

GLENCORE

**The Ventures Internal and External Reviews, Audits  
and Assurance: 2022/2023**

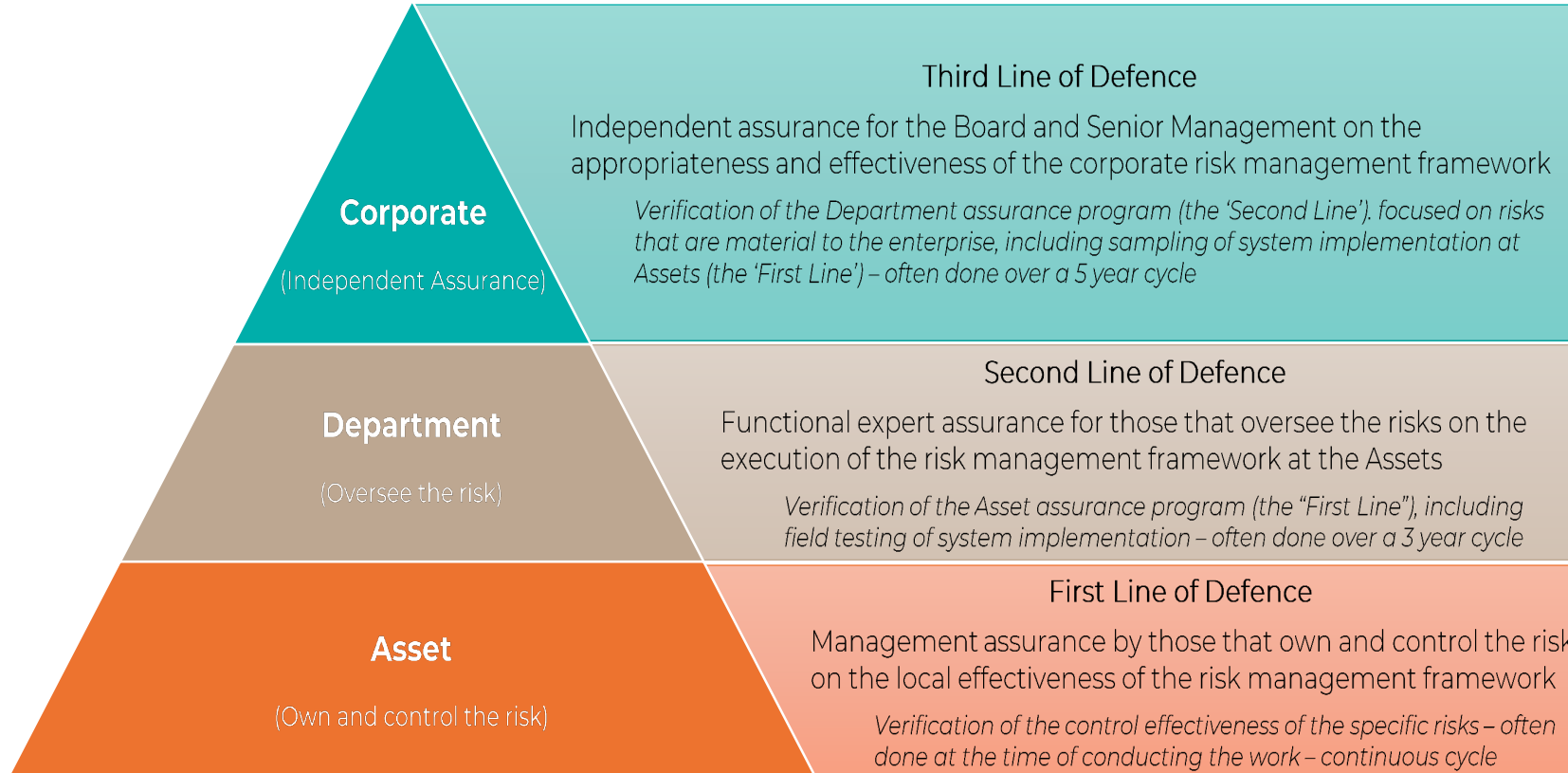


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- Second-line of Defence Assurance 2022
- Planned assurance 2023



# Assurance Structure



Line of Defence	Entity for Assurance Activity	
<b>First line of Defence (Asset)</b>	Self-assessment	Owner
	Second-party	A person independent from the subject, auditing the owner of the risk
	Third-party	External independent company/person, auditing the owner of the risk
<b>Second Line of Defence (Department)</b>	Second-party	A person independent from the subject, auditing the owner of the risk
	Third-party	External independent company/person, auditing the owner of the risk
<b>The third line of Defence (Corporate)</b>	Second-party	A person independent from the subject, auditing the owner of the risk
	Third-party	External independent company/person, auditing the owner of the risk

## Second-line of Defense Assurance

- HSEC & HR assurance plan based on 3-year cycle.
- The plan focus on Fatal Hazard Protocols, HSEC & HR Standards, Critical Controls, Safework Performance Expectations, HSE Legal Compliance, Data verification.
- Ad-hoc audits considered through review of leading and lagging indicators.
- Compliance inspections conducted throughout the year at different operations by the Compliance Manager
- Analysis and trends identified after audit cycle / subject completed
- Second-line of defense assurance plan is reviewed annually.
- During the review operations might move forward in the plan based on the performance / audits / incidents / actions / concerns.
- Operations have their own plans (first-line of defense) aligned with the Alloys plan including their departmental internal audits, cross operational audits, ISO certification audits, insurance audits, using third party auditors or internal subject matter experts
- All audit findings are actioned in Isometrix.

