Permit to Work (PTW)	16
Toolbox Talk / HIP	17
Security	18
Sanitation	19
Hygiene	20
Power Tools	21
Hand Tools	22
Blasting	23
Grinding	24
Welding	25
Excavations	26
Stacking	27
Road Safety	28
Heavy Equipment	29
Lifting & Rigging	30
Electrical Work	31
Feet	32
Resp. System	33
Ears	34
Head	35
Flushing	36
Blowing	37
Leak Test	38
Cable Works	39
Insulation Works	40
Grating	41
Steel Erection	42
Shuttering	43
Edges	44
LOTO Works	45
Access / Egress	46
Method Statement / JSA	47
Housekeeping	48
Waste Management	49
Welfare Facilities	50
Manual Handling	51
Pneumatic Tools	52
Painting	53
Hazardous Materials	54
Cutting	55
Confined Space	56
Storing Equipment	57
Supervision	58
Vehicle (Un)Loading	59
Working at Height	60
Scaffolding	61
Seatbelt	62
Chipping	63
Drilling	64
Heat Stress	65
Mechanical Work	66
Tools & Equipment	67

Incident Ram Table					PROBABILITY				
					IMPROBABLE	REMOTE	OCCASIONAL	PROBABLE	FREQUENT
SEVERITY	People	Assets	Environment	Reputation	Has occurred in world-wide industry but not in ADNOC	Has occurred in another ADNOC Group Company	Has occurred Takreer	Happens several times each year in Takreer	Happens several times per year in same location or operation
5-Catastrophic	Multiple fatalities	Extensive damage	Massive effect	International impact					HIGH
4-Severe	Single fatality or permanent disability	Major damage	Major effect	National impact					
3-Critical	Major injury or health effects	Local damage	Localised effect	Considerable impact			MEDIUM (ALARP)		
2-Marginal	Minor injury or health effects	Minor damage	Minor effect	Minor impact					
1-Negligible	Slight injury or health effects	Slight damage	Slight effect	Slight impact	LOW				

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12.2 Attachment 2: Injury Attachment Format

