NORMANDY
MINING LIMITED

OVACIK GOLD MINE

Now & Beyond

Striving to achieve responsible mining

2000

about the operation

Ovacık gold mine is located near the west coast of Turkey in the Aegean region, 120km north of the city of Izmir. The mine is immediately adjacent to Ovacık village, with a population of 350 people, and close to Çamköy and Narlıca villages (total population 1,000). Bergama (population 50,000) is located some 9km east from the mine and 14 other villages with a combined population of 6,000 are located within a 10km radius of the mine. The surrounding villagers are overwhelmingly dependent on small-scale agriculture - particularly tobacco, cotton and olives.

Construction of Ovacık mine was completed in 1997. However, despite obtaining signatures of more than 700 government officials, approval of the project was withdrawn in November 1998, based on concerns associated with the use of cyanide. As of February 2001, the project still awaits final approval.

The mine, with its combination of cyanide destruction and lined tailings containment, is the first of its kind in the world, exceeding national and international environmental standards, according to an independent audit.

foreword

We would like to welcome you to this first Public Report for Ovacık Gold Mine. All of us at Normandy Madencilik A.S. and Normandy are very proud of our operation and are keen to share this report with you.

It details the technical aspects of our operation and highlights our key responsibilities and commitments in the areas of Health and Safety, Community and Environment. These areas are the public "face" of mining and we must effectively manage them as core business activities in order to be accepted within our community.

Ovacık project has had a chequered history in terms of acceptance by the community and the permitting process. The environmental precautions adopted at Ovacık are of world class standards. We are committed to ensuring the realisation of the mine and commencement of operations.

Although of modest size when in production with annual output of some 110,000 ozs gold and 125,000 ozs silver, Ovacık stands at the vanguard of the development of a future vibrant gold mining industry for Turkey. As a country, we import some 180 tonnes (+5.5M ozs) of gold annually - Ovacık should untap this wealth for the benefit of Turkey.

Our greatest challenge during our first year of operation will be to ensure that we deliver on all of our commitments - social, environmental and financial.

Sabri Karahan
Managing Director
Normandy Madencilik A.Ş.

Ismet Sivrioğlu
General Manager
Ovacık Gold Mine

ABOUT THE OPERATION	
In full production:	
Ore milled (kt)	300
Gold produced (oz)	110,000
Silver produced (oz)	125,000
Forecast closure (yr)	2009

EXPENDITURE/BUDGET	Exp. '00 / Bud. '01
Environment (US$)	400,000
Health & Safety (US$)	250,000
Community (US$)	400,000

FRONT: EMPLOYEES OF OVACIK MINE PICTURED IN FRONT OF THE PLANT.

about this report

Ovacık GoldMine: *Now & Beyond 2000* is one of a series of site-based reports published by Normandy Mining Limited. The report on Ovacık Gold Mine highlights the challenges of this operation and the commitments we have made to ensure the safety of our employees and the community, and the protection of the environment in which we will operate. In subsequent years, we will report progress made by the operation in fulfilling its commitments.

The report was prepared by employees of Normandy and its subsidiary Normandy Madencilik A.Ş. for our colleagues, stakeholders, local communities and the public.

risk assessment

The Turkish Government – led by the Office of the Prime Ministry – commissioned TÜBİTAK, Turkey's highest scientific and technological research organisation, to undertake a detailed study of the Ovacık facility, based on the perceived risks identified in the Higher Administrative Court when the mine's approvals were withdrawn in 1998. The report, completed in October 1999, clearly stated that the risks cited in the Higher Administrative Court ruling had been totally eliminated or reduced far below acceptable maximum limits; that the plant reflected "most appropriate" technology; and that the mine would economically benefit the country[1].

Commissioning tests verified the technological and environmental safety of the plant and its operational efficiency, with particular emphasis on the safety and reliability of chemical destruction using the INCO process (a propriety cyanide destruction process) and heavy metals precipitation circuit. The tests clearly indicated Ovacık mine met all rules and regulations of the Turkish government and has high standards of safety, reliability and environmental and ecological protection.

