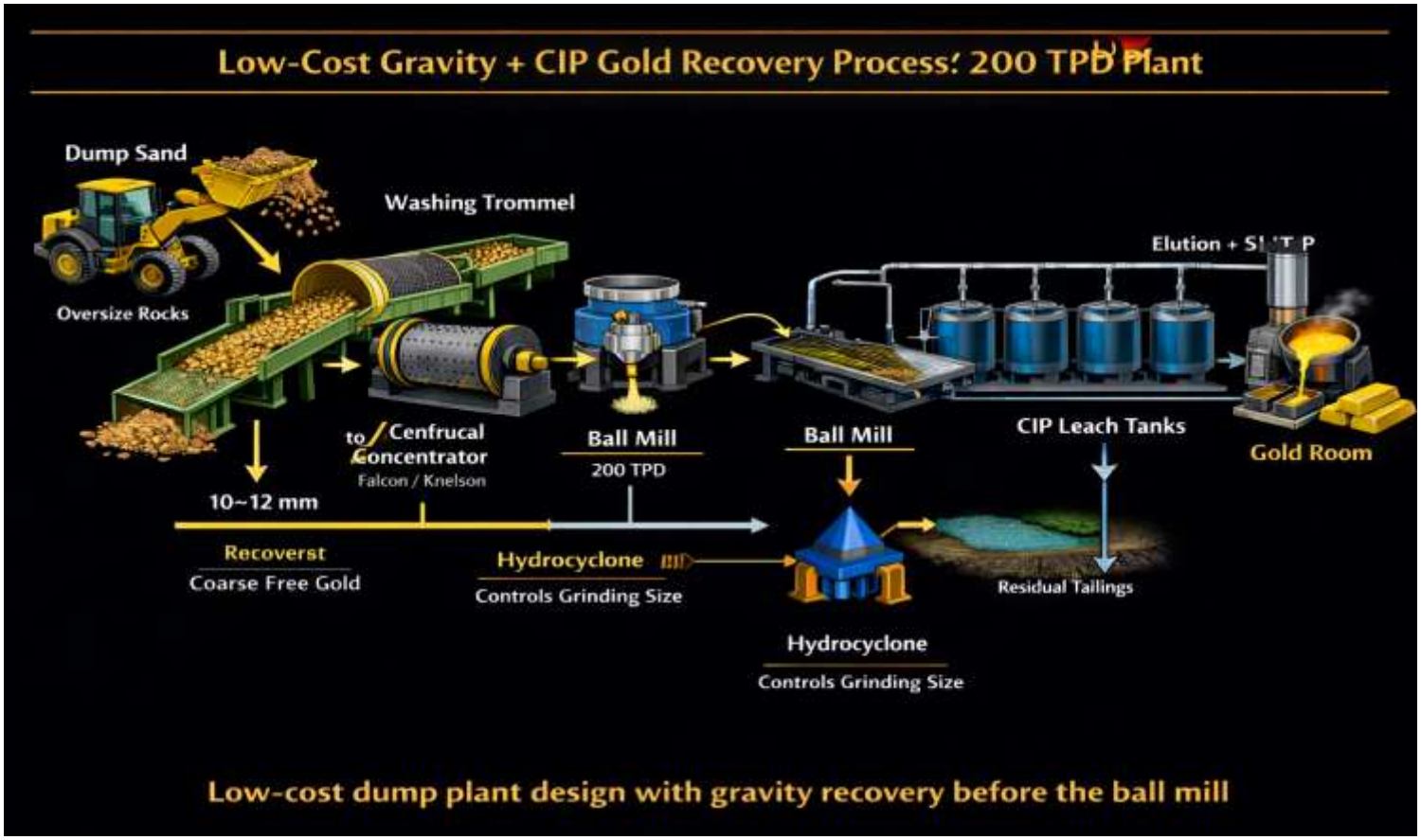
Tailings Recovery & Wet Pan Processing Operational Cost Overview

Operational Cost Estimate

200TPD Gold Recovery Processing Plant



Silobela, Zimbabwe

Confidential Operational Cost Overview

Prepared for:
Potential Investors & Strategic Partners

Project Area:
Hlhlohlo, Nsingo, Zuma, Mpofini & Comfort Tailings Recovery Site

Processing Facility:
200TPD Gold Recovery Processing Plant

Material Type:
Vat-Leached Gold Tailings

Planned Processing Volume:
77,400 Tons

Executive Summary

This document outlines the estimated operational expenditure associated with processing approximately 77,400 tons of historical gold tailings material sourced from all five dump sites through the proposed 200TPD centralized Gold Recovery Processing Plant.

