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DGS OPERATING WORK PERMIT PROCEDURE

ABSTRACT

The purpose of this standard is to define the process of the permit to work to apply it to all DGS while executing the ZFOD activities.

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RACIE Terms

R	Responsible
K	The person who actually produces the document.
Α	Accountable
^	The person who has the answer for success or failure of the quality and timeliness of the document.
С	Consulted
_ C	Those who must be consulted before the document is published.
	Informed
•	Those who must be informed after the document is published.
Е	Endorsed
	Those who must approve the document before publication.



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NOTE: (1) OHC – Original Hard Copy / EC–Electronic Copy / HC – Hard Copy / (2) NL – The Netherland / ZB – Zubair Branch Office / ZFOD – Zubair FOD



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1. INTRODUCTION

1.1 PURPOSE

The purpose of this document is to define the process of the permit to work to apply it to all DGS while executing the ZFOD activities.

1.2 SCOPE

The goal of the DGS operating Work Permit procedure is to ensure a strict, coherent and efficient management of all the works conducted on the different ZFOD DGS, associated wells and pipelines in a way to protect human, environment and material resources.

This procedure describes the systematic process of:

- Identification of hazards and risks,
- Implementation of precautions and compensatory measures to reduce and control the risk,
- Managing possible interference between various jobs,
- Information of the various parties involved, particularly the team performing the works,
- · Registration of the Work Permit,
- Ensuring works are completed and installation is safe before putting it back in operation.

This procedure deals with the ZFOD main cold and hot Work Permit type, and with the complementary Work Permits.

A WORK PERMIT DOES NOT BY ITSELF MAKE THE JOB SAFE. SAFETY CAN ONLY BE ACHIEVED BY THOSE PLANNING, PREPARING AND CARRYING OUT THE WORK. TO ENSURE THE PTW SYSTEM IS EFFECTIVE, NO ATTEMPT SHALL BE MADE TO BYPASS IT.

A work permit is not simply permission to carry out the job, a paperwork exercise or a means of avoiding the need to eliminate hazards or reduce risks. It is the cornerstone of a safe system of work that determines how that job can be carried out safely. It does not remove individual responsibility and any signature upon documentation within the PTW System shall be considered a formal acceptance of responsibility.

IF PERSONNEL ARE UNSURE ABOUT ANY PART OF A WORK PERMIT OR IN ANY DOUBT REGARDING THE PTW PROCEDURE, THEY MUST STOP AND ASK THEIR IMMEDIATE SUPERVISOR FOR GUIDANCE.

1.3 DISTRIBUTION AND INTENDED AUDIENCE

Unless otherwise authorized by ZFOD, the distribution of this document is confined to ZFOD and authorized Contractors.

1.4 DEFINITIONS, ACRONYMS AND ABBREVIATIONS

1.4.1 General Definitions

The word **shall** be used to indicate that a provision is mandatory.



The word **should** is used to indicate that a provision is not mandatory, but recommended as good practice.

1.4.2 Specific Terms, Definitions, Acronyms and Abbreviations

Term / Acronym / Abbreviation	Explanation / Definition
DGS	Degassing Station
PTW	Permit To Work
ZFOD	Zubair Field Operating Division
HSE	Health, Safety, Environment
JSA	Job Safety Analysis

1.5 REFERENCE DOCUEMNTS AND LINKS

Unless specifically designated by date, the latest edition of each publication shall be used, together with any amendments/supplements/revisions thereto.

Ref.	Document Number / Link	Title / Description
(1)		
(2)		
(3)		
(4)		

2. ROLES AND RESPONSIBILITIES

The roles and responsibilities for this document are defined within the document RACIE (see page 2).

The roles of the various groups referred to within this document are:

2.1. DGS Section Head

The DGS Section Head (or is delegate when not in the DGS) has full responsibility, authority and final decision during the planning of all work activities.

The DGS Section Head shall decide:

- The need of a Work Permit according to the provisions of this procedure,
- The level of supervision and monitoring of the work, and request the presence of the Issuing authority and/or Performing Authority representatives accordingly.

Both DGS Section Head signatures (ZFOD/SOC and ZFOD/eni) are required.

If it is not possible, one signature is acceptable only if the counterpart has been informed in advance. In this case the date and time of communication shall be indicated on the additional comments in the box No.8 of Work Permit form ("Authorization of Section Head DGS").

The DGS Section Head shall:

Chair the daily coordination meeting with concerned people,



- Initiate and organize kick of meetings for specific works,
- Ensure or additional compensatory measures when necessary,
- · Check the validity period of the Work Permit,
- Approve all "cold", "hot" and complementary Work Permit after formal acceptance by issuing authority and HSE Authority,
- Promote and participate in site inspections and Work Permit audits.

The DGS Section Head shall ensure that:

- All personnel using the Work Permit system have received adequate training and that system is well understood,
- All personnel working on his site have received adequate training about the Work Permit system,
- The location of work and the work equipment are inspected prior the beginning of the work,
- A tool box meeting is conducted prior to start the job.

2.2. Issuing Authority

The Issuing authority is nominated in writing by the DGS Section Head.

He is in charge of the normal operations of an installation, or part of it, and of the compliance with the operating procedures for running the installation.

The issuing authority shall:

- Identify the risks inherent to the works:
 - Risks created by works carried out concurrently with operation of existing installations,
 - Risks due to possible interference between works and/or other concurrent operations),
- Inventory the possible events able to alter the conditions in which the works will be performed,
- Ensure the correct issue of Complementary Permits/Certificates.
- Participate to the Job Risk Assessment,
- Participate to the daily coordination meeting,
- Lay down adequate precautions and compensatory measures to control identified risks, downgraded situations, possible emergency situations and their consequences,
- Evaluate the appropriate level of monitoring of the works (or some specific phases).
- Considering any possible interference and agree on the work preparation before signing and submitting the Work Permit to the DGS Section Head for approval
- Ensuring prior to starting the works that all safety precautions, isolations, marking, tests, checks etc. have been organized,
- Prior to authorizing the Work Permit, holding a Tool-box talk meeting ensuring that the Performing Authority and the Work Supervisor fully understands the nature of the work, the hazards involved and the precautions required,



- Notify the DGS Section Head of any anomaly he may notice during the execution of the works.
- Stop the execution of the work in case of deviation from the requirements of the Work Permit and inform the DGS Section Head,
- Ensuring that isolations, spading, particular precautions, have been removed after completion of the works and that installation is safe for return to the work.
- Ensure proper commissioning of new/modified installation and commissioning file is completed and signed by ZFOD representative,
- Initiate the Work Permit and complementary permits closure, and forward them to the DGS Section Head for definitive closure.