Further, Ovacık mine conforms with, and in many cases exceeds, recommendations made by the *International Task Force for Assessing the Baia Mare Accident*[2] in its report on a major cyanide spill in Romania in 2000.

The UN-led task force was established to identify and recommend improvements to legislation covering European mining waste.

[1] An Assessment Report by TÜBITAK-YDABCAG Commission on Eurogold Ovacik Gold Mine', TÜBITAK, Istanbul October 1999. Translated from the Turkish report.

[2] Report of the International Task Force Assessing the Baia Mare Incident, by UNEP Baia Mare Taskforce, established by European Environment Commissioner Wallstrom, Brussels, December 2000.

MINE EMPLOYEE, MESUT ÇAVUSOGLU, FROM OVACIK VILLAGE IN THE PLANT.

Health & Safety

Ovacık gold mine places highest priority on protecting the health and safety of its people and nearby communities.

The health and safety management system at Ovacık mine is based on the systems already in place at Normandy's other operations in Australia and internationally. However, the system has been specially tailored to Ovacık mine, and addresses the social and cultural issues faced by a site which draws its workforce from communities with little or no mining experience.

An extensive induction program is, and will continued to be, delivered to all new employees. It focuses on site-based training and uses specialist trainers from other Normandy sites within Australasia to transfer their operating and health and safety skills and experience to new employees.

Fortnightly "toolbox" meetings, attended by management and staff, focus on a particular theme or issue, such as equipment isolation procedures, safe chemical handling and safe driving, and are aimed at increasing awareness amongst all on-site personnel.

MEDICAL SERVICES WILL BE PROVIDED TO STAFF AND THEIR FAMILIES.

Similarly, the site will investigate the benefits of implementing PASS®. The Positive Attitude Safety System (PASS®) is a safety improvement initiative used effectively at Normandy operations and in industries all around the world. It empowers all employees to take responsibility for their own safety and the safety of their working environment. It encourages employees to be constantly on the look out for potential hazards and ways in which to eliminate those hazards, therefore improving safety.

Site medical support includes a doctor, nurse and ambulance. All employees will be encouraged to undertake first aid training. A clinic has been constructed and emergency response plans developed.

performance commitment

LEACH ABSORPTION TANKS AT OVACIK MINE.

Sodium Cyanide

Health and safety issues relating to sodium cyanide use have been thoroughly examined.

Despite its known toxic characteristics, and since its commercial introduction to the industry in 1889, the gold mining industry in South Africa, North America and Australasia has achieved a remarkably good safety record with regard to cyanide-related fatalities[3].

US Public Health Administration has determined the amount of free cyanide which can be consumed daily and continuously without any negative health impact is 0.05mg/kg of body weight. As an indication of the toxicity of cyanide in the Ovacık mine tailings, a person weighing 70kg could drink 3.5lt of Ovacık tailings water per day throughout his/her life without any negative effects. Similarly, the Ovacık tailings water contains at least 50 times less cyanide than that considered safe for birds[4]. Furthermore, there is no discharge of waste water to the environment and no possibility of unauthorised access to the tailings storage facility.

COMMITMENT

Waste water from the tailings storage facility, with a cyanide concentration of <1mg/l, does not pose any danger to humans.

Zero discharge means no threat to the environment.

THE OVACIK MINE OVERLOOKING NEARBY VALLEY.

HCN Emissions

Hydrogen cyanide (HCN) emissions from Ovacık mine will not impact on human health. Three HCN monitoring devices provide detection of HCN levels in and around the plant and tailings facility.

During a test run in 1998, HCN measurements were taken from around the leaching, adsorption, and chemical destruction tanks, tailings storage facility and decant tower. The concentrations recorded were below the detection level of HCN in the air. A risk model analysis has shown that even under the worst wind conditions, continuous HCN emissions from the leaching and adsorption tanks could potentially reach a maximum 0.0016mg/m^3 at the mine boundary. The limit for continuous exposure to humans is 0.0042mg/m^3. The lethal limit for humans is above approximately 250mg/m^3.[5]

The HCN control philosophy is to maintain a pH of 10.5. The pH is continuously measured. If a variance in pH levels is detected, the system automatically adjusts pH by adding lime.

