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The Name of
the Work

Mersin-Adana-Osmanliye-Gaziantep Yüksek Standartlı Demiryolu Hattı
İnşaatı İle Elektromekanik Sistemlerinin Temini
Construction of Mersin-Adana-Osmanliye-Gaziantep Hight Standard Railway Line
With Supply Of Electromechanical Systems

Rapor Adı
Report Name

: WORK PERMIT PROCEDURE

Doküman Kodu
Document Code

: MAOG-RECU-GN-GNL-IS-GNL-PRG-0008-0

Revizyon Revision	Tarih Date	Rapor Adı Report Name : WORK PERMIT PROCEDURE		
0	15/09/2021	Açıklama / Remarks :		
		Hazırlayan / Prepared by	Kontrol eden / Checked by	Onaylayan / Authorized by
		Onur GÜL HSE Supervisor	Hasan TAŞKAN HSE Manager	Kayserşah ERDEM Project Manager
		Açıklama / Remarks :		
		Hazırlayan / Prepared by	Kontrol eden / Checked by	Onaylayan / Authorized by
		Açıklama / Remarks :		
		Hazırlayan / Prepared by	Kontrol eden / Checked by	Onaylayan / Authorized by



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1. PURPOSE

Within the scope of the activities to be carried out regarding the MAOG Project, It is to provide a safe working environment for the employees with the safe management and control of various potentially dangerous work activities.

2. SCOPE

This procedure covers the minimum requirements in the Work Permit System for all main and auxiliary/support activities within the scope of the MAOG Project.

3. IMPROVEMENT

Persons who detect ambiguity and inconsistency in this document can report their requests and suggestions using the "User Feedback Form" in the Appendix.

This document is the minimum requirement for Ronesans Holding and all its affiliated Group Companies, and can be developed in accordance with the legal regulations of the working region, employer expectations, MAOG Project needs and requirements and international standards. The control and follow-up of the practices included in the local laws, which are not mentioned in this document, are the responsibility of the MAOG Project.

4. REFERENCES

- OHSAS 45001:2018, Occupational Health and Safety Management System
- ISO 14001:2015 Environmental Management System,
- MAOG-RECU-GN-GNL-IS-GNL-PRG-0002-0 Hazard and Risk Management Procedure
- MAOG-RECU-GN-GNL-IS-GNL-PRG-0003-0 HSE Training Procedure

5. RESPONSIBILITY

5.1. Project Manager

MAOG Project Management is responsible for the implementation of this document in all work areas / activities and ensuring that the subcontractors it works with provide their employees with trainings in accordance with this document.

MAOG Project Management is also responsible for;

- Providing training on the work permit system for all responsible Ronesans and subcontractor company employees,
- Approving and applying the prepared work permit procedure,
- Responsible for taking the necessary actions for the work permit system.

5.2. Site Manager / Construction Managers

Site Managers are responsible for the implementation of the Work Permit System in operational areas and the coordination of simultaneous operations in a way that prevents dangerous interactions.



Site Managers, together with the Project Manager, are responsible for officially identifying and announcing the person(s) authorized to approve the work permit (Field Officers, Authorities to Operate the Work Permit) with the "Person(s) Authorized to Approve the Work Permit list".

Site Chiefs / Construction Managers also;

- Ensuring regular Work Permit Inspections,
- Managing the latest approval process of work authorization in simultaneous operations (SIMOPs) and
- Responsible for ensuring the effective functioning of the work permit office.

5.3. Area Managers (Ronesans Site Managers / Engineers / Project Managers)

Ronesans site supervisors / engineers / project managers perform the duty of field supervisor in their assigned areas of responsibility and are responsible for the coordination and implementation of all works in their area of responsibility.

**In cases where "Field Responsible" is not defined within the project organizational structure, the relevant duties and responsibilities can be defined in the Project work permit procedure and performed by the "Officer to Operate the Work Permit".

- Authorized persons cannot be authorized to implement the work permit system without receiving "Work Permit System Training" to undertake the responsibilities defined in the document. (For detailed information on work permit training, see MAOG-RECU-GN-GNL-IS-GNL-PRG-0003-0 HSE Training Procedure)

Site supervisors are responsible for providing the following items before approving work permits:

- Checking the availability of the necessary control methods in the work area before the work starts,
- Making sure that the work area is controlled by the authorized person who will operate the work permit,
- Making sure that the requested work does not conflict with another Work(s) in its area of responsibility, Keeping conflicting Works under control,
- Ensuring that potential hazards and risks, their control methods and measures are communicated to employees,
- Reviewing the work area with the authorized person (requester) who will operate the work permit before the work starts,
- Ensuring that the authorized person (requester) who will operate the work permit is aware of other work permits in the current area,
- Checking that the necessary documents (ITA, Construction Method, TRIC Card, etc.) are included in the annex of Work Permits,
- Responsible for ensuring that the work method for specific activities and the work method number for routine activities are added to the work permits.

