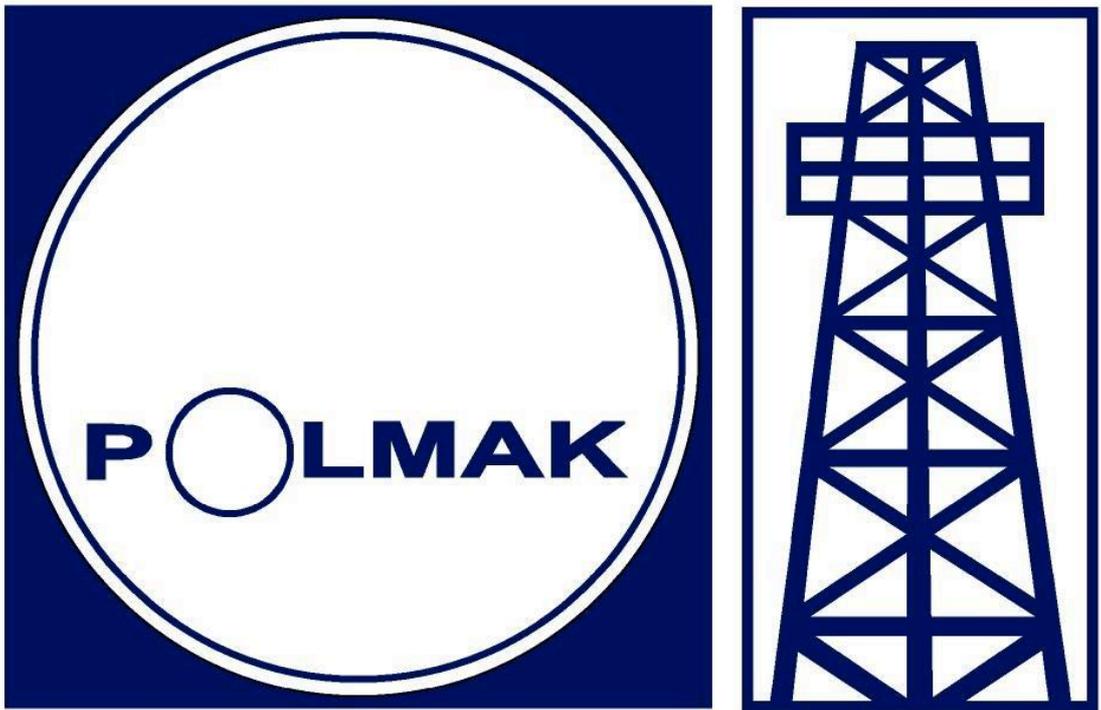


POLMAK SONDAJ SANAYII A.S.



**HEALTH, SAFETY, AND
ENVIRONMENTAL POLICY**

POLMAK GROUP'S HSE POLICY

Objective

The aim of this Manual is to assist our drilling and exploration company POLMAK SONDAJ SANAYII A.S. (Polmak Sondaj) to implement safety policies and practices that meet the highest standards of safety.

This Manual provides recommendations that Polmak Sondaj is advised to use as a guideline when developing its' own policies and standards for safety in design and operations. Other solutions giving the same level of protection can be adopted but should be documented as a specific variance. Existing practices that fall short of the specific recommendations in the Manual should be upgraded.

Polmak Sondaj may adopt more specific requirements on the basis of its' experience or legal requirements in the area of operations.

Scope of the Manual

This Manual provides a set of guidelines and advice to the management, safety advisors and professional staff in Polmak Sondaj.

SAFETY IN DRILLING

General

Safety standards in drilling can be achieved, when well-managed, and well-trained personnel operate well-designed equipment. Key factors in a safe operation are proper planning, interactions, and communications with all level of personnel. The personnel should realize that the implementation of this manual is for their own good and safety.

The manpower intensive nature of the drilling operation exposes the drilling crew to potentially hazardous situations and work procedures. Many operations are physically demanding and depend on the coordinated activity and timing of each member of the crew.

Safety Management

Drilling superintendents or Safety Inspectors are responsible for ensuring that all activities are performed safety and in a way that protects the personnel, environment and equipment.