COMMITMENT

HCN emissions will always be less than 10ppm in the plant, 5ppm at the tailings facility and 1ppm at the health band, in accordance with the Protocol established with and approved by the Ministry of Environment. Daily measurements will be reported to the Monitoring Inspection Commission.

Health Checks

The mine is committed to providing periodic health checks for workers, as determined by the Ministry of Health. All associated costs will be paid by the mine. At mine closure, health checks will be performed and the results compared with earlier assessments.

COMMITMENT

Periodic health checks during operation and at closure will be conducted in accordance with the Ministry of Environment Protocol.

[3] Logsdon, MJ, Hegelstein, AK and Mudder, T, 1999 The Management of Cyanide in Gold Extraction, International Council on Metals and the Environment, Canada.

[4] Hegelstein, AK and Mudder, T, 1997 Strategies and standards for control of bird mortality at mining operations, Proceedings of the Short Course on Management of Cyanide in Mining, ACMRR, Australia.

[5] Logsdon, MJ, Hegelstein, AK and Mudder, T, 1999 The Management of Cyanide in Gold Extraction, International Council on Metals and the Environment, Canada.

OVACIK VILLAGERS, INCLUDING THE MUHTAR, MR HALIL GEZER, DURING A VISIT TO THE MINE.

Community

The lesson we have learned from our project is that regardless of our advanced technology and excellent safety management, it is how well we communicate with the local community that really counts ...

Ovacık Gold Mine will, no doubt, have a significant impact on the economic and social fabric of the Bergama area. Whether this will be a positive or negative impact, has been the question of vast debate since construction commenced in 1997. And it's no secret the project has had its setbacks since obtaining all operating permits between 1989-1996 and their subsequent withdrawal in 1998. Although the original project design met all international standards, we made some mistakes in our limited knowledge of the sensitivities and customs of our Turkish hosts. But our ears and eyes were open and we responded quickly to the concerns of local communities. In addition, we took on a new team of experienced and senior Turkish mining professsional.

Our commitment to Turkey over the past seven years has been simple: obey the rule of law, hence our patience in waiting for 120 permits to operate; respect and involve local residents, hence our willingness to make changes to the project to eliminate "potential risk factors" and alleviate local concerns; and to act with the highest integrity in all our dealings. We are proud of what we have achieved in Turkey, and we look forward to a successful, mutually-beneficial and long-lasting partnership with the people of Bergama and Turkey.

Our project has changed for the better, but the many benefits of our operation remain:

- The Ovacık project will inject hundreds of millions of dollars to the regional and national economy over the life of the mine;
- Direct employment will be provided for over 230 people. Indirect employment will total more than 1,000. Priority will be given to local applicants (in the period September to December 2000, more than 3,500 job applications were received from local residents);
- Tourism has and will increase, infrastructure has improved, regional development will be encouraged and foreign investment will be boosted.

"Bergama needs this mine. The majority of people want and expect this mine to be opened as soon as possible.[6]"

We've worked hard to make this project satisfactory to the people of Turkey and it seems support for the project is widespread. According to *Yeni Asir* newspaper, more than 66 percent of residents of Bergama and district are supportive of the mine. The words of one Bergama resident, published in the Izmir daily, *Yeni Asir*, on 18 November 2000, echo these sentiments. He said, "Bergama needs this mine. The majority of people want and expect this mine to be opened as soon as possible."[6]

[6]*Translated quotes from Izmir newspaper,* Yeni Asir, *18 November 2000, P. 11*

performance commitment

PRIORITY WILL BE GIVEN TO LOCAL WORKERS.

Employment at Ovacık

During initial construction of the mine, 340 local people were employed. The tailings dam, ore processing plant, administration buildings, workshop and village housing were constructed by local and regional contractors.

