

**Terms of Reference
for
Tkibuli/Georgia mine technical and H&S inspections**

1. Issue of Purchase:

- a) **Technical Inspection** – Assess technological process compliance to the safety standards, including:
- Collect data/documentation and other relevant information on the accident cases from the two mines;
 - Analysis of existing technical documentation;
 - Review of geotechnical conditions and plans, review of support system;
 - Tunnel excavation and strengthening;
 - Study technology of cleaning work;
 - Study coal extracting technological schemes;
 - Study and analyze existing procedures of tunnel maintenance;
 - Review of rock burst prevention and monitoring and provide recommendations to prevent rock bursts;
 - Assess mines and tunnels conservation and liquidation compliance to the international standards;
 - Analyze and study projects of mining ventilation network, control air conditions in mine and used technology, also provide recommendation on actions to improve ventilation system and minimize methane ignition hazard;
 - Assess and analyze working machines and its equipment straighten;
 - Assess and analyze technical and exploitation straighten of the transport used for workers and load transportation;
 - Assess the compliance of the exploitation and installment of the mobile compress machines in the mines;
 - Assess the exploitation compliance of the electric safety, including electric machines, cables, electric systems in the mines;
 - Assess the compliance of the exploitation and conformity of the illumination and signalization systems in mines;
 - Assess and analyze projects and appropriate procedures related to the underground fire and fire extinguisher systems;
 - Assess the issues related to the spontaneous combustion signs and liquidation procedures;
 - Analyze blasting works and blasting techniques;
 - Analyze roadway stability and safety and provide comments on improvement, if necessary.
- b) **H&S Inspection - In order to ensure health and safe working conditions for mine workers:**
- Interview a representative cross-section of all mine personnel from top to bottom at all levels to ascertain reasons for accidents and incidents. From the findings, formulate and roll out a suitable H&S process;
 - Analysis of existing H&S documentation;
 - Analyze existing H&S conditions and if necessary plan further prevention mechanism;
 - Elaborate necessary measurements in order to avoid existing and possible hazards, occupational accidents and diseases;

- Elaborate necessary tool and procedures to provide information and trainings for employers;
- Assess existing collective and personal protective equipment compliance with the working specification and if necessary provide information regarding appropriate equipment.

2. **Qualification Requirements:**

- a) At least 20 years active and practical experience at underground work inspection field;
- b) To have an appropriate technical equipment, including measuring tools, to implement a technical and H&S inspections;
- c) After the inspection processes, provide individual reports regarding technical inspection and H&S inspection. Reports should include information regarding existing non-compliances, recommendations about what and how to improve non-compliances and expert conclusion regarding mine exploitation.
- d) Applicant organization must involve at least:
 - Mining engineer;
 - Electric engineer;
 - Mechanic regarding mining work;
 It's desirable that applicant organization involve:
 - Geologist / Geodesist.
- e) Applicant should provide invoice paper and information, mentioning:
 - All of the costs related to the procedures;
 - Number of engaged experts/specialists;
 - Duration period of the inspections.