For this purpose, drilling superintendents shall:

- Carry the responsibility for the department's safety performance.
- Develop a safety program. Specify safety performance objectives.
- Demonstrate commitment to the company and department safety policies by frequent discussions, review, consultation and actual visits to the drilling location.
- Select proper standards, specifications and safe working procedures and include those in the drilling operation manual.
- Follow up adherence to standards, specifications and procedures and review performance of department staff.

- Be sure that staff are provided with sufficient resources and training to achieve their safety rules.
- Provide opportunities for full involvement in the safety effort by all personnel within their relevant responsibility.
- Be sure that accidents or incidents causing harm or damage to personnel, the environment or equipment are properly investigated, unsafe acts are controlled by line supervisors, heads and managers as in order and every accident or incident to be reported and discussed, all precautions are to be taken to prevent any recurrence.
- Help in developing, testing and following up the company's dependence plans.

Contractor Safety Management

Contractor safety performance is considered an integral part of company safety policy and objectives. Therefore, measures must be taken to ensure that the contractor's safety policy is integrated with that of the company. Contract documents must include the necessary obligations relating to safety and safe operating practices.

Basic topics are as follows:

- Basic Policy guidelines on health, safety and environment
- Contractor safety assessment questionnaire
- Checklist for bid clarification meeting
- Recommended standard safety clause
- Guidelines for the preparation of additional safety clauses for drilling contracts
- Civil engineering site works
- Incident/accident report form for contractors

Safety Responsibilities on the Rig

a) COMPANY Drilling Supervisor (Toolpusher)

Company drilling supervisor is the first man in the rig site in the implementation and monitoring of the safety program. He is, apart from his task as manager of the overall drilling rig operation, responsible for ensuring that company policies and procedures are observed on or near the drilling location.

- The main responsibilities of drilling supervisors are that injury or harm to crew, or damage to equipment and materials, is prevented.
- Environmental standards are applied.
- Verify and test the contingency plan and ensure that the drilling contractor is aware of his involvement.

- Safe working practices are implemented for all operations and to see that these are according to company standards.
- His safety inspector is promptly advised of any deficiencies in safe working practices.
- All employees are properly trained in all aspects of their work and observe such safety requirements as the work situation warrants.
- All employees have a sufficient knowledge of all safe working practices related to their work and that they initiate action when there is a need for new, different or improved safety requirements.
- Existing safety rules and procedures are adhered and whenever employees ignore them, to take on the spot corrective action to ensure future compliance
- Safety meetings with all personnel employed are held once in every 2 months and that records are kept of all attendances and the subject matter discussed.
- Inspection of equipment of the drilling installation is made by each shift and that any unsafe conditions are corrected or reported immediately.
- All accidents causing injury to personnel or damage to equipment are reported immediately and they are investigated for the purpose of identifying causes and in order to prevent recurrence.
- Near miss accidents are similarly reported, hazards are identified and appropriate remedial action is taken.
- Employees wear protective clothing and use safety equipment as necessary.
- Duties are delegated to adequate inferiors.
- Non-routine work is performed under permit to authorized work system.
- All equipment are labeled and numbered and registered in company books. A supervisor checks the safety of working conditions, and ensures that accidents are reported correctly by the toolpusher.

The personnel mentioned below are part of the drilling contractor's personnel on the majority of drilling rigs. It is up to the Company drilling supervisor to ensure that these personnel are carrying out their part in the implementation of the safety program at least to the same standard as Company personnel.

b) Driller

The driller's main objective is to ensure that instructions are carried out correctly and therefore safely by the personnel.

The driller should at all times know which personnel are working in what area of the workplace. He should instruct and supervise all personnel of his crew to carry out their work, using safe working practices.

The driller holds monthly safety meetings. He gives to his crew information on safety and new safety procedures. On the other hand, the driller must inform senior personnel of safe working procedures suggested by his crew and other personnel and the introduction of any

consequent change in procedure should be implemented under the direction of the driller with guidance and approval from the company drilling supervisor and contractor's tool pusher if appropriate.