During operation, employment opportunities for at least 240 will be provided. At least 80 percent of these jobs will be awarded locally. Already, the majority of the 80 people who work at the mine are from the local area. It is estimated that flow-on effects are likely to create at least four additional jobs for every one job employed in mining.[7]

COMMITMENT

Priority for the recruitment of workers at Ovacık mine will be given to residents of those villages in close proximity to the mine (Ovacik, Çamköy and Narlıca).

To provide an effective training program for all employees.

SHOPPER BROWSES A JEWELLERY SHOP IN BERGAMA.

Benefits to the Economy

The mine is expected to generate approximately US$300M during its eight year life at a capital investment of US$40 million. Ore reserve details are located at Normandy's website.

Operating expenses, of which 70 percent will be spent in Turkey, are expected to reach US$20M per year.

The company is at par with local companies and is subjected to full taxation according to Turkish tax law.

The total estimated benefit of the mine, including added value, is US$415M to the local economy and US$675M to the national economy. Significantly, Ovacık mine could pave the way for a future vibrant/dynamic gold mining industry in Turkey to complement its leading position as a gold user/importer. This in turn will deliver the potential for considerable employment and economic benefits.

Partnering of projects such as Zeus' Rose will be supported to provide long term sustainability to the local economy, even after mine closure.

COMMITMENT

To give first preference for the purchase of goods and services to local businesses.

To develop business partnerships with the community that will provide sustainability to the local economy.

HOUSING CONSTRUCTED FOR OVACIK VILLAGERS.

Tourism, Infrastructure and Services

It is likely Ovacık mine will become a tourist attraction, drawing visitors to the Bergama area.

Presently, up to 200 tourists visit the mine monthly. A tourist viewing platform will be constructed overlooking the open pit.

Fifty new houses and associated infrastructure were constructed for Ovacık villagers residing near the south edge of the mine. Roads, bridges, water supply, sewerage and telecommunications have improved as a requirement of the project.

A dispensary/polyclinic was constructed to maintain the health and wellbeing of the workers. Preventative medicine, treatment and care will be provided to workers and non-workers.

Employees will be trained in-service to attain the necessary qualifications required by the mine. Contributions will continue to be made to local schools for renovations, provision of training materials and higher education scholarships.

COMMITMENT

Support and partner the development of local commercial initiatives based on the mine's operation.

To effectively implement the mine's Community Relations Management Plan.

[7] *Alkin, Prof. D E, 1993 Economic Impacts of the Ovacik Gold Mine Project, University of Istanbul.*

THE OVACIK PLANT AND TAILINGS STORAGE FACILITY.

Environment

The major concern voiced against Ovacık mine relates to the use of sodium cyanide in the gold extraction process.

Sodium cyanide has been used in the gold mining industry for more than 100 years. However, the gold mining industry consumes less than 18 percent of the world's total cyanide production. Its main uses are in the electroplating and metal processing industries, ship fumigation and the manufacture of nylon and plastics, textiles, pharmaceuticals and paint to name just a few. Approximately 2,500 tonnes of sodium cyanide are used in Turkey each year, including 1,200 tonnes of sodium cyanide used annual at the Kütahya Gümüsköy silver mine, operated by the Turkish Government since 1987. Ovacık mine will use 240 tonnes of sodium cyanide per year.

With its chemical destruction and metals stabilisation units, impervious tailings facility, zero waste discharge into the environment and underground water monitoring bore holes, Ovacık mine constitutes a prime example of environmentally sound mining technology.

According to the TÜBİTAK report, "The use of cyanide does not constitute an environmental problem in the plant" at Ovacık. In its conclusion, the report stated, "the risks claimed to threaten human and environmental health in the Higher Administrative Court ruling" (which resulted in the withdrawal of approval for the mine in 1998) "have either been totally eliminated or reduced far below the acceptable maximum limits". It stated the characteristics of the plant reflected "most appropriate or better technology" presently applied to gold mining throughout the world and finally, that the plant should become operational "for the benefit of our country in the framework of sustainable development".

> "The use of cyanide does not constitute an environmental problem in the plant.[8]"

The meticulous design of the Ovacık mine is complemented by an extensive environmental management system. The purpose of the system is to continuously develop and improve environmental performance. The following pages outline the various environmental aspects of the Ovacık mine and the measures in place to protect and preserve the environment.

