

Mining Gold Responsibly...from exploration to reclamation

exploration



Duration

- 3-5 years

Objective

- Prospecting to discover and confirm mineral reserves

Process

- Conduct geological survey/ geochemical sampling to locate and delineate ore deposits
- Conduct core drilling to determine ore grade and geologic characteristics
- Partner with junior gold companies/exploration partners
- Begin collection of environmental and community baseline information

Responsibilities

- Apply Kinross EHS Management System and standards
- Ensure partners and contractors adhere to Kinross EHS standards
- Initiate public consultation and dialogue
- Initiate preliminary assessment of key community, environmental and human rights issues that might impact development

development



Duration

- 3-5 years

Objective

- Design and receive approval for mine construction and operation

Process

- Complete engineering design of optimal mining method (open-pit or underground) and mineral recovery process
- Complete project feasibility study
- Obtain necessary construction and operating approvals
- Obtain land and water rights

Responsibilities

- Develop EHS procedures for construction and operation
- Expand public consultation and dialogue
- Complete collection of environmental and community baseline information
- Complete assessment of key community, environmental and human rights issues and incorporate management strategies as needed into project design and plan
- Assess availability of local talent pool and services
- Include closure considerations in project design

construction



Duration

- 2-3 years

Objective

- Construct mining facilities in accordance with approvals, requirements and Kinross standards

Process

- Establish skilled construction team to execute development plan
- Construct mine and processing facilities and associated infrastructure, such as roads, power and water lines, and employee facilities

Responsibilities

- Train employees and contractors in safety, health and environmental practices, procedures and performance standards
- Maintain high EHS performance standards
- Continue community consultation and dialogue
- Identify and implement local employment and purchasing opportunities
- Comply with all legal requirements, approvals and Kinross standards
- Develop plan for transition from construction to operation

mining



processing



closure/reclamation



Duration

- 10-35 years (the average life of a gold mine)

Objective

- Operate a safe, environmentally sound, socially responsible, profitable, and efficient mining and processing operation

Process

- Drill and blast to access the ore
- Transport ore and country rock for processing or storage
- Concurrently reclaim disturbed land that is no longer needed for operations

Process

- Mill by crushing and grinding ore and separating metals from rock through flotation or gravity concentration, followed by tank leaching with diluted cyanide solution (milling)
or
Place crushed ore on lined leach pad and dissolve gold with diluted cyanide solution (heap leach)
- Chemically recover gold from solution through electrowinning or precipitation
- Smelt precipitate and produce gold doré bars for shipping to a refinery
- Impound residue from ore processing in tailings area

Responsibilities

- Maintain best-in-class EHS performance by setting clear objectives, maintaining operating procedures, training, monitoring performance and continuous improvement
- Provide rewarding career opportunities and competitive compensation and benefits to employees
- Routinely assess risks and implement risk management measures
- Ensure compliance with International Cyanide Management Code
- Continuously improve energy efficiency and waste minimization
- Support capacity building and social investment in the community
- Regularly update closure plans

Duration

- 5-20 years (typical time span)

Objective

- Close and reclaim mine facilities to achieve approved post-mining land use and maintain environmental quality
- Satisfactory completion and termination of permit obligations

Process

- Execute the approved closure and reclamation plan
- Conduct environmental monitoring to ensure reclamation success and environmental protection

Responsibilities

- Maintain best-in-class safety, health and environmental performance
- Assist workforce in transition to new employment opportunities
- Engage with community and other stakeholders regarding closure plans and activities
- Assist community in closure transition