The driller should:

- Ensure that all crewmembers know exactly what the tasks of the crew are for carrying out a job.
- See that all instructions and procedures of the toolpushers concerning work methods and equipment are carried out.
- Take necessary steps to correct hazardous conditions and incorrect practices and control whether each protective device is in good condition and used when needed.
- Expect hazardous events and remove the cause of possible accidents and see that crewmembers complete each job in an orderly way and leave no hazardous conditions behind.
- Report promptly on any near miss accident and unsafe equipment that cannot be prevented by the drilling crew.
- Encourage all crewmembers to make safety suggestions and recognize the intelligence of crewmembers and their ability to contribute to accident prevention.
- Remind crewmembers frequently how accidents affect them personally.
- Investigate and report all accidents to the contractor's tool pusher, indicating all contributory factors to the accident.
- Teach all crewmembers to be trained in correct operating procedures and policies, with a particular effort to make new crewmembers know safety procedures and verify their job knowledge.
- Train the assistant driller in all safety procedures and policies.
- Periodically teach and test all crewmembers well control methods.
- Give in written form with complete instructions to the crew and, if the job is hazardous, the driller or his assistant should direct the job personally.
- Set an example for the crewmen by wearing a safety hat, safety boots and proper clothing, and observing procedures.
- An adequate task exchange program is prepared to ensure continuity during shift changes.
- Adapt the operations to the slowest man of the crew, and try to make him quicker.

If the driller or the man in charge of the operations is away from the rig floor, the assistant driller should ensure that instructions are carried out correctly and safely.

In order to carry out these objectives, the assistant should know which personnel are working where. He will instruct and supervise all personnel, in order for the driller to carry out his work on the rig floor safely.

The assistant driller should:

- Make sure that all floormen and derrickmen are working safely, and as a supervisor, ensure that each task is performed in the safest possible manner; comment on and report on any observed unsafe practices.
- Check that all floorman, derrickman and roustabouts have a good working knowledge of all equipment they use.
- When working on any equipment, including pumps, regardless of the nature or significance of the job, always isolate power first and then isolate fluid.
- Ensure vertical ladders to derrick are secure.
- Make sure all tools and equipment in the derrick are securely fastened.
- Check derrick winch wire and all pulleys for wear.
- Properly hang signs and seal all areas with ropes where gratings have to be removed.
- Ventilate mud tanks adequately at all times (if applicable).
- Keep the driller informed of mud losses or gains immediately. In the driller's absence he should be capable of acting according to good well control practice.
- Make sure that he has a proper understanding of the installation and operation of the degasser.
- Ensure that mud is not lost but remains in the active system to maintain accurate mud level. If any amount of mud is lost it should be replaced immediately with new mud.
- In the event of a well kick, stay close to the mud tank area for carrying out instructions, i.e. weighting up mud etc.
- Prevent oil-based mud from being spilled.
- Check all the pressure gauges on equipment regularly.
- Make sure that proper pressure equipment is used in connection with oxygen, nitrogen, acetylene etc. bottles that are sealed and racked securely.
- Clean and keep all working areas free from debris.
- Check equipment for proper operation before round-trips when it is not in use.
- Never leave an inexperienced man unsupervised on a task involving any hazard.
- Ensure all communication systems between mud tanks, drill floor and monkey board are working and audible.

c) Floorman

The floorman should:

- Beware of loose or moving objects. That is: swinging items, hanging rods, etc.
- Work as a team member and avoid being the cause of self-injury or injury to others.
- Keep fingers away from moving parts of power tongs and similar items.
- Never over lift with a winch, maximum capacity should be noted before use.
- Use only certified shackles and slings.
- Use up winches or taglines to prevent swinging about of collars, Kelly, casing etc.
- Take care when using the ramp, make sure it is safe to use, i.e.
- Sling all loads properly and replace worn slings with the new ones.
- Keep the drill floor clean and tidy at all times.
- Take care during wire line operations, as a snapped wire can be very dangerous, even fatal.
- Clean and replace if necessary dies on foot tongs, slips while drilling.
- Wear proper protective clothing when working with poisonous chemicals.
- Do not watch someone struggle; give a hand. Help each other be safe.
- Keep away from a moving rotary chuck.
- Keep all hand tools etc. away from wellbore to avoid dropping. Use hole cover at all times when not drilling.
- Keep alert and always be aware of the dangers around you.
- Report all near miss accidents to avoid recurrence.
- Never leave a job half done without a proper hand-over.