[8] *An Assessment Report by TÜBITAK-YDABCAG Commission on Eurogold Ovacik Gold Mine', TÜBITAK, Istanbul October 1999. Translated from the Turkish report.*

performance commitment

Transportation of Sodium Cyanide

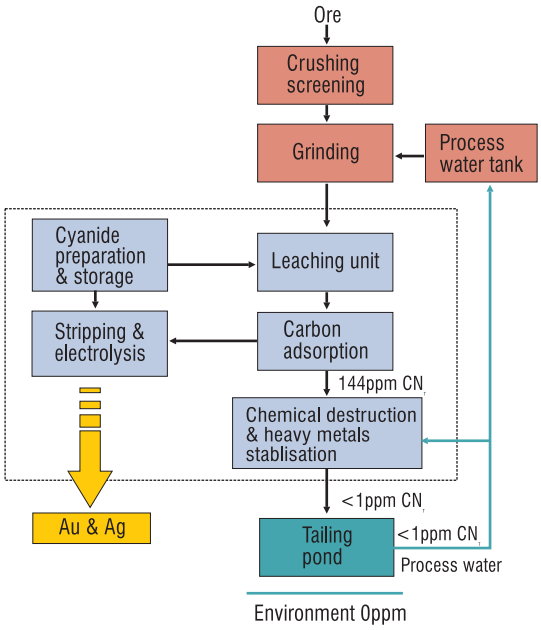
Sodium cyanide will be transported to the site in specially designed containers that meet the highest safety standards. It will be transported in small amounts as required, negating the need to store large amounts on site.

Sodium cyanide will be stored within a secure, enclosed area on-site. The storage area is fire-proof and will be locked at all times.

Storage tanks, reansfer areas, leaching and cyanide solution tanks have been installed on sloped and bunded concrete.

COMMITMENT

Adherence to the requirements of “Regulations for Testing Harmful Chemicals and Products” and “European Agreement on the International Carriage of Dangerous Goods by Road”.



Processing

The CIP process for extracting gold from ore at Ovacık uses sodium cyanide as a principal reagent. Cyanidation is used at more than 80 percent of operating gold mines worldwide.[9]

Ovacık mine combines the world’s most technologically advanced pollution-control systems including an INCO cyanide destruction unit which destroys cyanide before tailings are released into a fully-lined, impermeable dam, designed to withstand a major seismic event (0.6g*), or one-in-3,000-year earthquake. This combination of cyanide destruction and lined containment of tailings is the first of its kind in the world.[10]

COMMITMENT

To operate in accordance with Management Plans and operating philosophy that Health, Safety and Environmental issues will take precedence over production imperatives.

** g - Newton’s gravitational acceleration constant*

THE INCO CIRCUIT WILL DESTROY FREE AND WEAK ACID DISSOCIABLE CYANIDE.

Chemical Destruction Circuit

Ovacık mine employs a three stage chemical destruction circuit to destroy cyanide and stabilise heavy metals.

In the first stage (INCO circuit), SO_2 as sodium metabisulphite is added to chemically destroy free and weak acid dissociable cyanide. During this process, the chemical is converted into inert carbon and nitrogen compounds. In the heavy metals precipitation circuit, ferric sulphate is added to precipitate and stabilise active heavy metals. The third stage only operates as required and enables destruction of cyanide in returned water from the pond, using hypochlorite.