The Issuing Authority is the ZFOD Production Superintendent (or equivalent position)

2.3. Performing Authority

The Performing Authority is the ZFOD trade representative for the job to be executed under the Work Permit.

The Performing Authority shall be the requester of the Work Permit.

He is responsible for:

- Initiating Work Permit as requester,
- Initially filling the Hazard Identification and compensatory measures parts of the Work Permit,
- Having a good understanding of all interfaces with surrounding activities,
- · Participating to the Job Risk Assessment,
- Participating to the daily coordination meeting in order to provide necessary information to the DGS Section Head, issuing and HSE Authorities,
- Proposing procedures for the execution of the works,
- Being conversant with all instructions concerning the work, the rules and procedures in respect of safety and discipline and enforce them within the working team,
- Checking that all specified requests laid down in the Work Permit are implemented before starting the work,
- Chairing the "Tool-box talk" meeting,
- Ensuring that Contractor equipment are in accordance with the ZFOD requirement (especially lifting and diesel engine powered equipment),
- Ensuring that all Contractor workers attended the ZFOD HSE Induction and are aware of the mustering procedure,
- Ensuring proper cancellation or re-validation of on-going permits
- Stopping the execution of the works in case of deviation from the requirements of the Work Permit, and inform immediately the Work Supervisor, the Issuing authority and/or the DGS Section Head,
- Ensuring the location is left clean, and that equipment, material and any waste have been removed prior to leave the location whether the work being temporarily suspended or definitively completed.

The Performing Authority shall be physically present during:

The daily Work Permit coordination meeting in order to provide all



necessary information to the DGS Section Head, the Issuing and HSE Authorities (e.g. drawings, procedure, spades list, ...),

Work Permit opening and closure.

For Work Permit opening, daily re-validation and work follow-up, if he cannot be present on location, he shall appoint a qualified representative, the Performing Authority Representative.

Typical Performing Authorities are as follow:

- Construction operations: ZFOD Construction Supervisor,
- Maintenance operations; ZFOD Maintenance Supervisor,
- Work-over operations: ZFOD Work-over Supervisor,
- Production Operations: ZFOD Production Supervisor.

At the beginning of a work the DGS Section Head can nominate specific personnel to act as Performing Authority (Work-over rig tool-pusher...).

2.4. HSE Authority

The HSE Supervisor of the DGS acts as HSE Authority.

He is responsible for:

- Assisting the Issuing authority and Performing Authority in hazard identification, risk evaluation, JSA,
- Defining the necessary precautions and including them on the main Work Permit forms accordingly,
- Assisting the DGS Section Head and Issuing authority in defining priorities, should difficulties arise with conflicting activities, and in defining a limit to the number of simultaneous permits in the case of simultaneous activities,
- Proposing, if not already done, additional precautions to avoid escalation and limit the consequence of a possible incident,
- Ensuring that PPE proposed on the Work Permit are appropriate and properly used during the execution of the work,
- Participating in Tool-box talk meeting for sensitive operations,
- Performing regular audits of the work places with the Issuing authority and any other DGS Supervisors, to verify compliance with this procedure and constant adherence to safe work practices,
- Promoting and participating in Site Inspections and Work Permit audits,
- Organizing training for all Work Permit signatories, placing emphasis on all details of the procedure that are site-specific,
- Organizing training for all workers, covering the system basics,
- Ensuring that the material to be used is conforming to the ZFOD rules (e.g. Gas cylinder, Welding Rigs, Thermal Engine...).

The HSE Authority can appoint a qualified Representative (HSE Technician) to check that all precautions are enforced prior to open a Work Permit, to monitor regularly the safe performance of the work, or to ensure that gas tests are performed by authorized gas testers.

At any time the HSE authority can be assisted by the HSE field Superintendent.



2.5. Foreman

The Foreman is the representative of the contractor or department in charge to perform the job.

The Foreman is technically responsible for the job execution.

The Foreman shall:

- Have a good understanding of the job related hazards, and of all possible interfaces with surrounding activities,
- Participate in Hazard Identification and compensatory measures discussion with the issuing authority, the Performing Authority and the HSE Authority,
- Propose procedures for the works including precautions for controlling associated risks.
- Identify the risks associated with the use of his equipment (if any) and the nature of the work to be performed,
- Ensure that his workforce involved understands the nature of the works and the associated risks.
- Ensure that all team members have been trained, whenever relevant, in DGS ERP procedures, actuation of DGS Section Head system and operation of portable fire extinguishing systems. At least they shall receive a General Safety Induction,
- Ensure that all the equipment he will use have been certified by ZFOD representative. Lifting equipment shall be clearly identified after certification by inspector (logistic Dept.),
- Ensure that the contractor Safety supervisor or Officer is present on location when required on the Work Permit,
- Participate at on-site "Tool-box talk meeting" prior to start a job,
- Regularly monitor the progress of the jobs,
- Participate in the job commissioning if required,
- Ensure that precautions laid down can be implemented at the execution stage,
- Stop the execution of the works in case of deviation from the requirements of the Work Permit. Inform immediately the Issuing authority and/or the DGS Section Head,
- Ensure that his workers leave a clean and safe work place, whenever the work has been temporarily suspended or definitely completed.

The Foreman shall be physically present for Work Permit opening/closure and for daily/shift re-validation and work follow-up.

2.6. Safety Watcher

A Safety Watcher may be nominated to assist in the supervision of critical works.

In such case, his role is to:



- Supervise permanently the job or intervention, or some specific phases as requested on the Work Permit, and ensure that precautions and safety rules are complied with,
- Help in case of leak, failure or abnormal situation,
- Refer to the Issuing authority, his Representative or to the HSE Authority (or to the DGS Section Head in case of difficulty) any deviation of the program mentioned in the Work- Permit,

The Safety Watcher can be allocated to supervise a maximum of 3 working areas if they are all, at all time, on his sight.

The safety watcher should have a specific training and he's appointed by the HSE Supervisor (Safety watcher must be: the fireman, HSE technician, Operator production)

2.7. Authorized Gas Tester

An Authorized Gas Tester is a person formally appointed to perform gas tests, by the HSE Department or an external body accredited by the HSE Division after a successful test following an appropriate training course.