No: (Form No in English)		INJURY REPORT		We Refine Right
SUPERVISOR	(A) DETAILS OF INJURED PERSON AND INJURY			
	Name :		Employee No :	Age :
	Telephone :		Job Title :	
	Occupation :		Division :	
	Department / Unit :		Section :	
	Employee Status : TAKREER <input type="checkbox"/> Contractor <input type="checkbox"/>		Contractor (Name) :	
	Injured at Work : Yes <input type="checkbox"/> No <input type="checkbox"/>		Date / Time of Accident :	
	STATEMENT OF INJURED EMPLOYEE & SUPERVISOR COMMENTS ' How ', ' Why ' & ' What was he doing at time of incident '			
	Supervisor's Name & Signature			
	Name :		Employee No :	
Telephone :		Signature :		
Date / Time :				
MEDICAL	(B) PRELIMINARY MEDICAL DIAGNOSIS REPORT			
	Nature of Injury			
	Allergy or sensitivity	<input type="checkbox"/>	Exposure effects heat/cold	<input type="checkbox"/>
	Amputation	<input type="checkbox"/>	Fainting	<input type="checkbox"/>
	Asphyxiation	<input type="checkbox"/>	Foreign body	<input type="checkbox"/>
	Bruising	<input type="checkbox"/>	Fracture/dislocation	<input type="checkbox"/>
	Burn/scalds	<input type="checkbox"/>	Hearing loss	<input type="checkbox"/>
	Communicable disease	<input type="checkbox"/>	Hernia	<input type="checkbox"/>
	Concussion or other neuro injury	<input type="checkbox"/>	Internal injuries	<input type="checkbox"/>
	Confusion/crush	<input type="checkbox"/>	Laceration/deep cut	<input type="checkbox"/>
	Damage to artificial aids	<input type="checkbox"/>	Multiple injuries	<input type="checkbox"/>
	Electric shock	<input type="checkbox"/>	Nausea/vomiting	<input type="checkbox"/>
		<input type="checkbox"/>	Occupational overuse injury	<input type="checkbox"/>
		<input type="checkbox"/>	Poisoning/toxic effects	<input type="checkbox"/>
		<input type="checkbox"/>	Post-traumatic shock	<input type="checkbox"/>
	<input type="checkbox"/>	Psychological disorder/stress effects	<input type="checkbox"/>	
	<input type="checkbox"/>	Puncture	<input type="checkbox"/>	
	<input type="checkbox"/>	Respiratory	<input type="checkbox"/>	
	<input type="checkbox"/>	Skin condition e.g. dermatitis/eczema	<input type="checkbox"/>	
	<input type="checkbox"/>	Superficial wound or abrasion	<input type="checkbox"/>	
	<input type="checkbox"/>	Sprain/strain	<input type="checkbox"/>	
	<input type="checkbox"/>	Vision impairment	<input type="checkbox"/>	
Part (s) of Body Affected				
		Left	Right	
Head	<input type="checkbox"/>	Neck	<input type="checkbox"/>	
Forearm	<input type="checkbox"/>	Chest	<input type="checkbox"/>	
Buttock	<input type="checkbox"/>	Back	<input type="checkbox"/>	
Face	<input type="checkbox"/>	Wrist	<input type="checkbox"/>	
Thigh	<input type="checkbox"/>	Hand	<input type="checkbox"/>	
Foot/toe	<input type="checkbox"/>	Upper Arm	<input type="checkbox"/>	
Stomach/trunk	<input type="checkbox"/>	Ear	<input type="checkbox"/>	
Knee	<input type="checkbox"/>	Eye	<input type="checkbox"/>	
Internal	<input type="checkbox"/>	Elbow	<input type="checkbox"/>	
Shin/calf	<input type="checkbox"/>	Finger/thumb	<input type="checkbox"/>	
Groin/hip	<input type="checkbox"/>		<input type="checkbox"/>	
Further description of injury:				
Cause of Injury				
Animal/insect	<input type="checkbox"/>	Mobile plant/equipment	<input type="checkbox"/>	
Radiation	<input type="checkbox"/>	Needle/sharp	<input type="checkbox"/>	
Repetitive work	<input type="checkbox"/>	Biological agent (e.g. pathogens)	<input type="checkbox"/>	
Situation - violence, assault	<input type="checkbox"/>	Noise	<input type="checkbox"/>	
Surface (slippery/rough)	<input type="checkbox"/>	Electricity	<input type="checkbox"/>	
Thermal (heat/cold)	<input type="checkbox"/>	Explosion/implosion	<input type="checkbox"/>	
Vehicle/transport	<input type="checkbox"/>	Lifting/carrying	<input type="checkbox"/>	
Workstation design	<input type="checkbox"/>	Machinery/fixated plant	<input type="checkbox"/>	
	<input type="checkbox"/>	Psychological/social	<input type="checkbox"/>	
Action / Mechanism Which Caused Injury				
Exposure to biological material	<input type="checkbox"/>	Fall from height	<input type="checkbox"/>	
Muscle stress - repetitive	<input type="checkbox"/>	Exposure to chemicals	<input type="checkbox"/>	
Noise	<input type="checkbox"/>	Hit by/trapped in moving object	<input type="checkbox"/>	
Pressure	<input type="checkbox"/>	Exposure to electricity	<input type="checkbox"/>	
Slip/trip	<input type="checkbox"/>	Hitting object	<input type="checkbox"/>	
Vehicle accident	<input type="checkbox"/>	Exposure to heat/cold	<input type="checkbox"/>	
	<input type="checkbox"/>	Insect/animal bite	<input type="checkbox"/>	
	<input type="checkbox"/>	Exposure to radiation	<input type="checkbox"/>	
	<input type="checkbox"/>	Mental stress factors	<input type="checkbox"/>	
	<input type="checkbox"/>	Exposure to vibration	<input type="checkbox"/>	
	<input type="checkbox"/>	Muscle stress - loads	<input type="checkbox"/>	
Other (specify)				
Categorization		Medical Advice		
First Aid Case (FAC)	<input type="checkbox"/>	Regular duty	<input type="checkbox"/>	
Home	<input type="checkbox"/>	Medical Treatment Case (MTC)	<input type="checkbox"/>	
Need follow-up	<input type="checkbox"/>	Restricted Work Day Case (RWDC)	<input type="checkbox"/>	
Advice for hospital Admission	<input type="checkbox"/>	Lost Time Injury (LTI)	<input type="checkbox"/>	
Referred to hospital	<input type="checkbox"/>	Occupational Injury	<input type="checkbox"/>	
Referred to specialist hospital(s)	<input type="checkbox"/>	Occupational Illness	<input type="checkbox"/>	
Hospital (s):	<input type="checkbox"/>	Non Occupational Injury/Illness	<input type="checkbox"/>	
	<input type="checkbox"/>	Days away/restricted workdays:	<input type="checkbox"/>	
Name & Signature of Medic / Doctor				
Name :		Employee No :		
Telephone :		Signature :		
Date / Time :				
MANAGER	Approved by Manager SEFD/HSED as appropriate			
	Name :			
	Signature :			
Date / Time :				
Note:				
Supervisor or Section Head should complete Part A or injury Report within the same work shift. He should copy it to SEFD and relevant Department Manager and then send the form to the hospital, with the injured person if possible.				
The hospital is requested to complete part B after examining the patient, and to send the completed form to Safety, Fire and Environment Department at the appropriate refinery.				