Tailings at Ovacık will contain less than 150ppm cyanide prior to treatment and less than 1ppm after treatment. During tests carried out at the plant, cyanide concentration after treatment averaged 0.2ppm - a level well below acceptable concentrations for the protection of human health and the environment, and which carries negligible risks.[11]

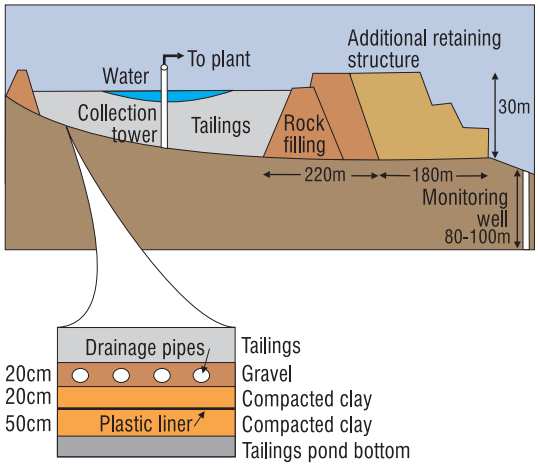
COMMITMENT

Cyanide levels from the process plant will not exceed the Ministry of Environment Protocol limit of 1ppm cyanide.

If this limit is exceeded, the plant will be stopped.

[9] Logsdon, MJ, Hegelstein, AK and Mudder, T, 1999 The Management of Cyanide in Gold Extraction, International Council on Metals and the Environment, Canada.
[10] Case Study on Tailings Management, International Councils on Metals and the Environment (ICME) and United National Environment Programme (UNEP), November 1998.
[11] “Negligible risks”, An Assessment Report by TÜBITAK-YDABÇAG Commission on Eurogold Ovacik Gold Mine, October 1999.

performance commitment



Tailings Storage Facility

The treated tailings will be stored in an impermeable, lined tailings facility.

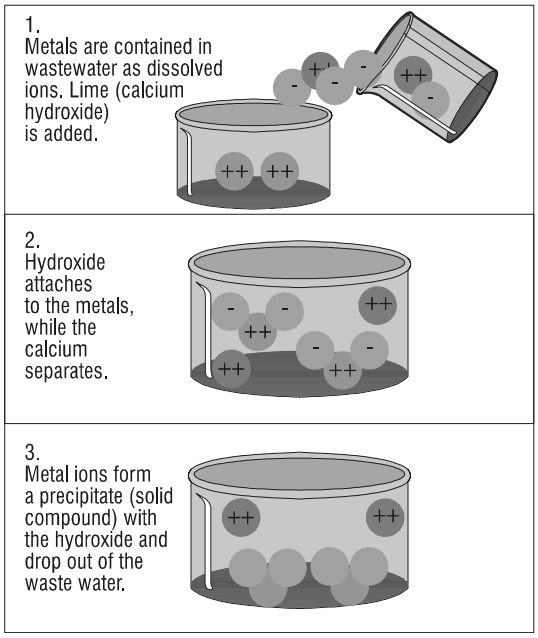
The facility comprises two compacted rockfill embankments to provide storage for 1.6 million m^3 of tailings. It is designed to accommodate a 0.6g earthquake and is lined with a layer of compacted clay overlain with high-density polyethylene and another layer of compacted clay. The construction prevents seepage and includes a decant water collection system to recirculate excess water to the plant, as well as surface water diversion to prevent erosion and under-drains to prevent liner damage and water build-up.

The facility was constructed with the added safety precaution of high embankments capable of holding four times the expected highest rainfall. The freeboard capacity will ensure the embankment cannot be breached, even during severe weather conditions.

COMMITMENT

Tailings management will be in accordance with the Tailings Dam Management Plan.

The tailings storage facility is designed and constructed to Turkish Earthquake Code and under the control and approval by the State Hydraulic Works (DSI).



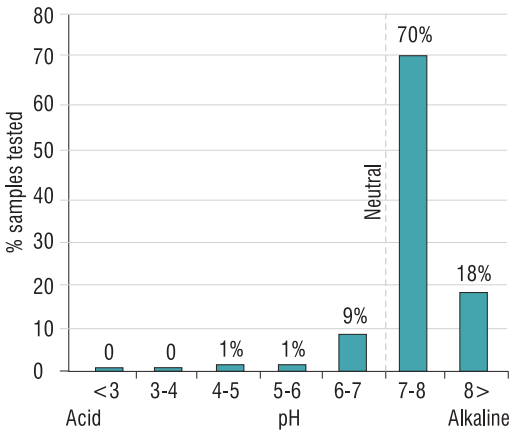
Heavy Metals

Compared with similar deposits, the ore processed at Ovacık mine containes only minor concentrations of heavy metals and metal sulphides, with most levels below Ministry of Environment limits, even before metal stabilisation. The ore also has a low sulphur content (<0.1%). These characteristics, combined with pH control, hydroxide formation and the heavy metal precipitation circuit, reduce the levels and further minimise the risk of solubility and/or leakage. This stabilisation process occurs before tailings are transferred to the storage facility.