The Authorized Gas Tester is responsible for:

- Carrying out the necessary gas checks and reporting them in the "gas measurement" place in the Work Permit,
- Ensuring that gas detector is reliable, maintenance is up-to-date, calibration done and proceed to a function test before use.

3. WORK PERMIT SYSTEM

As mentioned in introduction, the goal of the Work Permit System is to ensure a strict, coherent and efficient management of all the works conducted on the different ZFOD sites in a way to protect human, environment and material resources.

Work Permits documents are split into 2 main categories:

- · Work Permits: "Cold Work Permit" and "Hot Work Permit",
- Certificates: "Excavation", "Confined space entry", "Radiography", "Scaffolding", "Process/Mechanical/Instrumentation Isolation" and "Electrical Isolation".

Each Work Permit or Certificate is composed of 4 colored copies (3 Arabic 1 English).

3.1. Main Permits

The Work Permit is the main document resulting from preparatory tasks such as:

- The description of the work to be carried out,
- The hazard identification of the work and the way to prevent them,
- The additional measures to prevent escalation.



Additional certificates can be required and attached to the Work Permit, according to the associated risk of the work.

Cold Work Permit

The Cold Work Permit is distinguished by blue color.

It is applied for any work where no ignition sources are used.

Hot Work Permit (naked flame and No naked flame)

The Hot Work Permit is distinguished by red color.

It is applied for any operations in hazardous or non-hazardous area with the ability to create any ignition source. This can be the use of equipment producing sparks (grinding, piling, no EX equipment, static electricity build-up, etc...), hot points (welding group, electric blower...), flame (welding, oxycutting, burning...), etc...

As often as possible, hot work permit should be avoided inside hazardous areas.

3.2. Certificates

In addition to the main Work Permits, some Certificates shall be issued for the preparation and execution of the following operations:

- Confined Space Entry,
- Process / Mechanical / Instrument Isolation,
- Electrical isolation
- Radiography,
- Excavation (deeper than 30cm),
- Scaffolding,

Certificates must be cross linked with the Work Permit (Cold or Hot), writing the certificate/s and work permit numbers in the relevant boxes of each forms.

Period of validity of complementary certificates is normally the same as the main Work Permit.

This period cannot be extended beyond period of validity of main Work Permit except for Electrical/Process/Mechanical/Instrument Isolations.

In this case, Isolation Certificates shall be recorded in the Long Term Isolation Certificate Log Book (see annex 12)

3.3. Basics rules for main Work Permit

3.3.1. Risk Evaluation



A significant step for the preparation of the main Work Permit is the risk evaluation which can be performed depending on the conditions and on the nature of the job:

- Perform a basics risk analysis and fill out main Work Permit form may be sufficient,
- Conduct a formal Job Risk Assessment.

This situation shall be initially assessed by the DGS Section Head.

He will then request to Issuing authority, Performing Authority and HSE Authority in order to finalize the assessment.

The DGS Section Head can also request the Contractor to carry out the risk assessment that anyway must be reviewed by the above authorities.

The number of simultaneous open Work Permit at a same location shall remain in the frame of what is practically controllable and can be supervised.

If during the work, a significant change appears in the initially assessed situation, the Issuing Authority (or his representative) shall immediately interrupt the job and refer to the DGS section head for further instruction.

3.3.2. Kick-off Meeting

Chaired by the DGS Section Head, and attended by Issuing Authorities (and delegated if necessary), Performing authorities and HSE Authority.

Objective is to give to everybody the same information. A general presentation of the operation is done. Participants define together the expected starting date/time and duration, battery limit of responsibilities, preparatory jobs, Work Permit breakdown, risk management, contingency plan and main phone numbers.

Kick-off meeting is planned for specific works such as heavy lift, lifting on live lines, confined space entry, works involving several trades such as wells connection, etc...

3.3.3. Daily Coordination Meeting

All Work Permits shall be discussed and approved during the daily Work Permit coordination meeting, chaired by the DGS Section Head, and attended by Issuing Authorities, Performing authorities, Permit to work Controller and HSE Authority.

During this meeting, the scheduled Work Permits for the following day are signed and the Work Permit log sheet is then updated by the Permit to work Controller and formally approved by the DGS section head.

3.3.4. Tool-box talk meeting

When opening the Work Permit in the work-site, the Performing Authority with HSE representative shall lead Tool-box talk meeting in presence of the



complete workforce in charge of performing the job and shall be refreshed at beginning of every working day.

The meeting shall focus on:

- The tasks to be carried out, equipment and materials,
- The risks linked to the work and its environment,
- The precautions to be enforced,
- The emergency and evacuation procedures.

3.3.5. Validity of main Work Permit

All cold Work Permits have a maximum validity of 7 consecutive days and must be revalidated at beginning of each working day or night shift.

Hot Work Permit validity is 1 day.

A main Work Permit is approved for opening and execution at the planned date indicated.

However, any cold Work Permit not opened within 3 days after the planned start date will automatically become invalid.

A main Work Permit may be momentarily interrupted at any time by different parties (Performing Authority, Work Supervisor, Issuing authority, HSE Authority, DGS Section Head) and for various reasons:

- Change in environment,
- Precautions not respected,
- Concurrent jobs with higher priority
- Hazardous interfaces foreseen...

The Work Permit shall then be re-assessed before being revalidated and maybe postponed or cancelled.

4. WORK PERMIT FLOW

The Work Permit is split into 5 steps:

- · Request,
- Preparation,
- Approval,
- Execution,
- Termination control.

4.1. Request

Any Work Permit shall be submitted at least 24 hours in advance to have time for Risk Analysis, clarifications, site visit, ensure the provision of adequate equipment and necessary PPE for workforce, etc. In case of real urgent job, upon approval of DGS Section Head the Work Permit can be submitted the same day of the job activity.

The Requester (designated as the Performing Authority) shall:



- Get the appropriate main Work Permit form (Hot or Cold), and complete the "Work description" section as accurately as possible. All four copies of the Work Permit are kept together,
- Clearly and comprehensively describe the intended work, specify the location and equipment, and ensure all relevant drawings/documents are attached (PID's, layout, isometrics, etc...),
- Indicate the name of department or Contractor in charge of executing the works, the material to be used and the number of people planned to work on the location.
- Indicate the specific work requirements and prepare the necessary Complementary Permits/Certificates and the planned date for execution/duration of the works,
- Sign and submit the Work-Permit as requester for review and consolidation.