5.4. Work Permit Tracking and Registration Officer

The Work Permit Coordinator is the person responsible for the management of all work activities in accordance with this document, assigned by the MAOG Project HSE Manager / Chief / Manager. Tracking and Recording Officer also:



- Checking whether there are other works or simultaneous works performed or to be carried out in the region where work permit is requested,
- Coordinating work permit meetings for the planning of simultaneous operations (SIMOPs) in co-working areas according to the work schedule,
- Keeping the record / list of work permits and updating them continuously,
- Making follow-up and announcement in work permits that require announcement (road closure, pressurized works, LOTO, radioactive tests, etc.),
- Supervision of the work permit system on site,
- Checking the prepared work permits, attachments, certificates, necessary signatures,
- Checking the comments of the relevant departments and the additional measures to be taken on the work permit,
- When making a work permit request, examining whether the HSE procedures related to the work are handled and coordinating with the relevant groups in case of deficiencies,
- It is responsible for following the work permit periods and ensuring the cancellation of the expired permits.

5.5. Authorized Person (Supervisor, Manufacturing Engineer, Technician, etc.) to Request/Operate Work Permit.

The Authorized Person to Operate the Work Permit is the authorized person who requests the work permit, fulfills all the requirements determined/required by the Field Officer before the work, and signs the work permit by demonstrating that the work environment is safe. The Authorized Person to Operate the Work Permit is assigned by the Project Manager and/or the Site Chief.

Authorized persons cannot be authorized to implement the work permit system without receiving "Work Permit System Training" in order to assume the responsibilities defined within the scope of the procedure. The Authorized Person to Operate the Work Permit is also:

- Providing a safe working environment for the working personnel as specified in the work permit,
- Transferring all instructions to employees before starting work,
- Obtaining all the necessary approvals for the work permit before the work starts,
- Ensuring / ensuring that all controls are fully fulfilled before signing the work permit,
- In works requiring gas measurement, making sure that the measurement work is carried out by authorized personnel,
- Informing the Work Permit Tracking and Registration Supervisor / Field Supervisor in case of any delays or changes before the work, in the planned works,
- Controlling the compliance with the protection of the safe working environment and the continuity of the measures by inspecting the work area at regular intervals,
- Suspending the work permit and notifying the Field Supervisor and/or the Work Permit Tracking and Recording Supervisor in case of conditions different from those specified in the work permit during the work,
- Informing the Work Permit Tracking and Registration Supervisor / Area Supervisor in case of any change in the working conditions around the work area that may prevent the safe execution of the work,



- Actively participating in the work hazard analysis study to be carried out within the scope of the study,
- In the event that different employees are involved, ensuring that the scope of work is fully understood and that the hazards and controls related to the work are fully known to all employees,
- Following the continuation of the work in accordance with the construction method and procedures,
- In case the work done affects the regions outside the current area, contacting the area manager of the relevant area and ensuring that the necessary security actions are taken,
- Delivering the relevant copy of the work permits to the Authorized Person to Perform the Work,
- Delivery of necessary documents, information and responsibility in shift changes,
- After the work is completed, he is responsible for checking the area and informing the Work Permit Tracking and Registration Officer / Area Responsible and ensuring that the work is completed safely.

****** The Authorized Person Who Will Request/Operate Work Permit is expected to execute a maximum of 6 work permits on the same day. In order for effective surveillance to be implemented, different persons should be appointed for work permits above this number.

5.6. Authorized Person to Perform the Work (Person Carrying out the Work)

The Authorized Person to Perform the Work cannot initiate the work without the approval of the Field Supervisor and the Authorized Person to Operate the Work Permit. The responsibilities of the Authorized Person to Perform the Work are as follows:

- To ensure that all employees involved in the work are aware of the dangers, risks, rules and limitations mentioned in the work permit,
- Before the work permit, training the employees within the scope of the Occupational Hazard Analysis (ITA) in the annex of the permit, within the scope of the existing dangers and risks, realizing / ensuring the realization of the TRIC card application,
- Ensuring that a copy of the work permit is available in the work area during its active and valid period,
- Making sure that all necessary approvals are included in the work permit,
- Making sure that all the measures and control methods specified in the work permit are in place and applied,
- Ensuring that only the work specified in the work permit is carried out,
- Identifying hazards before and during work and ensuring that necessary precautions are taken,
- To ensure the transfer of work permit and information transfer to the next shift, in cases such as each shift change, employee personnel change or change of people who will operate the work permit,
- To apply to the Authorized Person to Operate the Work Permit, who approves the work permit, in order to close the work permit at the completion of the work.