The estimate is based on:

- current regional operating conditions,
- projected processing methodology,
- transportation logistics,
- reagent consumption,
- labor requirements,
- and anticipated plant operating costs.

The operational model combines:

- gravity recovery,
- cyanide leaching,
- Carbon-in-Pulp (CIP) processing,
- and centralized gold recovery systems

to maximize gold recovery efficiency from previously processed tailings material.

Project Overview

1. Hlohlo

Processing Cost

Processing 1,500 tons

Estimated Processing Time

7–8 Days

Estimated Timeline

Approximately 1 Week

Operating Cost

Item	Description
Project Name	Hlhlohlo Tailings Recovery
Material Type	Historical Vat-Leached Tailings
Processing Plant	200TPD Gold Recovery Plant
Estimated Material Volume	1,500 Tons
Distance From Plant	Approximately Regional Haulage Distance
Processing Method	Ball Mill + CIP Recovery

Estimated Operational Costs

Processing of 1,500 Tons

Operating Cost Category	Estimated Cost
Labor (10 Workers)	$3,000
Diesel / Power Consumption	$1,125
Cyanide & Reagents	$500
Transport & Haulage	$1,360
Activated Carbon	$250
Plant Maintenance	$200
Security Services	$400
General Consumables	$300

Total Estimated Operating Cost

USD $7,135

2. Nsingo

Processing Cost

Processing 40,000 tons

Estimated Processing Time

200 Days

Estimated Timeline

Approximately 6.5 – 7 Months

Operating Cost

Item	Description
Project Name	Nsingo Tailings Recovery
Material Type	Historical Vat-Leached Tailings
Processing Plant	200TPD Gold Recovery Plant
Estimated Material Volume	40 000 Tons
Distance From Plant	Approximately Regional Haulage Distance
Processing Method	Ball Mill + CIP Recovery

Estimated Operational Costs

Processing of 40 000 Tons

Operating Cost Category	Estimated Cost
Labor (10 Workers)	$3,000
Diesel / Power Consumption	$30,000
Cyanide & Reagents	$13,333
Transport & Haulage	$54,540
Activated Carbon	$6,667
Plant Maintenance	$2,000
Security Services	$400
General Consumables	$1,000

Total Estimated Operating Cost

USD $110,940

3. Zuma

Processing Cost

Processing 900 tons

Estimated Processing Time

4–5 Days

Estimated Timeline

Approximately 1 Week

Operating Cost

Item	Description
Project Name	Zuma Tailings Recovery
Material Type	Historical Vat-Leached Tailings
Processing Plant	200TPD Gold Recovery Plant
Estimated Material Volume	900 Tons
Distance From Plant	Approximately Regional Haulage Distance
Processing Method	Ball Mill + CIP Recovery

Estimated Operational Costs

Processing of 40 000 Tons

Operating Cost Category	Estimated Cost
Labor (10 workers)	$3,000
Diesel / power	$675
Cyanide	$300
Transport	$1,200 (22t truck at $30/trip-2000t – 40t)
Activated carbon	$149
Maintenance	$135
Security	$400
Consumables	$225

Total Estimated Operating Cost

USD6 084

4. Mpofini

Processing Cost

Processing 5,000 tons

Estimated Processing Time

25 Days

Estimated Timeline

Approximately 3 – 4 Weeks

Operating Cost

Item	Description
Project Name	Zuma Tailings Recovery
Material Type	Historical Vat-Leached Tailings
Processing Plant	200TPD Gold Recovery Plant
Estimated Material Volume	5,000 Tons
Distance From Plant	Approximately Regional Haulage Distance
Processing Method	Ball Mill + CIP Recovery

Estimated Operational Costs

Processing of 5,000 Tons

Operating Cost Category	Estimated Cost
Labor (10 workers)	$3,000
Diesel / power	$3,750
Cyanide	$1,667
Transport	$4,540
Activated carbon	$833
Maintenance	$600
Security	$400
Consumables	$700

Total Estimated Operating Cost

USD15,490

5. Comfort

Processing Cost

Processing 30,000 tons

Estimated Processing Time

150 Days

Estimated Timeline

Approximately 5 Months

Operating Cost

Item	Description
Project Name	Zuma Tailings Recovery
Material Type	Historical Vat-Leached Tailings
Processing Plant	200TPD Gold Recovery Plant
Estimated Material Volume	30,000 Tons
Distance From Plant	Approximately Regional Haulage Distance
Processing Method	Ball Mill + CIP Recovery