4.2. Preparation, Review and consolidation

The Work Permit is reviewed and consolidated during a dedicated meeting attended by all personnel involved in the preparation process.

This step involves the Performing Authority, the HSE Authority and the Issuing authority. The "Hazard identification, Control and Safety precaution and equipment" section of the Work Permit form is used. Communication between parties is mandatory.

4.3. Permit authorization

This step involves the production supervisor the performing authority and the HSE authority. The "Permit authorization" section of the Work Permit form is used.

The Performing authority shall:

- Check that Contractor Foreman fully understands all conditions of the permit,
- Check that tools and equipment required are in accordance with the work description
- Check from PTW any complementary permit or certificate

The Performing authority then signs the "permit authorization" part.

The Issuing Authority (Production Superintendent) shall:

- Check from daily Work Permit log sheet any potential interferences with others works,
- Complete and define additional measures if necessary
- Check the interference with other work permit
- Check the interference with operation in progress
- Control and check all Complementary Permits and Certificates and documentation associated



The HSE authority shall:

- Check from daily Work Permit log sheet any potential interferences with others works,
- Specify gas test frequency,
- Control the part of "hazard identification" and the "safety precaution and equipment"
- Complete and define additional precautions if necessary
- Control and check the documentation associated and job safety analysis
- Ensure that the safety precaution and the work area requested are coherent

4.4. Approval

The DGS Section Head shall:

- Ensure that hazard identification and safety precaution are coherent,
- Ensure the battery limits of the Issuing Authorities responsibilities,
- Complete and define additional precautions if deemed necessary,
- Ensure that level of supervision defined by Issuing authority and Performing Authority is appropriate,
- Ensure that all qualified persons are nominated as required,
- Ensure compatibilities of works with on-going ones,
- Return the Work Permit if not satisfied.
- In case of Complementary Permits and Certificates are required to verify the execution of required action before to sign the main work permit

The both DGS Section Head will then sign the "authorization of Section Head DGS" part.

4.5. Execution

Work Permit shall be withdrawn in the Control Room whoever is the Operating authority.

The Performing Authority must ensure that the Work Permit has been read and understood by the Contractor Foreman.

"Person in charge of work" part of the Work Permit is filled and signed on the permit to work controller office every day by foreman or supervisor to notify Work Permit opening.

"Validation on site" part of the Work Permit is filled and signed on site every day by the foreman or supervisor, the production operator and the safety watcher to notify Work Permit opening.



If a Gas Test is required, a first measurement is done before the work can start. The control room is notified that the Work Permit is open and the work ready to start.

During execution of the main Work Permit:

- two copies remains on site at all time (original-Arabic, copy 3-English),
- One copy is posted in "live" part of the Work Permit board (in the Control Room) to have an overall view of on-going works.
- One copy is given to HSE office.

A Work Permit can be closed for several reasons:

- Work is completed,
- Work is delayed or postponed,
- Work is being continued under another Work Permit. In all cases, the "Closure" section is to be used.

4.6. Termination control

The Performing Authority must ensure the work site is left clean, safe and all tools and equipment are removed or stored. Then, he returns the copy to the Control Room, and informs the Issuing authority.

The Issuing authority shall declare that works are completed, or definitively interrupted, after he has ensured (visual check, check-list, test-run, etc.) that the installation is safe for hand over (isolation or spading removed, etc.) and/or ready to return to service.

The Issuing authority informs the Control Room of the status of the works and of the installation.

The production supervisor ticks the "work completion" box and writes, if any, the mandatory actions required before putting the installation back in service.

The issuing authority dates and signs the Closure of the Work Permit.

Note 1: The closure of the Work Permit closes the associated complementary permits also.

Note 2: When Electrical/Mechanical/Process isolation Certificates cannot be closed when the main Work Permit is closed, then, they shall be recorded as "long-term inhibitions/isolations in a dedicated log book. A Downgraded Situation declaration might be issued under Issuing authority and/or DGS Section Head decision.



PERFORMING THE WORK

5.1. Gas Testing

Gas Tests shall be performed by authorized/certified Gas Testers ONLY as required by Work Permit statements.

The authorized Gas Tester shall complete the result table on the adequate section and sign it to state that it is safe to undertake the work.

5.2. Onsite Work Permit validation

The main Work Permit is opened on site by the Issuing authority, the Foreman and the Performing Authority once they have:

- Checked that precautions and safety precautions are implemented. The box in front of each safety precautions implemented is to be ticked,
- Ensured that proper tests and measurements have been done with safe results and recorded by Gas Tester in the appropriate table,
- Ensured that required isolations have been properly performed,
- Held a pre-job Tool-box talk meeting with the labor force to ensure that risks, precautions and emergency procedures are known and well understood.

Once satisfied,

- The foreman and production operator signs the "Validation on site" part of the Work Permit,
- The Safety Watcher (hot permit to work), if assigned by the HSE authority, shall sign the "validation on site" box also.

For high-risk works like confined space entry, naked flame in hazardous area, sensitive equipment dismantling, sensitive excavation, or as mentioned in Work Permit, the HSE Authority or technician shall be present at Work Permit opening.

5.3. End of working day

At the end of the working day and if the work is neither completed nor interrupted for safety reason, the Performing Authority returns the two copies to the Control Room and informs the Issuing authority that the site has been left in safe condition.

The Control room copy is then moved from "live" section of the board to the "suspended" section with the two copies and the attached certificates, waiting for revalidation.

In case of crew change, the Issuing authority, the HSE Authority and the Performing Authority must review all live Work Permits and status of works with appropriate personnel in the new crew.



The Work Permit shall then be revalidated by the new crew personnel identified as the Issuing authority, Safety Watcher and Performing Authority.

5.4. Revalidation of the main Work Permit

Work Permit must be re-validated at least each morning before the work resumes or as requested in "validation on site" section of the permit.

Revalidation of main Work Permit is the joint responsibility of the Issuing Authority, the Contractor Foreman and the Performing Authority once they have checked that stated precautions are still implemented and that environmental conditions have not changed and caused additional hazards.

It is allowed for the issuing Authority or his representative to revalidate the Work Permit in Control Room depending on the following:

- Additional hazards associated with the job,
- Change in conditions during the night,
- Additional work in the area that will interrupt or conflict with the job.

After revalidation, one copy is placed on "live" section of the board while other two is kept on Site and remaining copy is at DGS HSE office.