Note: The Authority to Perform the Work is expected to execute a maximum of 6 Work Permits on the same day. In order for effective surveillance to be implemented, different persons should be appointed for work permits above this number.



5.7. Authorized Gas Measurement Personnel

He is the expert who will test the presence of flammable gas or steam, toxic gases and oxygen in the environment, especially in "Confined Spaces". This person may also be an authorized person trained within the MAOG Project and authorized by the project managers or a third party expert.

Gas measurement authorized personnel are required to inform the Authorized Person to Perform the Work and the Authorized Person to Operate the Work Permit of the test results in cases where the post-measurement environment is not suitable for safe operation, and should immediately stop the work if the work has begun.

5.8. Headquarter E&S Manager:

Responsible for managing infrastructure and superstructure projects regarding environmental and social governance issues and member of the Executive E&S Committee on behalf of the REC.

5.9. PIU (Project Implementation Unit)

- PIU Physics Engineer who is responsible for supervising health and safety for the Project.
- PIU Department Manager (Superstructure / Civil Engineer) will be responsible for overseeing the implementation of all health, safety and social measures, as specified within the disclosure package of the Project, and regular reporting to AYGM PIU.

5.10. Executive Environmental and Social Management Committee

- Executive E&S Committee Project Manager (Department Head / Branch Manager / Head of Department) will be ultimately responsible for overseeing the activities undertaken by the AYGM/TCDD specialists (listed below), overseeing the implementation of mitigation measures and management procedures specified within the disclosure package of the Project, and overseeing the preparation and implementation of a CESMP, which will be based on this ESMP.
- Executive E&S Committee Environmental, Health and Safety, and Social (EHSS) Manager (Specialist / Engineer) will be responsible for overseeing all matters that relate to environment, health, safety and social aspects of the Project. Also, s/he will be appointed to be responsible for supporting the implementation of the SEP, by conducting regular consultation with affected communities on any concern regarding the Project. CLOs will also have responsibility for disseminating the Project disclosure package as described in the SEP. They will also conduct regular inspections of records relating to grievances received and their resolution. S/He will report regularly to AYGM PIU.

Further technical staff may be required during the course of the Project, who will be assigned internally by the AYGM, either by means of permanent or temporary basis until the completion of relevant tasks under the Project whilst they undertake their current responsibilities.

6. DEFINITIONS AND ABBREVIATIONS

ITA: Work Hazard Analysis:

IIS: Permit to Work (PTW)

HSE: Occupational Health and Safety and Environment

PPE: Personal Protective Equipment



TRIC Card Task Risk Identification Card

MAOG: MAOG (Mersin-Adana-Osmaniye-Gaziantep) High Standard Railway Project

Critical / Complex Lifting: Lifts in which two or more cranes are used simultaneously, restricted areas such that the crane boom cannot be fully opened, lifting of loads with an unknown center of gravity using more than 85% of the crane capacity are complex lifts and are subject to work permit. For complex lifting, a lifting plan should be prepared in addition to the work permit.

Site Officer: They are site managers/engineers with operational authority and responsible for a specific area. It is the person who approves the work permit, is responsible for the implementation of the work permit system in his jurisdiction, and is the most senior signatory within the scope of the work permit system. It is also responsible for ensuring that the site operates in accordance with the Work Permit.

LOTO (LOTO): Tag – Lock – Secure – Try (Lock out –Tag out)

Energizing: It is the activation of mechanical or electrical lines, systems from the source. E.g.: First powering the power lines, filling the pipelines with gas or liquid, starting the mechanical equipment for the first time.

Labeling Locking – In the tagging system, a tag showing the identity of the lock and the date the lock was attached to the machine or equipment is added to the lock.

Work Hazard Analysis: Occupational Hazard Analysis is one of the most effective tools for the hazard and risk management of activities. With this method, Ronasans Holding and affiliated group companies try to identify preventive actions by separating the activity step by step, identifying the hazards for each step.

Permit-to-Work Written permission to conduct business.

Authorized Person to Operate the Work Permit: The Authorized Person to Operate the Work Permit is the authorized person who will make a request for the work permit, sign the work permit by stating that all the requirements determined / requested by the Field Officer are fulfilled, that all the control requirements are fulfilled before the work and the work environment is safe.

Authorized Person to Perform the Work: The Person to Perform the Work is the most authorized person with the title of minimum foreman who manages the work group that performs the work in line with the work permit requirements, is responsible for its supervision.