Estimated Operational Costs

Processing of 30,000 Tons

Operating Cost Category	Estimated Cost
Labor (10 workers)	$3,000
Diesel / power	$12,273
Cyanide	$15,000
Transport	$40 890 (22t truck at $30/trip-3000t – 1,363t)
Activated carbon	$5,000
Maintenance	$3000
Security	$400
Consumables	$700

Total Estimated Operating Cost

USD80,263

Consolidated Operational Cost Summary

Project Operating Cost

Hlhlohlo	$7,135
Nsingo	$110,940
Mpofini	$15,490
Zuma	$6,084
Comfort	$80,263

TOTAL OPERATIONAL COST

USD $219,912

Consolidated Portfolio Processing Timeline

Milling Centre	Tonnage	Estimated Processing Duration
Hlhlohlo	1,500 Tons	7–8 Days
Nsingo	40,000 Tons	200 Days
Mpofini	5,000 Tons	25 Days
Zuma	900 Tons	4–5 Days
Comfort	30,000 Tons	150 Days

Total Combined Material

77,400 Tons

Total Estimated Processing Duration

Plant Capacity	Estimated Duration
200TPD	387 Days

Estimated Timeline

Approximately 12.9 Months

(1 Year + 3 Weeks)

Operational Note

The estimated processing timelines may improve through:

- increased plant utilization,
- additional shifts,
- feed blending optimization,
- and future plant expansion.

The proposed centralized processing model also allows simultaneous feedstock sourcing from multiple milling centres, supporting long-term operational continuity and scalable production growth

Operating Cost Breakdown

Labor

Operational labor includes:

- plant operators,
- supervisors,
- security personnel,
- and general processing staff required for continuous plant operation.

Diesel & Power

Power costs include:

- milling operations,
- slurry pumping,
- agitation systems,
- and general plant electricity consumption.

Cyanide & Processing Reagents

Includes:

- cyanide consumption,
- pH control chemicals,
- and auxiliary processing reagents required during gold recovery.

Transportation & Logistics

Transportation costs are based on:

- 22-ton haulage truck operations,
- approximately 68 haulage loads,
- and movement of tailings material from the dump site to the centralized recovery facility.

Activated Carbon

Activated carbon is required for:

- dissolved gold adsorption,
- gold recovery,
- and carbon management within the CIP circuit.

Maintenance

Maintenance allocation includes:

- equipment servicing,
- wear part replacement,
- lubrication,
- and preventative maintenance activities.

Security

Security services include:

- asset protection,
- site monitoring,
- and operational security support.

Consumables

General consumables include:

- pipes,
- fittings,
- hoses,
- lubricants,
- safety equipment,
- and miscellaneous operational materials

Strategic Operational Advantages

The Hlhlohlo recovery project benefits from:

- existing historical tailings availability,
- low feedstock acquisition cost,
- centralized processing infrastructure,
- scalable recovery capacity,
- and established regional mining relationships.

The project model minimizes mining risk by focusing on:

- already mined material,
- historical tailings,
- and secondary gold recovery opportunities.

Operational Efficiency

The centralized 200TPD processing model provides:

- lower per-ton processing costs,
- scalable throughput capacity,
- improved recovery efficiency,
- and stronger long-term operational sustainability.

Technical Disclaimer

The figures presented in this document are preliminary operational estimates based on:

- current fuel pricing,
- estimated reagent consumption,
- projected processing assumptions,
- and anticipated regional logistics conditions.

Actual operating costs may vary depending on:

- fuel price fluctuations,
- processing recovery rates,
- haulage conditions,
- reagent consumption,
- and plant operating performance.

Wet Pan Operating Cost Report

Wet Pan Processing Operations

As part of the project's integrated artisanal mining support strategy, the operational portfolio also includes the estimated monthly operating costs associated with the proposed Wet Pan Processing Plant.

The wet pan facility is designed to:

- process artisanal miners' ore,
- generate service-based revenue,
- strengthen regional mining partnerships,
- and secure additional tailings feedstock for secondary recovery through the centralized 200TPD Gold Recovery Plant.

Wet Pan Processing Plant

Operational Cost Estimate

Plant Configuration

- 6 × Wet Pan Mills
- Approximate Capacity: 60 Tons Per Day
- Operating Schedule: 10 Hours Per Day
- Workforce Requirement: 4–6 Workers

Total Operating Cost

Cost Item	Monthly Cost
Power	$1,600
Labor	$1,300
Grinding parts	$500
Water	$200
Maintenance	$600
Miscellaneous	$600

Total Monthly Cost

$4,800

Contact Information

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