Tests indicated heavy metal concentration in the liquid phase remained low and below Ministry of Environment limits. Other jurisdictions such as US, Canada and the World Bank do not impose limits for heavy metal discharges into tailings ponds. Limits are only set where there will be a discharge into the environment. Ovacık is a zero release site.

COMMITMENT

Heavy metals analysis will be conducted daily and reported to the Inspection Monitoring Committee.



Acid Mine Drainage

Tests on 99 samples of ore and waste rock confirmed no acid generation potential of waste rock at Ovacık mine. The limited amount of waste rock produced from Ovacik mine will be used as filling for the up- and downstream embankments of the tailings facility.

COMMITMENT

Routine tests will be undertaken to ensure there is no change in the characteristics of the ore and waste.

performance commitment

THE OVACIK TAILINGS STORAGE FACILITY WITH PLANT IN BACKGROUND.

Protection of Groundwater

The possibility of seepage of cyanide or heavy metals into underground water is extremely low.

Chemical decomposition and metal stabilisation in the mill, combined with permeability of the tailings storage facility almost three and a half times lower than the generally accepted threshold, make the potential impact of any seepage very low and the risk of seepage remote.

The quality of groundwater will be monitored at six boreholes located near the tailings facility. The boreholes are equipped to pump water back to the tailing facility if necessary, thus ensuring no potential for pollution of the groundwater.

Model studies, confirmed by TÜBITAK, indicate that even in a worst-case-scenario, the quality of underground drinking or potable water would be at no risk of impact from seepage.[12]

COMMITMENT

Cyanide and heavy metals will be treated to very low levels and tailings will be deposited into an impervious tailings pond.

Monthly water samples from groundwater monitoring bores will check water quality and results will be reported.

A DUST SCRUBBER WILL ASSIST TO CONTROL DUST.

Dust

Dust generated during blasting, excavation and transportation at Ovacık mine will be minimised.

Crushing and screening will occur within a closed circuit. The air inside will be extracted through a wet scrubber system which will wet dust and prevent it becoming airborne. Similarly, an extensive dust suppression program will be applied to roads and waste rock and ore stockpiles to prevent dust. Automatic gauges have been installed around the operation, complemented by mobile dust gauges. Windbreaks will be constructed from soil and the planting of trees.

Open pit mining will occur only during the first three years of operation. Thereafter, production will continue from underground, when dust from operations will reduce even further.

Measurements made during the 1998 test run proved the Ovacık dust control system to achieve limits set by Air Quality regulation.

COMMITMENT

Dust will not exceed the following regulatory limits:

Precipitated dust -

Short period limit of 650mg/m^2 per day, Long period limit of 350mg/m^2 per day

Particulate dust -

Short period limit of 300µg/m^3, Long period limit of 150 µg/m^3

THE IMPACT OF NOISE AND VIBRATION WILL BE MINIMISED.

Noise & Vibration

Noise from mining equipment and the processing plant, and vibration from blasting, are an unavoidable part of open pit mining.

The impact of noise and vibration will be minimised. Monitoring devices will ensure variances in noise and vibration are managed so as to not exceed regulatory limits.

To minimise effects of blasting, several smaller blasts, discharged milliseconds apart, help reduce vibration and noise and local residents will be informed prior to blasting. During tests conducted under the supervision of the Monitoring Inspection Commission, vibration levels measured 1.97mm/sec and noise generated averaged 112 dB(A), both well below regulatory limits.

Transport routes will be designed to minimise noise in Ovacık Village. Sources of noise will be confined in insulated buildings, where possible.