Work Permit Coordinator: The Work Permit Coordinator is responsible for checking the prepared work permits, their annexes and whether there are other works in the defined work area. The Work Permit Coordinator checks the comments of the relevant departments and additional measures to be taken on the work permit.

It examines whether the HSE procedures related to the work are handled while the Work Permit request is made, and coordinates with the relevant groups in case of deficiencies.

Authorized Gas Measurement Personnel: He is the expert who will test the presence of flammable gas or steam, toxic gas and oxygen in the environment, especially in "closed areas". This person may also be an authorized person trained in-house and authorized by the MAOG Project, or a third party.

Indoor Work: Restricted areas where entry and exit is limited and/or exit from the area is difficult, ventilation situation is unsuitable/insufficient, harmful or flammable smoke, steam or gas cannot be evacuated for adequate ventilation or sufficient oxygen cannot be provided, its design is not planned



for continuous work, Its depth Is 2 These are the places where the excavations are more than meters deep.

Preventive measure: It refers to all the measures planned and taken to eliminate or reduce the risks related to occupational health and safety at all stages of the work carried out in the workplace.

Risk: Means probability of loss, injury or other harmful result arising from hazard,

Risk Assessment: It refers to the works required to be performed in order to identify the internal and external hazards, analyse and grade the factors which turn such hazards into risks and the risks arising from such hazards, and determine control measures,

Radlography It is the work in which radioactive source is used.

SIMOPs: They are simultaneous operations.

Cold Working It is used for works that are not included in hot work and other types of work permits, but contain high risk potential.

Hot Work: Works that create open flames, sparks or other potential sources of ignition (welding, grinding, oxygen cutting, etc.).

Hazard: It refers to the potential of damaging or harming which exists at the workplace or caused by an outside factor and which may affect the employees or the workplace,

Hazardous Operation: It is used for works that are not included in hot work and other types of work permits, but contain high risk potential.

7. IMPLEMENTATION

7.1. Work Permit Categories

Work permit may be granted to works within the scope of one and/or more of the work permit categories listed below. Work Permit Categories;

- Bored Pile Studies
- Hot Work
- Indoor Work
- Excavation & Fill & Backfill Work
- Electrical Works
- Load lifting works
- Works Containing Radlography
- Testing and Commissioning
- Working Near the Line
- Shaft/Lift Gap Works
- Works at Night
- Scaffolding Installation-Dismantling Works
- Working at height
- Working with Hazardous Chemicals
- Works Requiring LOTO
- Other Activities (High Risk Non-routine Activities)



According to the risk analysis, the details of the form within the scope of the work permit system, re-verification, the maximum lifetime of the work permit and authorized top signatories are given in the table below;

	Hot works	Excavation works	Hazardous Works	Lifting Works	Radlography	Indoors
Revalidation (Reconfirmation)	In every shift change of the Authorities to Operate the Work Permit	During the shift change of the Authorities to Operate the Work Permit or 24 hours a day		In every shift change of the Authorities to Operate the Work Permit	In every shift change of the Authorities to Operate the Work Permit	In every shift change of the Authorities to Operate the Work Permit
Maximum Approval Validity Period	7 days/14 shifts (day/night)	7 days/14 shifts (day/night)		7 days/14 shifts (day/night)	7 days/14 shifts (day/night)	11 hours
Work permit Daily Verification Details	✓	✓		✓	✓	-
Authorized Signature Approving Work Permit	Work Area Manager					HSE and Authorized Issuer of Work Permit

7.1.1. Hazardous Work Permit

Work permit in this category is used for works that do not involve hot work but have a high risk potential. The works that will fall into this category are determined by the MAOG Project "Risk Management Studies". Below are some examples of this category:

- Any work that affects the integrity or availability of security or emergency systems (e.g. fire pumps, main fire pipe, closure systems, fire and gas detection)
- Pressure testing on plant and equipment
- In works involving dangerous chemicals (flammable, toxic or corrosive substances)
- In systems under pressure
- Facade Works
- Shaft Works
- Blasting Works
- Sandblasting Works (Non-routine work outside the workshop)
- Pressure tests (Hydraulic – Pneumatic)
- Works at Night

Pressure tests should be performed together with Mechanical / Electrical Insulation (LOTO Procedure / Instruction, etc.).



A hazardous work permit is not required in the following cases:

- Routine work done in workshops
- In non-destructive testing works without radioactive radiation (Penetrant test etc.)