Subject	Party	Scope
Fatal Hazard Protocols	Second party and/or Third party	Compliance w.r.t the Fatal Hazard Protocols as per workbook – 3 year cycle
HSEC & HR Standards	Second party and/or Third party	Compliance w.r.t the HSEC & HR Standards as per workbook – 3 year cycle
Critical Controls	Second party	Critical Control Management according to guideline and data verification
SafeWork Performance Expectations	Second party	Compliance w.r.t Safework Performance as per workbook – 3 year cycle
HSE Legal Compliance	Third Party	Schedule Legal compliance to relevant legislation, with technical component of compliance w.r.t authorizations, license & permits – 3-year cycle
HSEC & HR Data	Second Party	Quarterly Internal Process Control Review GCP Data verification – 3-year cycle
Compliance Inspections	Second Party	Schedule at all operations throughout the year, focused on compliance with legislation, protocols and standards - ad-hoc inspections for focus areas / areas of concern
HPRI verification	Second Party	Review effective action closure

# Third line of Defence Assurance 2022

## ESG: Road Safety Transportation (Second Party)

- Wonderkop Smelter

## Glencore Corporate Practice (GCP data verification for sustainability report – Deloitte)

- Lion Smelter

## ICMM Performance Expectations(Deloitte)

- Lion Smelter
- Thorncliffe Mine
- Wonderkop Smelter

## Metallurgical Plants - HATCH

- Boshhoek Smelter
- Lion Smelter
- Lydenburg Smelter
- Rustenburg Smelter
- Wonderkop Smelter

# Third line of Defence Assurance 2022

## Underground assessments

- Eastern Chrome Mines
- Western Chrome Mines
  
- Tailings Storage Facilities – Klohn Crippen Berger
- Boshhoek Smelter
- Helena Mine
- Kroondal Mine
- Lion Smelter
- Lydenburg Smelter
- Rietvly mine
- Rustenburg Smelter
- Thorncliffe Mine
- Waterval West Mine
- Wonderkop Smelter

# Second line of Defence Assurance 2022

## HSE Legal Compliance –Andersen Attorneys

- Boshhoek Smelter
- Kroondal Mine
- Lion Smelter
- Lydenburg Smelter

## GCP Data verification

- Rustenburg Smelter

## Fatal Hazard Protocol 01 – Energy Isolation

- Boshhoek Smelter
- Eastern chrome Mines (Helena, Magareng, Thorncliffe)
- Lion Smelter
- Rustenburg Smelter
- Wester Chrome Mines (Kroondal, Waterval, Rietvly)
- Wonderkop Smelter

# Second line of Defence Assurance 2022

## Fatal Hazard Protocol 03 – Confined Space / Noxious Atmospheres

- Boshhoek Smelter
- Eastern chrome Mines (Helena, Magareng, Thornccliffe)
- Lydenburg Smelter
- Lion Smelter
- Rustenburg Smelter
- Wester Chrome Mines (Kroondal, Waterval, Rietvly, UG2)
- Wonderkop Smelter

## Fatal Hazard Protocol 05 – Ground Strata Failure

- Boshhoek Smelter
- Eastern Chrome Mines (Helena, Magareng, Thornccliffe)
- Lydenburg Smelter
- Lion Smelter
- Rustenburg Smelter
- Wester Chrome Mines (Kroondal, Waterval, Rietvly, UG2)
- Wonderkop Smelter



# Second line of Defence Assurance 2022

## Fatal Hazard Protocol 06 – Electrical Safety

- Boshhoek Smelter
- Eastern chrome Mines (Helena, Magareng, Thorncliffe)
- Lydenburg Smelter
- Lion Smelter
- Rustenburg Smelter
- Wester Chrome Mines (Kroondal, Waterval, Rietvly, UG2)
- Wonderkop Smelter

## Fatal Hazard Protocol 07 – Emergency Response

- Boshhoek Smelter
- Eastern Chrome Mines (Helena, Magareng, Thorncliffe)
- Lydenburg Smelter
- Lion Smelter
- Rustenburg Smelter
- Wester Chrome Mines (Kroondal, Waterval, Rietvly, UG2)
- Wonderkop Smelter

# Second line of Defence Assurance 2022

## Fatal Hazard Protocol 08 – Lifting & Cranage

- Boshhoek Smelter
- Eastern chrome Mines (Helena, Magareng, Thornccliffe)
- Lion Smelter
- Rustenburg Smelter
- Wester Chrome Mines (Kroondal, Waterval, Rietvly)
- Wonderkop Smelter

