OCCUPATIONAL SAFETY AND HEALTH IN ARTISANAL AND SMALL-SCALE MINING

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2013
MINING RESCUE AUTHORITY

- Is a professional agency to provide professional assistance in preventing from potential accidents in mining extraction and processing plants in Mongolia, to organize trainings, ensure professional control on safe operations, and to conduct rescue operations and to promptly eliminate the negative consequences in times of need.
AS OF NOW, IN MONGOLIA

- Coal 31,
- Gold 144,
- Copper molybdenum 2,
- Flurspur 44,
- Zinc 1,
- Tin 2,
- Tungsten 4. Total of over 230 mining are operating and artisanal miners are working in 100 sites in over 80 soums of 16 aimags.
SERVICES AND ACTIVITIES

- Do inspections for preventing accidents
- Timely elimination of associated consequences in case of occurrence of accidents
- Conduct tests for gas and dust sampling
- Do inspections for workplace conditions and prevention
- Do inspections and verification for steel barring and swing equipment
- Do inspections for certain tools and equipment
- Charge of oxygen and air balloon
- Training and awareness raising activities
In 2011 BECAME A MEMBER OF INTERNATIONAL RESCUE AGENCY

1981 – Became member of Rescue agencies of Economic cooperation association (of Socialist countries).
2011 –Became a member of International Rescue agencies .
Close cooperation with Mining rescue agencies of PRC and Russian Federation.
MINING RESUCE-SAM PROJECT

- Since 2006, cooperation with the SDC SAM project started, and registration of small-scale miners and involving them in trainings have started.

- Small-scale miners lack of knowledge on mining issues, greedy attitude and desire to earn much income within short period of time were the reasons of accidents and losing their lives.

- Based on the registration, mapping of their location and studying the reasons of accidents, various types of trainings have been organized and different handbooks and handouts were provided, and most importantly, tangible results have been achieved by making behavioral change in negative attitudes of small-scale miners.
OSH training objectives and importance

• Every person, working in mining has to prioritize the OSH and prevent from the occupational diseases, incidents and accidents.

• OSH objective is to make behavioral changes in working in safe and healthy environment and enabling the condition for maintaining the health and labor capacity of the people, who are engaged in Labor.

• By achieving these objective, Small-scale miners will:
  – Comply with the Law on Labor, related regulations, rules and bylaws
  – Organize properly OSH
  – Use technique and technology properly
  – Have knowledge and skills to ensure occupational safety and health
ASM LEGAL ENVIRONMENT

- Laws of Mongolia
  - 1992.01.13 Constitution
  - 2010.07.01 Amendments to the Law on Minerals
  - 2010.07.01 Amendments to the Law on Land
- Resolutions of the Government of Mongolia
  - Resolution 71 of 2008 “Sub-program to develop Small-scale mining”
  - Resolution 308 of 2010 “Temporary rule for regulating mining activities of small-scale miners”
- Order of Head of MRAM
  - Order 153 of 2011.04.21 on “Approving models for bylaws, guidance, form and agreements”
- Tri-partite National committee on OHS was established on 2012.10.31.
- Sub-committee on OSH, representing related organization by the National committee was established on 2013.05.07.
TRAININGS AND AWARENESS RAISING ON OHS

- Using handbooks, handouts, books, short films and documentaries prepared by SAM project of SDC and Training and information center of Mining rescue authority:
  - Trainings in rooms
  - On-the-job trainings
  - Mobile trainings are conducted according to programs and schedule.
ARTISANAL AND SMALL-SCALE MINERS

• Participated in trainings,
• Have basic knowledge on rescue activities,
• Certain knowledge about OSH,
• Gaining knowledge on legislation, rules and regulations

At the beginning, people run away from rescue agency rescuers, but now they welcome them and attend training and follow their guidance.
RESCUE TEAMS IN SMALL-SCALE MINING

Zaamar – Tuv aimag
Bornuur – Tuv aimag
Tsagaan tsakhirt – Bayankhongor aimag
Airag – Dornogobi aimag
Tunkhel – Selenge aimag
Mandal – Selenge aimag
Jargalant – Bayankhongor aimag
Bumbugur – Bayankhongor aimag
ACHIEVED RESULTS

- State policy and support,
- Measures, taken from the SAM Project of the SDC,
- Mining rescue agency trainings and awareness raising activities,
- As a result of activeness and initiations of small-scale miners, the following NGOs are effectively working and certain achievements reached in OSH field:
  - “Baidragin khogjil” NGO in Jargalant soum of Bayankhongor aimag
  - “Baatarvangin khishig” NGO in Mandal soum of Selenge province
  - “Enkh munkh ergekh kholboo” NGO in Zaamar soum of Tuv aimag
  - “Duush Mandal khairkhan kholboo” NGO in Madnal soum of Selenge aimag
  - “Small-scale miners’ association” NGO in Bornuur soum of Tuv aimag
TYPES OF ACCIDENTS

- Landslide
- Lack of air
- Emission and extraction of noxious gas
- No barring or pillars
- Disorderly digging due to failure to follow digging principles
- Wrong communication with equipment and technology
MAJOR FACTORS FOR ACCIDENTS

- Not holding permission for operations,
- Not trained in safety and safe working practices,
- Unorganized,
- No reviewing and consolidation system, in case of occurrence of any accidents,
- Failure to use personal safety tools and equipment,
- Failure to comply with legislation, rules and regulations,
- Other
ADVANTAGES

Making conclusion on the abovementioned issues, the rule is complied for gold, flurspur and coal irrespectively.

- Rescue team were organized, trained and prepared,
- Rescue team members learned how to rescue themselves and gained experience in providing assistance at their service provision points,
- Comply with the laws and regulations on Mining sector production and fully consult with state policy thereon,
- Partnerships, corporative and teams set objectives for their own good.
- A consolidated common rule for Small-scale mining safety operations.
- Work under an agreement.
- Started to perform rehabilitation.
IN FUTURE:

- Comply and implement ASM consolidated management, related legislations and regulations,
- Full implementation of occupational safety standards and requirements,
- Each person take control on his/her workplace and completely refuse from dangerous workplaces,
- Each person shall be fully provided with safety, control and measuring tools and equipment,
- Risk-free production process, sub-soil friendly attitude and protection of environment and mother-nature,
- ASM system establishment,
- Work in risk-free ASM and proper management of OSH,
- Prioritize the occupational safety and health issues.
COOPERATION

• A number of steps and measures from the Government of Mongolia to support the ASM and to encourage its formalization, enable the opportunity to bring the Artisanal miners into formalization, to involve them in training and awareness raising activities, forming partnerships and join the AS miners. Tangible results achieved in improvement in ASM organization and responsibility and increasing their knowledge and skills.

• According to cooperation agreement between the SDC SAM Project and Mining Rescue agency, (MRA) MRA is taking leading role in ASM safety and health issues and gaining the trust of AS miners and involved over 10 000 AS miners in safety and rescue trainings.

• Further, we will focus on the quality of the trainings on prevention of mining accidents and risks.
THANK YOU FOR YOUR ATTENTION.