

# PROJECT INFORMATION



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<b>Client</b>	<i>Goldfields Ghana Ltd.</i>
<b>Project</b>	<i>Phase 2 - Tarkwa Gold Mine, Ghana</i>
<b>Consultant</b>	<i>Metago Environmental Engineers</i>
<b>Liner Specification</b>	<i>1,5mm HDPE</i>
<b>Size</b>	<i>390 000m<sup>2</sup></i>
<b>Date Completed</b>	<i>February 2000</i>

## Application Details

Engineered Linings was contracted through AMS (African Mining Services) to line Phase 2 of the Goldfields Ghana Heap Leach Project in Tarkwa. This involved the installation of 390 000m<sup>2</sup> of 1,5 mm thick HDPE liner to 6 pads, separated by divider berms.

A leaching solution of sodium cyanide is sprayed on the 8 - 10m high lifts of crushed gold bearing ore to extract the gold. The function of the HDPE liner is to capture the "pregnant solution" at the base of the heaps and lead it, via launders, to the containment pond for processing. The liner installation took 3,5 months to complete.

## ENGINEERED LININGS

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# Tarkwa Mine

The lining was to be durable enough to withstand the load of the ore, ultimately stacked up to 40 metres high, and the chemical attack.

1,5mm thick Hexene based HDPE was specified. Engineered Linings had this material shipped to Takoradi in Ghana and then transported overland to Tarkwa.



Over 40 labourers from the local village were used and their rates and hours had to be negotiated with the village chief. Credit must be given to our 6 technical staff members who controlled and supervised the installation.

The commencement of the project was delayed by 3 weeks due to heavy rains and subgrade damage. Engineered Linings was able to make up this backlog and still complete the project by the original handover date.



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Iduapriem Gold Mine - Ghana - 110 000m<sup>2</sup>  
 Suzdal Gold Mine - Kazakstan - Phase 1,2,3 - 99 000m<sup>2</sup>  
 Yatela Gold Mine - Mali - Pads 1,2,3,4,5,6,7...15 - 1 903 400m<sup>2</sup>  
 Tarkwa Gold Mine - Ghana - Phases 2,3,&4 - 1 456 700m<sup>2</sup>  
 Blue Ridge Gold Mine Project - Ghana - 473 100m<sup>2</sup>  
 Tarkwa Gold Mine - Goldfields, Ghana - Phase 5 - 931 500m<sup>2</sup>  
 Teberbie Gold Mine - Ghana - 167 000m<sup>2</sup>  
 Tsumeb Corporation - Namibia - 1 260m<sup>2</sup>  
 Angovia Gold mine - Ivory Coast - 221 000m<sup>2</sup>  
 Kalsaka Gold Mine - Burkina Faso - 288 000m<sup>2</sup>  
 Zeravshan Gold Mine & Dam - Tajikistan - 65 000m<sup>2</sup>  
 Amesmessa Gold Project - Algeria - 156 640m<sup>2</sup>



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