TAKREER	RUWAIS REFINERY EXPANSION PROJECT	DAEWOO E&C	
	EPC-4 TANKAGE AND ASSOCIATED INTERCONNECTING PIPING		
	AGREEMENT No. 09-5578-E-4		
PROJECT No. 5578	Doc: 5578-E4-HSE-HU-00026	Rev. 0	Page 30 / 30

12.3 Attachment 3: Emergency Contact list

EMERGENCY CONTACT NUMBERS EPC-4			
	<u>PMT Seoul</u>		
1	Project Manager	Omran Hilal	010-4930-3499
2	Project Coordinator	Khalid Abdul Qader Saleh	010-4904-3499
	<u>PMC Seoul</u>		
3	Project Manager	David Bristow	010-8820-3499
4	Engg. Manager	Anil Kumar	010-9268-8531
5	Project Control Manager	Daniel Susainadan	010-9315-8531
	<u>Contractor Seoul</u>		
6	Project Director	Young Soo Kim	010-8720-0776
7	Project Manager	Myung Heo	010-9990-5706
8	Sr. Project Manager	Jung Ryul Kim	010-9101-9461
9	Project Control Manager	Kyung Yong Park	010-3543-6227
10	Engineering Manager	Jun Wan Lee	010-8731-6406
11	Procurement Manager	Ju Wan Lee	010-7703-5634
12	Construction Manager	Soo Cheol Cho	010-2923-3158
13	QA/QC Manager	Yeon Tae Hwang	011-9316-0201
	<u>PMC Site</u>		
14	Construction Manager	Benton Yoe	971-50-751-9369
15	HSE Manager	Robert Reams	971-50-751-9612
	<u>Contractor Site</u>		
16	Construction Manager	Jong Hak Lee	971-50-136-3418
17	Camp Const. Manager	Chang Ho Kim	971-50-493-7623
18	Administration Manager	Jae Ki Jin	971-50-596-1418
19	HSE Manager	Vivian Bower	971-56-735-4084
20	Deputy HSE Manager	Do Yeol Kim	971-56-123-1863
21	HSE Superintendent	Anibal Mesquita	971-56-707-7953
22	Emergency Call Centre	DW HSES	971-50-896-7001
	<u>Emergency Service</u>		
23	Ambulance		02 602 2340
24	Crisis Management (TAKREER)		050 666 0394
25	ADNOC Emergency Hospital (24hrs)		02 602 2340
26	Ruwais Emergency Clinic		02 802 7714
27	Fire Brigade		02 602 2102
28	Police Post (Onshore)		050 333 3903
29	Port Control		02 602 1666 & 02 602 1777
30	CNIA Control Room		02 808 4444
31	Officer On Watch		056 610 7024