5.5. Momentary Interruption

Once the works have been stopped in a safe manner, the person who has taken the decision to interrupt the works shall:

- Notify immediately the Control Room, the Issuing Authority and/or the DGS Section Head of the interruption,
- Gather the Work Site and the Control Room copies of the main Work Permit,
- Indicate the reason for interruption in the proper section of the Work Permit. The Issuing Authority then keeps the 3 copies of the Work Permit.

For resuming the work, the full process of revalidation shall be applied under control of issuing Authority.

5.6. Interruption in case of alarm

In case of alarm (gas, fire ...), works shall be IMMEDIATELY stopped in safe manner.

Before reaching the muster point, the Foreman shall ensure that:

All hot works are stopped,



- Electrical generator, welding machine, thermal engines, vehicles, ... are shut-down,
- Any source of electricity is switched-off,
- Gas cylinders are isolated,
- Lifting devices with loads still suspended are abandoned in safe conditions,
- Escape ways are unobstructed.

.

The Performing Authority shall collect the Work site copy of the Work Permit and give it to the Issuing Authority or his representative.

The Contractor Foreman shall gather the work site, control room copies in the Control Room.

To reopen a Work Permit, whatever the cause of alarm, the full process of work permit revalidation shall be applied under the control of Issuing Authority.

5.7. Work delayed or postponed

When the work has been delayed or postponed, the Performing Authority is responsible to leave the work site in a clean and safe condition.

If a Work Permit has been delayed the Issuing Authority ticks the "Suspension or reissue" box and the other appropriate boxes.

As a general rule all the delayed Work Permits with their associated documentation shall be available in the Control Room.

6. WORK PERMITS LOG BOOK

Each DGS shall maintain a log sheet of all Work Permits. This log shall contain at minimum the following:

- Reference number,
- Date.
- Scope of work,
- Types,
- Start dates (planned/actual),
- Close dates (planned/actual),
- Signatures,

The list shall be daily reviewed by the Issuing Authority and the DGS Section Head in order to have a global view of the work plan and detect any interference between planned works.



7. ARCHIVING

The HSE Authority is in charge to archive all hot and cold Work Permits copies (Arabic and English). These copies are archived with all supported documents (complementary permits / certificates, PID's, etc...) for a 12 months period. After this period HSE ZFOD representative at DGS will pass to Company Main Archive representative. All these records in main archive shall maintain for a minimum period of five (5) years.

8. TRAINING

Anybody performing work on ZFOD DGS, well, RIG including any Contractors, must have attended a Work Permit system training course given by ZFOD Training Department.

A written exam must end any Work Permit training course for all persons implementing the Work Permit procedure including requesting authorities.

All trained staff should be recorded in a training matrix and a yearly refreshing training is performed to permanent staff under responsibility of the ZFOD HSE Department.



ANNEXES 9.

Rescue equipment (O2)	Parameter (Ot)	Fire water hose	Water screen / spray		Extra fire fighting equipment	Specific glaves	Disposable overall	Transaction of the last of the	Safety harness / line	Protection for chemicals	the property of	Far projection	Dust / Gas mask	Breathing apparatus	Constitution or and the Constitution of the Co	Safety poppler/face mask	4. Safety Precaution and Equipment (Tick as appropriate)					Cert Tramper		Cert Number	:Cert. Number		Cert Number	:Cert Number	:Cert. Number	3. Comuni (FA)				Noby area	Gas venting	Summer of summer		Confined space	Liquid/gas under pressure		Texic/corrects substance	Liquid hydrocarbon		Presence of east	Flammable materiel	Flame, spark		2. Hazard Identification (T		: 100E/Edulpment Nedutie						PERFORMING AUTHORITY(PA)	1. Work Description (PA)			COLD WORK FERIVILL			N KOGAS
Spark / blasting protection	Sand Albertan	Permanent watcher	Work area protection (barrier)	Work area protection	Scaffolding / scaff tag	Equipotent liaison	SISUS OR SCATION	ACCOUNT OF THE PARTY OF THE PAR	Venting /blending forbidden	Permanent gas monitoring	Sum reach based sever and	Can shock prior starting	Safety system override	Protect drains in zone	Second or Second Asses	Stop craning & lifting	quipment (Tick as appı		:Sign	!		KISOTOKA	4	French	Scattold	2 22 1	Mecha	Elect	Confin					Pressurized line	Uncontrolled start-up	to constitute and and amount	Not and the second	Excavation	Adjacent / everhead work		Heavy or difficult lifting	Manual handling / lifting	Total Section	Moving party	Single barrier	Downgraded safety device	,	ick as appropriate)		ent required	WORK AREA	vaav vaom.				ITY(PA)					LIMOTO		
Material check before to start	Material shock before to start	Incrting / air venting	Mechanical bolation		Electrical isolation	Additional safety lighting	E-quipment med with water	The state of the s	Equipment fully increed	Equipment ventilated	to the second se	Conferent fully our free	Equipment drained	Equipment depressurtied	Control Page 1	And mark took	ropriate)		n :Position				2 J		Scattolding certificate Job sater	T	Mechanical isolation Written	E I						Rig move / high traffic	Specific wastes /scales	T CONTROL DATE OF THE PARTY OF	Falcon fallon	internal combustion engine	Semote work		Road transportation	High temperature		Radiations	Static electricity	Live electricity				venicles used (:Хаше			HI Low	Risk category			
ico safety analysts :Additional co	Tab and the same back	isolation procedure	Specific procedure		Lifting precedure	Complete / partial SD	CONTRACTOR OF THE STATE OF THE	District Street Street of	Fool box talk	Communication means		Work above forbidden	Certified personnel only	ičemove flammable mat		ESD / adarm test before			tion		Addition	emer Search broceanie		rocedure	ly analysis		Written Procedure		Associated Documentation			:Interference with operations in pre	:Interference with work								Scaffolding under erection	Weather conditions	and other	Heavy contracts	Work at night	Work at heights (> 2m)				venicles used (pusies number inspection status	Number of worker	Number		WORK DESCRIPTION	Coar vacou				1	ory PTW number		T	ZFOD Contractors
800						Ð	WCILL			-			•	Sertal		4			Name	:	Additional comments										Non list hazard	tions in progress	permit number		L				L		-	L							L	Status	MOTECLE			THE LAND		Position		L		190	L		tractors
a ment							F	:						The state of the s			10. Suspe		Name		il comments							in the case of the	18		:Non list hazard	dions in progress	permit number		o. Author	O Author					T.	accent to re	7. Person							status	MOTREE		SIGN	5	The state of the s	7:	6. Gas Tes			790		o. remin	h
Make at the state of the state		Time	7011100	Position			11. Work Completion	:		Sign		hused.	Normal operations have been resumed. The	suspended by:			10. Suspension or re-issue		Name		1 comments							Change Sand die has been char	y. vanuation	0 Validation	:Non that hazard	dions in progress	mber	Sign	o. Authorization of Fiant Section	O Anthonis Tolland			Sign	1000	T.	I accept to respect ZFOD procedures as								Sisters)	2011/21		NAME	5		7:	6. Gas Test (Gas tester Authorize		Time	Der Tink		S. Fel mili Addition	h
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anacit Sugar		Date	100	-	The work is complete; the work area is safe and clear. Assistions have more	Training have not	F	:		Sign		hused.	Normal operations have been resumed. The work area	rial Suspended by:		Due	10. Suspension or re-issue		Name		d comments							Change Sand die has been char	y annualization on site of (Garett), a touristion, a victimatural	0 Validation on site by (Safety Prod	2Non-list hazard	Non-in-property	mber		- 0.0		2000 E.T.	W	:Name	:ingitic:	The second secon	- 1	in charge of work (forema								WOLLET.		NAME OTHER H2S	5		((Time	Tiax			h