7.1.2. Lift Operations

Critical, heavy, complex lifting operations are subject to a work permit and a lifting plan with detailed calculations and drawings. Lifting operation is considered as heavy / critical / complex lifting operation if one or more of the following criteria apply:

- If the weight of the cargo is more than 10 tons
- If the weight of the cargo is less than 10 tons but within the operating area in a live facility
- Equal to or greater than 75% of crane lifting capacity according to load chart or lifting configurations
- Multiple lifts (two or more cranes lifting)
- Lifting one after another
- Work near overhead lines
- Lifting fragile and/or sensitive loads
- Critical areas (eg dangerous goods - flammable, explosive or dangerous gases and liquids, etc.)
- In terms of the lifting area, works carried out in live facilities
- The load is complex in shape, size or center of gravity
- Load bearing capacity of the ground
- Lifts where the operator cannot see the load
- Distance of boom of crane due to existing facilities
- Use of more than 85% of the crane capacity requires an approval mechanism.
- Moving the crane when the load is suspended during the lifting operation. (Moving Crawler Cranes while the load is suspended)
- If there are other critical factors that may affect the lifting operation.

Heavy lifting operations are subject to a work permit. A "Lifting Plan" should be prepared in addition to the work permit.

7.1.3. Nondestructive Testing and Radiography

Non-destructive testing (NDT), handling and storage of radioactive sources are handled under the 'Hazardous Work' work permit.

A list of people to work with the NDT method and responsible person, the exact location and safe distance of the work area, a radioactive decay chart and other supplementary documents requested by the person approving the work permit should be provided.

7.1.4. Hot Work Permit

It is the work permit obtained for the works that may cause the formation of open flames due to or after the work done. Hot work permits are granted for all hot work performed outside of designated safe hot work areas, such as production areas where hot work is the primary work (for example, a



welding section on an assembly line) or a maintenance shop area set up for safe cutting and welding activities.

Hot work permits are issued only by trained and competent employees. Hot work permits must be granted for a certain period of time, not more than a single work shift. During work shift changes, it ensures that all work is clearly communicated from one shift to the next, and permits are reissued by addressing changes in MAOG Project conditions.

The authorized person who will carry out the work permit should have a good grasp of the scope of work in order to follow and regulate the measures in the approval and authorization processes. For this, before starting hot work, the work area should be carefully examined by the authorities who will carry out and carry out the work permit. The steps to follow are as follows:

- The work to be done is fully defined.
- The areas and equipment that will be affected by the work are explained.
- The persons who will carry out the work are determined.
- Potential risks associated with the work are identified (In some cases, a work hazard analysis-ITA can be done at the beginning of the work).
- The tools to be used during the work should be reviewed, and it should be ensured that the welding and cutting machines are in good condition.
- If available, automatic water fire extinguishing systems (sprinklers) should be checked.
- The presence and usability of other fire extinguishers should be checked.
- Before starting the work, the work area should be inspected for flammable, combustible and explosive materials and it should be checked that these materials are removed from the work area. In cases where it is not possible to lift, necessary isolation/insulation measures (fire blanket etc.) are taken between the flame and spark source and flammable explosive and combustible materials.
- Flammable liquids, dusts, lint and oily residues should be kept at least 11 meters away from the work area.
- Make sure that there are no flammable materials on the work floor.
- Openings in walls and floors must be sealed.
- If hot work is done near walls, partitions, ceilings or combustible structures, these areas should be protected with fire resistant blankets.
- In environments where there are liquids and gases with burning potential that cannot be completely eliminated, monitoring should be done with calibrated gas measuring devices. Where continuous gas measurement is not possible, a Low Explosive Level (LEL) measurement should be made at least every four hours and the values recorded.
- Before each hot work, it is ensured that sufficient number and type of fire extinguishers are located in an easily accessible area, in accordance with the materials and hazard sources around.

A fire watchman/observer must be present at all times during the hot work and for 30 minutes following the completion of the work to detect and extinguish any fire and must be named on the work permit. After this period, the fire area should be checked periodically at intervals of 30 minutes for 2 hours. The authorized person who will carry out the work permit, together with the authorized person who will carry out the work, determines the duty and periodical monitoring periods of the fire observer, taking into account the working area conditions and the fire formation potential.



7.1.5. Work Permit to Work Indoors

Areas that are not designed for continuous operation, have limited entrances and exits, areas where the amount of oxygen is insufficient or where there is a possibility of oxygen falling to a critical level during the work are considered closed areas. Some places that do not comply with the definition of a closed area can also be considered as a closed area in connection with the work of the workers at that time.

Entry to all closed areas is subject to a closed area work permit.

Oxygen deficiency, flammable, suffocating and/or toxic gases in the indoor area to be worked will be controlled by multiple gas measurement tests. It is ensured that the gas measurement tests are carried out by the personnel who have been trained on this subject, at the time intervals to be determined by the gas measurement specialist/authority before and during the study (eg, every 30 minutes). Ex-proof equipment is used in all closed areas with gas hazard and explosion risk. Indoor work permits can be granted for a maximum of one shift or 11 hours.

