



HOW THORBURN PROVIDED INTRUDER DETECTION SYSTEMS FOR ANGLO AMERICAN'S COAL COMPOUND **AND SAVED THE CLIENT OVER R200 000 A YEAR**



INTRODUCTION

The nature of mining makes it a high-risk environment where stringent health and safety protocols are essential for the wellbeing of all employees. So, when Anglo American needed to replace 212 alarms across its South African Coal Estate (SACE) in Witbank, it looked for a service provider that could guarantee quality products and maintenance services at a reduced rate while adhering to the mine's strict health and safety codes.

Thorburn Security Solutions, a proud member of the Tsebo Solutions Group and specialist provider of secure risk solutions in Southern Africa, was chosen not only for its ability to deliver premium security products and services, but also because it could provide integrated protection aligned to global standards and specifications, including health and safety protocols.

CHALLENGE

Anglo American's SACE compound spans about **35000 m²** and runs across nine affiliated sites, namely Greenside mine, a navigation plant, Umlazi opencast mine, Kromdraai colliery, RLT, a water reclamation plant, various service departments, Kleinkopje mine and the Excelsior mini-pit.

Gaining access to the sites posed an administrative challenge in terms of access due to stringent health and safety protocols implemented by the mine. The client's previous service provider had leased alarms, which meant that Anglo did not own these assets.

There was also no baseline for the equipment and quality varied significantly.

Thorburn had to ensure that the old and new system ran concurrently during the swapping out period to ensure that there was no alarm downtime – an operation that took careful consideration and orchestration. Technicians had to assess the sites and ensure that alarm signals could accurately communicate across two different control rooms and the various local sites.

212 alarms installed over a **three-week period**, across **9 affiliated mining sites**, with **no alarm downtime**.



SOLUTION

Thorburn originally deployed two teams to install 212 alarms over a three-week period in which time it swapped out all of the alarms and implemented a text-service to conduct risk assessments per site

to determine a baseline standard going forward. Thorburn's top management were involved from day one to ensure a proactive and clear line of communication for the client.

SCOPE OF SERVICES



Risk assessment



Tamper-proof video verification



Risk consulting



GSM frequency radios



Alarm systems



On-site maintenance and repairs



Alarm systems integration



Integrated security management reporting

BENEFITS

Thorburn was able to meet the client's stringent health and safety requirements owing to its high-level compliance with a number of international regulatory bodies including:

- **ISO 9001** (Quality Management)
- **ISO 14001** (Environmental Management)
- **ISO 45001** (Operational Health & Safety)

After successfully completing the initial installation of 212 alarms, Thorburn remained on site and continued to provide quality service to the client through a number of innovative solutions including:

Ongoing maintenance

Two teams remained on site to conduct constant maintenance as well as daily, weekly and monthly risk assessments to ensure accurate operation of the alarm systems. A third team was added after Anglo American requested the installation of an additional 311 alarms. The teams keep tabs on the alarms, repair faulty alarms and regularly service and maintain the systems.

Advanced technology

- Thorburn introduced **150 Global System for Mobile Communications (GSM) frequency radios**. This initiative resulted in improved communication and allowed the client to switch to remote monitoring, which is less expensive and easy to deploy.



- **Tamper-proof video verification alarms** were installed in key areas. These alarms are powered by lithium-ion batteries and do not need to be connected to an external power source, allowing off-grid protection 24/7.



Staff deployed on-site

- 3 technicians
- 3 technical assistants
- 1 administrative manager (SHE)

Advanced reporting and asset management

Highly detailed reports that meet the mine's health and safety requirements are submitted monthly.

Pandemic risk-reduction partner

With the outbreak of the COVID-19 pandemic in 2020, Thorburn was able to provide significant value add to the client by providing:

- **3 000** pairs of gloves
- **1** thermographic fever screening device
- **1** walk-through temperature scanner

RESULTS

Thorburn cut costs for the client by allowing ownership of and full control over the alarms. This resulted in a quality baseline, uninterrupted service and an annual saving of about R200 000. Client satisfaction resulted in another 311 alarms installed (total 523) and an extended contract. Thorburn has thus been contracted to South African Coal Estate (SACE) for eight years since 2012, in an industry where it is rare for a contract to exceed five years.



Thorburn achieved continued uninterrupted service and an annual saving of R200 000.

Results for 2020:

- **Over a 150** theft incidents detected from January to September as a result of alarms sending signals to the control room
- **Over 400** alarms serviced between July and September
- An **average of four faulty alarms repaired** per week (48 alarms over a three-month period)



Thorburn Security Solutions has provided us with great service over this time and is highly recommended. I have no hesitation in endorsing the service of Thorburn Security Solutions to those who enquire to make use of them as a security service provider.

BM Jansen van Rensburg, Acting Regional and Forensic Protection Services Manager – Anglo American Coal South Africa

BM Jansen Van Rensburg 

a **TSEBO** solution

+27 (0)87 820 3851 | sales@thorburn.co.za
www.thorburn.co.za