Кезсы ефи	Fire water h	Water screen / spray		Extra fire fish	Consulting along	Dismonable	Safety harness / line	Protection	Ear protect	Dust / Gas mask	Breathing a	Safety gogg	4. Safety Precau				Ī				Ī	Ī		1	3. Control (Ī		Noby area	Gas venting	Process ope	Contined space	and man have		Tazic/corre	Liquid hydroca	Presence of gas		Flammable	Fluenc, spark	2. Hazard Io			Ī	Γ			PERFOR	1. Work De			E OT	13	S James
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9.3. Electrical isolation certificate form







Electrical Isolation certificate number

Linked to PTW

Work site

ELECTRICAL ISOLATION CERTIFICATE This permit must be initiated with a main work permit / each trade must provide one main work permit and one isolation certificate

			ISO	_	ST (By Performing authority)	.1
	:Tag No			: I	Equipment to be isolated	:Date
					: Nature of work to be	performe
	: Signature		Time&Date		Department	:Name
		ISC	DLATION AUTH	ORIZATION (By N	Maintenance Superintendent)	.2
				I hereby authoriz	ed the isolation of the equipment detailed i	n (1.) above
	: Signature		Time&Date	:I	Department	: Name
				ISOLATION (By I	Electrical authorized person)	.3
				State here pr	recisely SITE / ROOM / PANEL / CIRCUIT	BRAKER:
				Isolation of the above	mentioned electrical equipment has been cor	npleted by:
No	Yes					Action
No	Yes				Ide	ntification
No	Yes				5	Switched off
No	Yes				R	acking out
No	Yes				Locked b	y padlock
No	Yes				De-energize	ed verified
No	Yes				Green sheet to be installed o	n padlock
No	Yes				Additional earthi	ng needed
					:Addition	nal request
						tion etc.)
	clare that the isolation or the above equipmen		oned equipment with Tag	No: has	been checked by me and now it is safe to	work as
			Signature	Date &	time	: Name
				CLEARANG	CE (by Performing authority)	.4
				at all persons under my char ent and tools have been rem	rge have been withdrawn and instructed the	at it is no
	1		Signature	Date &		: Name
			REQUEST FOR I	DE-ISOLATION (N	Maintenance Superintendent)	.5
hereby dec	clare that the work to	be carried out under	this certificate has been co	mpleted.		
			Signature	Date &		: Name
					Electrical authorized person)	
	rtify that the equipme emoved from the wo		bove has been reinstated ar	nd that all isolations have be	en removed. All caution notices, request a	ıd locks
			Signature	Date &	time	: Name
			CC	OMPLETION (By I	Maintenance Superintendent)	.7
	eclare that the work ork Permit has been		der this certificate has be	en completed, the equipmen	nt specified in (1.) Above has been reinstat	ed and that
			Signature	Date &	time	: Name
					DISTRIBUTION	.8
	2nd COPY		1st Co	OPY	ORIGINAL	
	Task Performe	er	HSE dep	artment	Control Room	



$9.4.\ Process/Mechanical/Instrument\ isolation\ certificate\ form$

eni ex	Kogas Walaid	E	Work site	Li	nked to PTW	Isolation certificat number
This p	ROCESS / I ISOI DETRICTION REQUEST (Pe	LATIO	N CERT	IFIC	ATE	
I. ISOLA	- ,	ag No	thority)	· Fanin	ment to be isolated	: Date
	.1	ug 140		. Equip		re of work to be performed
	~! ·					•
2. ISOLAT	Signatur		Date & time	ndont)	: Department	Name
Number of points at very the appropriate position	TION AUTHORIZA' which the equipment detaile on for depressurizing / vent the isolation of the equipmen	ed in (1) above is ing are indicated	to be isolated:	Isolating D(s)		each point together with
	Signature	Ι	Date & time		: Department	Name
3. ISOLAT	ΓΙΟΝ (isolation perfo	rmer) one tag	must be attached to e	each isolatio	on device	
DEINST	ATEMENT	ISOI	LATION	_	A. Process i	solation
Date	Time	Date	Time	Loci	k No Tag No	
			+	+		
	ATEMENT		LATION		A. Mechanica	
Date	Time	Date	Time	Loci	k No Tag No	Location/instruction
REINST	ATEMENT	ISOI	LATION		A. Instrument	isolation
Date	Time	Date	Time	Loci	k No Tag No	Location/instruction
			+	+		
I hereby declare that the	he equipment detailed in (1) ab	ove has been isolat	ted as indicated			
Thereby decime man	Signatu		Date & time		: Department	Name
4. CLEAR	ANCE (by performing				. Department	Ivaine
	he work detailed in (1) above l	• • •		nder my char	ge have been withdrawn	and instructed that it is no
	the equipment specified in (1)	above and that all	equipment and tools have	ve been remo		
	Signatu		Date & time			Name
5. REINST	FATEMENT AUTHO	ORIZATION	(Production Su	perinten	dent)	
I hereby declare that I	have checked the site and auth	orize the reinstaten	ment of the equipment de	etailed in (1)	above.	
	Signatur	re	Date & time			Name
6 REINS	TATEMENT(by pe	rformer isole	ntion)			
	the equipment specified in (1)		*	olations have	e been removed. All cau	ition notices and locks have
	Signatu	re	Date & time			Name
7. COMP	LETION (Production	n Superinter	ndent)			
I hereby declare that that the Main Work Pe	at the work to be carried out usermit has been closed.	ander this permit t	to work has been comp	leted, the eq	quipment specified in (1)) above has been reinstated an
	Signatu	re	Date & time			Name
8. DISTR	IBUTION					
	nd COPY		1st COPY			GINAL
Tac Tac	k Performer		HSE department		Contro	ol Room