In indoor works, gas measurement results, indoor personnel entry and exit log, work hazard analysis (ITA), TRIC card application record, risk analysis and rescue plan must be available in the work area.

It is obligatory to have an indoor observer in indoor works and should be stated in the work permit form to be prepared by the MAOG Project. As long as the work continues in the closed area, the observer should not leave the work area in order to respond quickly in any possible accident and emergency. In cases where it is necessary to separate, the work in the closed area should be stopped.

Before the work, a special emergency escape plan for the relevant closed area should be created and checked during the permit process.

All personnel who will work indoors (including the indoor observer) must receive indoor working training. The confined space observer should also receive supervisor training.

7.1.6. Excavation and Backfill Works Work Permit

- All deep excavation works (1.2 meters and deeper) are subject to an excavation permit. In excavation areas less than 1.2 meters, hazards and risks specific to the work area are taken into account in accordance with the MAOG-RECU-GN-GNL-IS-GNL-PRG-0002-0 Hazard and Risk Management Procedure, by the MAOG Project Management and/or occupational hazard analysis. The use of excavation work permit is evaluated on the risk management requirement table. Excavation areas are not within the definition of closed area under normal conditions, but according to the content of the excavation; limited access, deep pits, atmospheric conditions, etc. closed area may be subject to work permit.

The excavation work permit should contain at least the following information:

- Underground lines (cable, pipe, etc.) for the excavation area for which work permit is requested are shown on the site layout plan.
- Soil structure and type are defined for the excavation for which work permit is requested.
- Measures are defined by assessing the risk of water accumulation.
- Gas test, power line test, underground line plans (electricity, pipelines, etc.), risk assessment, construction method, excavation checklist and other supplementary documents requested by the person who approved the excavation permit are provided.



- It is defined how the entrance, exit, access and emergency response will be.
- For specific excavation works (units, equipment foundations, areas near rivers, lakes) the excavation plan showing the plan, shoring and slope details should be attached to the work permit.

Backfilling is the filling of the excavation area with the appropriate material at the desired compaction rate at the end of excavation and canal works. Another important issue in backfill works is the protection of the underground lines placed in the canals and excavations and the recording of their locations.

Before starting the backfilling works, the backfilling work permit is filled and approval is obtained from the necessary departments (mechanical, electrical, map-measurement team, etc.).

After excavation, physical barriers and warning signs are placed around the openings to prevent people and animals from falling.

7.1.7. CONTROLLING HAZARDOUS ENERGY (LOTO):

Hazardous energy control (mechanical, electrical, hydraulic, etc.) studies are an integral part of the work permit procedure. Works to be carried out on machinery, equipment and processes are prepared by the MAOG Project and are carried out in accordance with the content of the "Dangerous Energy Control Procedure".

Control of hazardous energy For the control of hazardous energy sources associated with machinery, equipment and processes, the MAOG Project establishes its own minimum requirements. While executing tasks on standard machines, equipment and processes, it is aimed to establish a common and systematic approach to prevent accidents that may occur from unexpected energy production, initiation or discharge of dangerous energy.

Energy isolation applications and work permit process approvals are carried out only by authorized experts who have received training in accordance with the minimum content below. These are;

- Energy Isolation standard and scope
- The order of Implementation of LOTO
- Identification of hazardous energy sources
- "Hazardous Energy Control Procedures" specific to machines, equipment and processes
- LOTO permit requirements
- Removal of Lockout/Tagout devices and other project-specific program requirements that include appropriate and practical applications.

7.2. Work Permit Management

During the Implementation of the Work Permit Procedure in the MAOG Project, the "Example Process Flow Diagram" shared below can be followed. Within the scope of the MAOG Project, organizational structures are evaluated and the necessary organizational duties and responsibilities for the best management of the current process are defined.



Authorization Stage:

1. The Authorized Person to Operate the Work Permit (Supervisor) checks the drawings, certificates and other attachments required for the work permit and sends them to the Work Permit Coordinator. The Work Permit Coordinator performs the 2nd Check.
2. The Work Permit Coordinator and Area Officer schedule the work permit coordination meeting if deemed necessary to manage the interaction in simultaneous operations / activities (SIMOPs).
3. The Site Manager is responsible for checking the work permit approval and validity, and for checking and confirming the hazards and precautions indicated.
4. Simultaneous Operations / Activities (SIMOPs) are managed by the Site Chief within the relevant procedure and plan.