Accident Reporting

Accident reports are intended to ensure that the proper lessons are learned and steps taken to prevent recurrence. Such reports should be greatly encouraged as they provide early warning of hazardous work situations.

Safety Meetings

Safety meetings are held to:

- Stimulate an effective two-way communication between staff and personnel,

- Monitor and promote safety consciousness,
- Report unsafe conditions or practices.

Safety Meetings should have a structured form with the provision of safety themes and suitable support material. They should be action orientated, relevant and should encourage participation. Visitors from the office should be encouraged to attend and contribute to safety meetings. Company drilling supervisors should initiate and participate in these meetings according to the Company statement on safety policy.

Records should be kept of actions, which require the involvement of other departments. Any required corrective action, needs to be followed up by the department responsible.

a) Safety in Drilling Engineering

- Participate in design review and layout review for new drilling rigs.
- Perform operational risk analysis and hazard assessment on drilling and well test programs.
- Advise on governmental regulatory requirements as they affect drilling operations.

b) Environmental Conservation

- Environment should be protected by means of advising on and assisting in the development of standards and practices.
- Liaise with governmental agencies to ensure timely advice of regulatory requirements and compatibility of those requirements.

c) Safety Training

- Assist in the identification of safety training needs.
- Develop and conduct specialist safety training as required.
- Assist in on-the-job safety training programs.
- Provide safety awareness material.
- Assist when conducting safety meetings and monitor recommendations arising from those meetings.

Drills and Exercises

Three important objectives are addressed for effective drills:

- The first objective is to demonstrate the crew's ability to respond to a wide range of emergencies. Drills improve and develop crew confidence and identify those areas where further attention is needed.
- The second objective is to train the crew in both individual proficiency and teamwork necessary to handle anticipated rig-specific emergencies.
- The third objective is to test the equipment needed for maintenance and operations.

An effective drill program should cover:

- Frequency and duration of drills.
- A description of the drill, including list of participants.
- A means of disseminating the results of drills to supervisors.
- Topics identified during past drills, which need improvement.
- Realism in the drill. Every drill should be performed as if the emergency existed.
- Drill review evaluation of the drill's success and areas of improvement, including the time taken to complete the drill as a means of judging the crews performance.

POLICY ON HEALTH, SAFETY AND

ENVIRONMENTAL CONSERVATION

It is the policy of Polmak Sondaj to conduct its' drilling and workover activities in such a way that ensures proper attention is paid to the task of taking care of the health and safety of its' employees and other personnel, and to the conservation of the environment against pollution and spills. For the implementation of this policy, Polmak Sondaj complies with the relevant legislation requirements and also promotes measures for the protection of health, safety and environment for everybody who may be influenced directly or indirectly by these activities.

During the implementation of this policy, everybody in POLMAK Group of Companies should:

- Be aware of the importance of the continuous involvement of management and necessity of required skills and support.
- Try to do best in order to avoid harm to the health or injury of the crew and other employees and damage to someone else's property.
- Study on the principle of preventing all kinds of injuries, promoting all activities associated with the high standards of safety consciousness and discipline that this principle requires.
- Do their best to provide products, with practical advise on the application that will not cause injury to health or negatively impact the environment.
- Apply the best practicable means to preserve air, water, soil, plant and animal life from adverse affects of their operations and to minimize any nuisance that may arise.
- Use their best efforts to ensure that Contractors working on their behalf apply health, safety and environmental standards fully compatible with their own.
- Keep their employees, Contractors, and the relevant authorities appropriately informed of known or potential hazards that might affect them; and make them aware of what is being done to minimize the risks and to improve the quality and safety of the working environment.
- Establish and maintain contingency procedures to minimize harm from accidents that may nevertheless occur, and work with the relevant authorities and emergency services

in an appropriate manner in the development and application of these contingency procedures.

- Include an assessment of health, safety and environmental matters in the factors to be taken into consideration before entering into new ventures or activities or acquiring companies.
- Work with governments, local authorities, industry, academic, and professional bodies and employees or their representatives as appropriate and take the initiative, where necessary, to promote workable and improved codes of practice and timely and practical regulations which relate to the above matters.
- Conduct or support research directed towards the improvement of safety and health at work, ensuring the safety of their products, and the conservation of the environment.
- Include expected future requirements and anticipated developments in all the above areas in their long-term planning.