9.5. Excavation certificate form

17717
צונתון
eni
C 11 11 11







Signature

Excavation certificate number Linked to PTW

Work site

EXCAVATION CERTIFICATE

This permit must be initiated with a main work permit

LOCATION / NATURE OF WORK (by requester)

:Location of Work

:Description of the work to be performed

:Drawing associated No : Depth

: Performing Authority Name Date & time

INSPECTION (By Production Superintendent)

After visiting the site, studying the above drawings and comparing with our documents we consider that

No	Yes	Damaged	No	Yes	Hazardous	There are objects liable to be
No	Yes	Backfilling	No	Yes	Excavation	This Permit is to be used for
No	Yes	Hand digging	No	Yes	Mechanical	Type of Digging Permitted

Date & time Name Signature

PRECAUTION TO BE TAKEN (HSE Authority) .3

	No	Yes	Barriers / Warning Notice required
	No	Yes	Flash light required
	No	Yes	Road diversion required
	No	Yes	Ladder / Stairway /Ramp Required (Required if excavation depth exceeds 4 feet. Maximum distance between worker and exit point must be below 25 ft).
Г	No	Yes	Scaffolding required
	No	Yes	Sloping / shoring / trench shields required (Precaution required if excavation depth exceeds 5 feet).
	No	Yes	Soil Classification checked by Registered Professional Engineer
Г	No	Yes	Daily inspection required

:Additional precautions

Signature Date & time

ISSUED (by Production Superintendent) .4

I have personally checked the above conditions of the job site and found that the work may be carried out safely provided the above precautions are followed in addition to those of main work permit.

The permission is granted to commence excavation work

Signature Date & time

ACCEPTANCE (By Performing Authority) .5

I have read this certificate and understand and agree to accept all precautions and conditions.

Signature

CLEARANCE (By Performing Authority)

I hereby declare that all work requiring this Excavation certificate has been completed and that all persons, equipment and tools have been removed from the Date & time Signature : Name

COMPLETION (By Production Superintendent) .7

I hereby declare that excavation work has been completed and the main Work Permit has been closed

Signature Date & time : Name

: Name

DISTRIBUTION .8

2nd COPY	1st COPY	ORIGINAL
Task Performer	HSE department	Control Room



9.6. Scaffolding certificate form

eni	exy	Kogas What was	Scaffolding cer . number			Linked to PTW	Work site
		SCAFI	FOLDING This permit must be init	tiated with a	main work per		requester) .1
	Removal N	Erection O YES : Specific Drawir Signature	ng associated / m		_	Heavy General	: Department of the work to be performed Light : Scaffold duty erforming Authority Name
				I	NSPECTION	ON (By Performing	Authority) .2
NO	Yes	Hazard created to/from traffic		NO		amiliar with area hazard	
NO	Yes	Area free of combustible /toxio	c gas	NO	Yes S	caffold anchoring point appr	oved
NO	Yes	Scaffold certificate material (t	ubes clamp)	NO	Yes	oundation footing prepared	
		Signatu	ıre		Date & t	ime	Name
			PRI	ECAUTI	ON TO BI	E TAKEN (By HSE	Authority) .3
NO	Yes	Barriers / Warning Notice requ	nired				
NO	Yes	Flash light required					
NO	Yes	Road diversion required					
NO	Yes	Ladder / Stairway /Ramp Requ below 25 ft).	nired (Required if excavat	tion depth ex	ceeds 4 feet. M	aximum distance between w	orker and exit point must be
NO	Yes	Scaffolding required					
NO	Yes	Sloping / shoring / trench shiel	lds required (Precaution r	equired if ex	cavation depth	exceeds 5 feet).	
NO	Yes	Are proper scaffold entry tags	s used to inform personr	nel when it	is safe (or not s	afe) to use a scaffold? (greer	ı, yellow, red)
NO	Yes	Daily inspection required					
NO	Yes	Erection team has been certifie	ed				
NO	Yes	Lifting device approval					
NO	Yes	Safety barriers/ safety tape /wo	ork safety area				
NO	Yes	Safety harness mandatory					
							:Additional precautions
		Signati	ure		Date & t	time	Name
				ISSU	ED (by Sc	affolding Erection S	Supervisor) .4
		ard involved in the above permit may be carried out safely provid					checked the scaffold and
		Signate	_		Date & t	_	Name
				A	CCEPTAN	CE (By Scaffolding	controller) .5
I hereby	declare that	this scaffold has been erected in	_	dustry pract			
		Signa		CE & C	Date &	ON (By Performing	Name authority) .6
		t all work requiring this Scaffold					, ,,
Work site		Scaffolding work has been com	-	k Permit has	been closed.	· time	Nama
		Signa	nure		Date &		Name RIBUTION .7
		2nd COPY	1st	COPY		ORIGI	
		sk Performer		epartment		Control	



9.7. Radiography certificate form







Work site

Linked to PTW

Radiography certificate number

RADIOGRAPHY CERTIFICATE

This permit must be initiated with a main work permit

1. LOCATION / NATURE OF WORK (by requester)



Location of Work

: Description of the work :Tag No : Equipment / Line

2. EQUIPMENT CERTIFICAT CHECK (By Contractor Radiography Protection Officer)

	_ €	THE CENTER OF THE CONTRACT (E)	3	.,	
			:Contact Tel No.	: Contractor Rac	liography Protection Officer Name
					: Contractor Performer Name
		: Activity (Curies)		:No	: Type of Radioactive Source
		Documents to be submitted by the Contractor Radiography Pro	tection Officer to the	HSE Superintenden	t
No	Yes			NATEO	C import authorization certificate
No	Yes			Radiog	rapher's qualification certificates
No	Yes				Decay chart for source
No	Yes		Certificate fo	or the exposure co	ntainer and record of leakage test
No	Yes			Calibrat	ion test for radiation dose meters
No	Yes		Copy of contrac	tors local rules (in	cluding emergencies procedures)
		Signature	Date & time		Name

3. PRECAUTION TO BE TAKEN (HSE AUTHORITY)

The restricted area is adequately marked at the safe limit of 50 meters (reading to be <6 mSv)	Yes	No
The restricted area is clear of unclassified persons	Yes	No
All people involved in radiography operation are wearing monitoring badges	Yes	No
Equipment for retrieval of source in case of emergency is present on site	Yes	No
Contractor radiation meter is on site, calibrated and serviceable	Yes	No
Persons in the surrounding area have been informed	Yes	No
Flashing light to be operated when source is exposed	Yes	No
Radio contact with control room	Yes	No
:Additional precautions		

Signature Date & time Name

4. ISSUED (by permit controller)

I have personally checked the above conditions of the job site and found that the work may be carried out safely provided the above precautions are followed in addition to those of main work permit.