Implementation Phase

1. After the work permit is approved, the Authorized (Supervisor) to Operate the Work Permit confirms the actions related to the execution of the work by the Field Supervisor before the work starts.
2. The Official (Foreman) who will perform the work is responsible for performing the work in accordance with the instructions specified in the work permit (Original work permit form will always be in the work area.)
3. After the job is complete, the Foreman is responsible for clearing and securing the area.

Shutdown Phase

1. The Authorized Person to Operate the Work Permit closes the work permit by checking and accepting the area. Informs the Area Manager.
2. The Work Permit Coordinator archives the Work Permit form and updates the registration log.

In case of taking additional control measures together with safe working systems; Work permit system is applied together with other Holding documents (Procedure, Standards, etc.), MAOG Project procedures. This system; is a communication requirement between MAOG Project Management and those who will perform the work, subcontractors, suppliers, employees and all those involved in safe working systems.

Key features of the work permit system:

- Identifying the work
- Identifying hazards
- Making / having checks
- Coordinating the work
- Identification and checking of qualification requirements (requirements)



- Authorizing the work to be done
- Publication of Instructions to begin work to be done during the authorized time frame
- Re-broadcast for each shift, verification of work completion
- Safe release of equipment/plant
- Closing the documentation.

7.2.1. Providing and Following the Documentation Required for Work Permit Management

The work of preparing work permit documents is carried out only by personnel who have received work permit training. Authorities who will operate the work permit are responsible for filling in the relevant fields defined for them in the work permit forms. In the annex of the work permit, the following examples of complementary documents are included in order to carry out the activities safely. These are;

- Work Specific Hazard Analysis (ITA) or TRIC Card
- Risk Assessment or Construction Method Reference
- Scaffolding Tag Number
- Isolation Confirmation Certificate
- Gas Test Certificate
- Site Layout Plan and Underground Line Plans (Natural gas, electricity, etc.)
- Lifting Plan
- Rescue plan etc

**For the works that require energy isolation, the Hazardous Energy Control (LOTO) Procedure and related Instructions should be created in accordance with the scope of the MAOG Project. LOTO trainings are given to the relevant team and process managers by the MAOG Project Management.

ANNEX B – Work Permit Registration Table is used for tracking work permits and managing them throughout the MAOG Project.

7.2.1.1. Work Permit Form Management and Minimum Requirements

The work permit should be composed of at least the original form and 2 other copies. The following minimum elements should be included in the Work Permit form:

- Work permit number,
- Work permit preparation date and time,
- Clear and absolute position of the work to be done,
- Clear and absolute definition of the work to be done,
- Equipment to be used,
- Pre-arranged work permits that may interact with the issued work permit,
- Names of the authorities who will operate the work permit and perform the work, and the Area Responsible,
- Names and responsibilities of other personnel who may be assigned (fire extinguisher, companion, etc.),



- Identified Hazards,
- Precautions to be Taken,
- Supplementary Documents,
- All the precautions to be taken before the work starts and the precautions to be taken for other risks that may occur during the work and the precautions to be taken after the work,
- Measurements of the environment before starting work (eg, oxygen/flammable gas measurements) or toxicity measurements and the requirements to maintain these tests throughout the work,
- PPE to be used,
- Required electrical / mechanical / other Insulations,
- Authority and acceptance,
- Approval date and time of the work permit and the validity period of the work permit,
- Testing and Commissioning and
- Work completion / cancellation.

Distribution of Work Permit Forms:

- Original: After the original Work permit form is approved, it is delivered to the authorized person who will perform the work. It is delivered to the HSE office at the end of the work permit and the cancellation of the permit.
- First Copy: The first copy is given to the authorized person who will carry out the work.
- Second copy: The second copy is processed in the work permit registration / tracking system and remains in the HSE office. In the cancellation or expiry of the work permit, it is filed and stored together with the other copy and the original.

All closed or canceled work permits must be submitted to the HSE office.

7.2.2. Work Permit Coordination Meetings

Daily meetings for newly approved work permits; It is done with the participation of the work permit coordinator, field supervisors and the authorities who will operate the work permit. If necessary, contractors and subcontractors (PM, Field HSE Managers / Supervisors, etc.) are invited to the meeting for technical support.

In simultaneous operations (SIMOPs), field supervisors ensure that necessary precautions are taken among themselves, taking into account occupational safety standards, and in cases where a safe working environment cannot be provided, non-critical work permits are not granted. In the management of concurrent activities, MAOG Project Management and/or Production Officers manage(s) the final work permit approval process.

Purpose of work permit coordination meetings:

- General review of ongoing and planned work under the work permit procedure
- Analyzing and evaluating general permit processes
- Identification of the safety equipment to be used and, if necessary, the definition of the HSE Instruction



- Accepting new work permits
- Re-approving, extending and closing existing work permits.