COMMITMENT

Operational noise will not exceed the regulatory limits of 55dB(A) at night and 65dB(A) during daylight at 1m distance from occupied buildings in residential areas.

Noise from blasting will not exceed the regulatory limits of 128dB(A) at 1m distance and vibration will not exceed 13mm/sec.

[12] *"Negligible risks", An Assessment Report by TUBITAK-YDABÇAG Commission on Eurogold Ovacik Gold Mine, October 1999.*

performance commitment

THE TAILINGS STORAGE FACILITY WAS CONSTRUCTED TO WITHSTAND ONE-IN-3,000-YEAR EARTHQUAKE.

Earthquake or Breakdown

According to Turkish Earthquake Code, the seismicity of the Bergama-Dikili region is 0.4g. The largest earthquake in the region - in Dikili in 1939 - registered 6.5 on the Reichter Scale and produced an acceleration of <0.4g.

The tailings storage facility at Ovacık was constructed to withstand a 0.6g seismic event, or one-in-3,000-year earthquake. In the event of a catastrophic earthquake (ie. greater than 0.6g) damaging the tailings storage facility and releasing tailings into the environment, the impact would be negligible, if any, because of the prior destruction of sodium cyanide in the tailings.

An assessment of the tailings facility based on guidelines of the International Commission on Large Dams found no likelihood of failure[13].

COMMITMENT

Tailings storage facility designed and constructed to withstand a 0.6g seismic event, or one-in-3,000-year earthquake.

SHEEP GRAZE NEAR THE OVACIK MINE TAILINGS STORAGE FACILITY.

Risk to nearby & agricultural land

The closed circuit nature of the processing plant at Ovacık mine prevents any reagents from coming into contact with the outside environment. The system will automatically shut down in the case of a malfunction, minimising any risk of impact outside the plant.

Soil taken from the open pit will be reused in rehabilitation. About 900m^3 of make-up water per day will be required for the operation. Reuse of water will be maximised to ensure local water resources are not affected. Research confirms the generative and vegetative characteristics of olive trees will not be effected[14].

COMMITMENT

No process water will be discharged to the environment. Any excess water from underground will be treated if necessary to comply with Turkish Water Pollution Control Regulation.

AFTER MINING, THE ENTIRE MINE SITE WILL BE REHABILITATED

Mine Closure & Rehabilitation

At the conclusion of mining operations, the entire mine site will be rehabilitated. The underground workings will be sealed and the open pit will be revegetated with native species. Infrastructure will be removed and the area rehabilitated. The tailings facility, which will be dewatered, will be rehabilitated using a multi-layer cover. A 0.5m layer of topsoil will be placed on the surface. It is envisaged the flat surface of the facility would be suitable for growing crops or for grazing.

Details of the rehabilitation project will be finalised after consultation with the local people.

A monetary guarantee, or bond, the first of this kind in Turkey, has been provided to ensure adequate financial provisioning at mine closure.

COMMITMENT

The Conceptual Mine Closure Plan will be reviewed annually and updated as appropriate.

After mine closure, all disturbed areas will be rehabilitated under the control of the Monitoring Inspection Commission and to the technical specification of the State Hydraulic Works (DSI).

Monitoring will continue for at least five years after closure to confirm rehabilitation success.

CONTACT US

Normandy and Normandy Madencilik A.Ş. are keen to solicit feedback from the community on ways in which its performance can be improved. Ideas can be forwarded to the General Manager.

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35700 Bergama
Izmir Turkey

PHONE: (+90) 232 641 8565
FACSIMILE: (+90) 232 641 8019

EMAIL: feedback@normandy.com.au

INTERNET: Complete the electronic feedback form located on Normandy's continually updated website: - www.normandy.com.au. Additional information on Ovacık Gold Mine is available at www.ovacik-altin.com.

[13] *1998 Report on Probabilistic Risk Assessment Ovacik Mine Tailings Dam, Golder Associates (UK) Ltd, February 1998.*

[14] *Expert Report 9-2-1996, Izmir First Administration Court, Turkey, February 1996.*