Signature

Date & time

Name

5. ACCEPTANCE (By contractor Radiography protection Officer)

I have read this certificate and understand and agree to accept all precautions and conditions. Signature Date & time

Name

6. CLEARANCE (By contractor Radiography protection Officer)

I hereby declare that all work requiring this radiography certificate has been completed and all persons, the source and equipment have been removed from the work site.

Signature

Date & time

Name

7. COMPLETION (By permit controller)

I hereby declare that radiography work has been completed and the main Work Permit has been closed.

Signature Date & time

Name

8. DISTRIBUTION

2nd COPY	1st COPY	ORIGINAL
Task Performer	HSE department	Control Room



9.8. Confined space entry certificate form

								ntrol room	ment / copy 2 - Co	- HSE Depart	in PTW / copy 1 -	Distribution: Original – with main PTW / copy 1 – HSE Department / copy 2 – Control room	distribution: O	ы
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							Signature	Mion	Designation		Date	Time		
							Returned by - Name (print)	Returne						
	\vdash						erations Authority)	N (Return to Op	CERTIFICATE CANCELLATION (Return to Operations Authority)	CERTIF				
							Signature	ation	Designation		Date	Time		
							Name (Sim)							
							Name (Deat)							
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							Additional conditions/precautions for entry:	mal conditions/pr	Additio					
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							Name (Print)		Signature		Date	Time		Τ
							Performing Authority	Peri						
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							vided	& Life Lines pro	Full-body Harness & Life Lines provided	Н	puired	Breathing Air Equipment required	—	No
								gr.	Gas Monitor required	+	llow entry	Vessel sufficiently clean to allow entry	\rightarrow	No
	\mid	T				I		lated	Inerting System Isolated	+	OUES	Vessel purged of gases / vapours	_	
	+					Ī		n all hazzuds	Vessel Isolated from all hazards	No Yes	Bypassed	Fixed Fire fighting Systems Bypassed	-	
							TAILOUNAN BUILDING	n all hazards	CONDITIONS FOR EXTENT TO BE compresed by Fellorining Auditority Ves. Vessel blanked from all hazards	No Yes	Collated	ina fighting Systems	Yes Fixed F	S.
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							Permit to Work No.			Γ				
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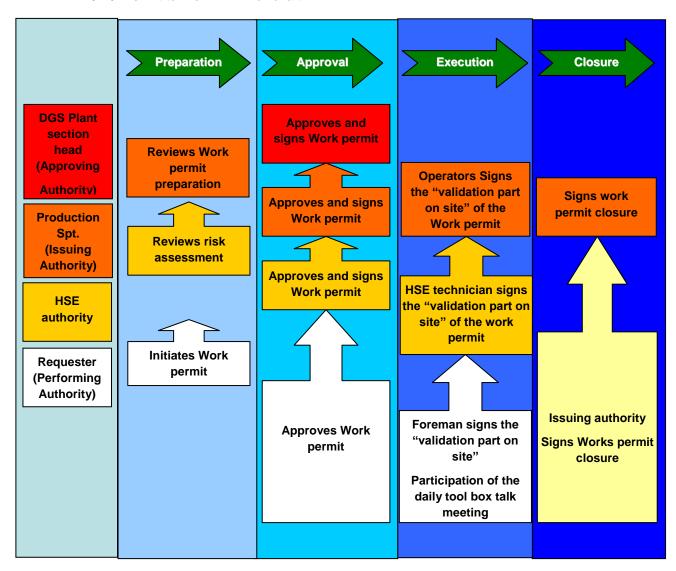


9.9. Tool box meeting form

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		TOPICS DIS	CUSSED				1000000		de la rechine di indica	PTW		per breach doubles	Politerelin Bodice
Critical Activit	es	Hazardou	s Agents	#4	azardous con	sequences	οН	PTW			o CP	ΓW	
 □ Working at height □ Mechanical lifting □ Manual Handling □ Welding / Cutting □ Power tools □ Hand tools □ Pressure/leak testing □ Process Isolation □ SIMOPS □ Electrical isolation □ Stacking / Storage □ Confined space entry □ Chemical cleaning □ Excavation □ Painting / sand blastin □ Machinery □ Concrete pouring □ Other: 		o Oil Flammable G Toxic Chemic Oxygen Nitrogen/ Iner Noise Vibration Electrical Ene Pressure Heat Stress Falling objects Wind/rain/Sar Lack of comp Contaminated Lubrication Oil Inizing Radia	als t Gas rgy s s sdstorm etency l water il stion semicals	DERICAL DERICA	e/Explosion ectric shock image to equip earing Loss e Injury aks and Spills phyxiation xic effects her: Preventive M oper PPE susekeeping Il Protection urricading e prevention as detection	а Со а Ел а Рг	cavati onfinec ectrica cocess- caffold	mpler on I space I isolat Mech-	e entry ion inst is device	y peri	988		
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Date Time Signature				85.50				ul#A:					



9.10. Permit to Work PTW flowchart.





9.11 PWT Logbook.

Section of the sectio

DGS Section Head Signature

Number | Permit Type | Job Performer Job Area Open (Date & Initial) Closed (Date & Initial) Validity



PERMIT TO WORK LOGBOOK

LONG TERM ISOLATION LOGBOOK



9.12. Long Term Isolation Certificate Logbook.

DGS OPERATING WORK PERMIT PROCEDURE

_		_		-							
											Date
											Isolation Certf No.
											Permit No.
											Isolation Cent. No. Permit No. Type of isolation Area
											Equipment/ Tag No.
											Description and Reasons for Long Term
											Comments