The date, time and place of the work permit coordination meetings are determined by the Site Managers / Project Managers or their assignees (Field Officers, Work Permit Coordinator, etc.).

Notes Work permit requests are expected to be made at times deemed appropriate by the MAOG Project (eg at least 24 hours before etc.).

7.2.3. Audit of Work Permit System, Application Control

Work permit system audits should be planned at a frequency to monitor the effectiveness and Implementation of the MAOG Project on the system. Work permit system audits are carried out with work permit system checklists or other methods to be defined by the MAOG Project.

Regular Internal audits are carried out by the MAOG Project supervisors or the HSE unit In order to ensure that all critical malfunctions within the system and appropriate measures for the work have been/are being taken.

7.2.4. Cancellation of Work Permit

Cancellation of work permit; It occurs at the end of the work done or when the work is suspended due to a situation contrary to occupational safety. The authorized person who will operate the work permit, the authorized person who will perform the work and the field supervisor must fill in the cancellation parts of the work permit in the work permit form specified in the article 7.2.1.1 and forward the work permit to the work permit coordinator.

Works without TRIC Card application are not allowed to work.

7.2.5. Records

All closed work permits are kept until the end of the work / end of the project, unless a different process is defined in line with the requirements of the MAOG Project. Work permit records are kept for at least 10 years, especially in the annexes of serious accident reports.

7.3. Training & Competence

Work permit trainings are given to the employees listed below as a minimum, and those who are successful in the written exam are given a certificate of achievement.

- Site Managers
- Authorized Person to Operate the Work Permit
- Authorized Person to Perform the Work

Moreover :

- The name lists of the authorized persons who will operate the work permit are determined by the Project Management (Site Supervisor or Field Supervisors) and they are provided with the necessary training.
- The names of the officials (formemen, etc.) who will carry out the work are determined by the authorities who will operate the work permit and they are provided with the necessary training.



- Signature authorization is granted only after successful completion of the training.

Area Responsibilities; It is appointed by the MAOG Project Manager or the Production Manager and notified to all concerned with an announcement.

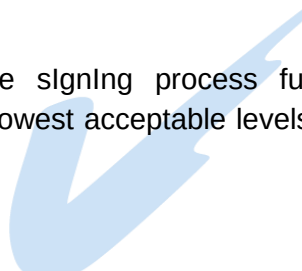
**The authorities defined above cannot be authorized to implement the work permit system without receiving work permit system training to undertake the responsibilities defined within the scope of the document.

7.4.1. Competency Criteria In Work Permit Management

Authorization, acceptance and approval processes, which are the key steps of the work permit system, are carried out by the following personnel trained in this field and authorized by the MAOG Project Management:

- Work Permit Coordinator
- Site Manager
- Authorized Person to Operate the Work Permit
- Authorized Person to Perform the Work.

It is ensured that those involved in the signing process fully understand these document requirements. The table below defines the lowest acceptable levels of signatory authority during the work permit process.



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Ronesans Project / Business Work Permit Process Authorlization Matrix			
Minimum Area Manager Level Information	Authorized Person to Operate the Work Permit - Minimum Position Definition	Authority to Perform the Work - Minimum Position Description	Work Permit's Validity
Project / Operation Manager or department chiefs to be authorized by them	Supervisor / Manufacturing Engineers / Technicians	Foreman	The validity of the permit is shown in the permit. Process information is decided together at the Work Leave Coordination meeting.

8. MONITORING, ASSURANCE AND VERIFICATION

Key success indicators (KPIs) of this procedure will be monitored, verified and evaluated by the relevant parties in accordance with their responsibilities set forth in the E&S Governance document, within the scope of the MAOG-RECU-GB-GNL-IS-PRG-0007-0 HSE Monitoring, Assurance and Verification Procedure.

9. APPENDICES

APPENDIX A – Work Permit Registration Table

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APPENDIX A – WORK PERMIT REGISTRATION TABLE

Work Permit Registration Book											
Permit No.	Permit type	Request Date	Authorized Person Carrying out the	Working Area	Job Definition	Approval Date	Method Statement Number	Relevant JH Number	Authorized Person for Managing the	Closing Date	Status
	HOT WORKING										
	DANGEROUS WORKING										
	CLOSED AREA										OPEN
	RADIOGRAPHY										CLOSED
	EXCAVATION										
	BACK FILLING										
	ELECTRIC (EKED etc.)										
	REMOVING										
	ROAD BLOCK										
	FACADE WORKS										
	SHAFT WORKS										
	WORKING WITH CHEMICALS										
	PRESSURE TESTS										
	SANDING										
	TESTING AND COMMISSIONING										

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