## Fatal Hazard Protocol 09 – Fire & Explosion

- Boshhoek Smelter
- Eastern Chrome Mines (Helena, Magareng, Thornccliffe)
- Lydenburg Smelter
- Lion Smelter
- Rustenburg Smelter
- Wester Chrome Mines (Kroondal, Waterval, Rietvly, UG2)
- Wonderkop Smelter

# Second line of Defence Assurance 2022

## Fatal Hazard Protocol 08 – Lifting & Cranage

- Boshhoek Smelter
- Eastern chrome Mines (Helena, Magareng, Thornccliffe)
- Lion Smelter
- Rustenburg Smelter
- Wester Chrome Mines (Kroondal, Waterval, Rietvly)
- Wonderkop Smelter

## Fatal Hazard Protocol 12 – Inrush & Outburst

- Boshhoek Smelter
- Eastern Chrome Mines (Helena, Magareng, Thornccliffe)
- Lion Smelter
- Rustenburg Smelter
- Wester Chrome Mines (Waterval, Rietvly)
- Wonderkop Smelter

# Third Line of Defense Assurance – Planned for 2023

## Voluntary Principles on Security and Human Rights and Security Standard

- Kroondal Mine

## Tailings Facility assessments

- Boshhoek Smelter
- Helena Mine
- Kroondal Mine
- Lion Smelter
- Lydenburg Smelter
- Rietvly mine
- Rustenburg Smelter
- Thorncliffe Mine
- Waterval West Mine
- Wonderkop Smelter

# Third Line of Defense Assurance – Planned for 2023

## Underground assessments

- Kroondal Mine
- Helena Mine
- Magareng Mine
- Thorncliffe Mine

## Metallurgical Plants

- Boshhoek Smelter
- Rustenburg Smelter

## PMC#5 HPRI action verification

- Kroondal Mine
- Lion Smelter

*PMC – Potential Maximum Consequence*

*PMC#5 – Catastrophic risks*

*HPRI – High Potential Risk Incident*

# Second Line of Defense Assurance – Planned for 2023

## GCP Data verification

- Lydenburg Smelter
- Eastern Chrome Mines (Helena, Magareng, Thornccliffe)

## FHP 4 – Mobile Equipment verification

- Boshhoek Smelter
- Eastern Chrome Mines (Helena, Magareng, Thornccliffe)
- Lydenburg Smelter
- Lion Smelter
- Rustenburg Smelter
- Wester Chrome Mines (Kroondal, Waterval, Rietvly, UG2)
- Wonderkop Smelter

# Second Line of Defense Assurance – Planned for 2023

## FHP 13 – Molten Material verification

- Boshhoek Smelter
- Lion Smelter
- Rustenburg Smelter
- Wonderkop Smelter

## SafeWork Performance Expectations

- Boshhoek Smelter
- Eastern Chrome Mines (Helena, Magareng, Thornccliffe)
- Lydenburg Smelter
- Lion Smelter
- Rustenburg Smelter
- Wester Chrome Mines (Kroondal, Waterval, Rietvly, UG2)
- Wonderkop Smelter

# Second Line of Defense Assurance – Planned for 2023

## FHP 13 – Molten Material verification

- Boshhoek Smelter
- Lion Smelter
- Rustenburg Smelter
- Wonderkop Smelter

## SafeWork Performance Expectations

- Boshhoek Smelter
- Eastern Chrome Mines (Helena, Magareng, Thornccliffe)
- Lydenburg Smelter
- Lion Smelter
- Rustenburg Smelter
- Wester Chrome Mines (Kroondal, Waterval, Rietvly, UG2)
- Wonderkop Smelter



# Second Line of Defense Assurance – Planned for 2023

## FHP 01 – Energy Isolation

- Lydenburg Smelter
- UG2

## FHP 08 – Lifting & Cranage

- Lydenburg Smelter
- UG2

## FHP 12 – Inrush & Outburst

- Kroondal Mine
- Lydenburg Smelter
- UG2

# Second Line of Defense Assurance – Planned for 2023

## Safety Standards (Road Safety Transportation, Aviation and Structural failure)

- Boshhoek Smelter
- Eastern Chrome Mines (Helena, Magareng, Thornccliffe)
- Lydenburg Smelter
- Lion Smelter
- Rustenburg Smelter
- Wester Chrome Mines (Kroondal, Waterval, Rietvly, UG2)
- Wonderkop Smelter

## Social Performance Standard

- Boshhoek Smelter
- Eastern Chrome Mines (Helena, Magareng, Thornccliffe)
- Lydenburg Smelter
- Lion Smelter
- Rustenburg Smelter
- Wester Chrome Mines (Kroondal, Waterval, Rietvly, UG2)
- Wonderkop Smelter

# Second Line of Defense Assurance – Planned for 2023

## Loss of Containment Standard

- Boshhoek Smelter
- Eastern Chrome Mines (Helena, Magareng, Thornccliffe)
- Lydenburg Smelter
- Lion Smelter
- Rustenburg Smelter
- Wester Chrome Mines (Kroondal, Waterval, Rietvly, UG2)
- Wonderkop Smelter

## HSEC & HR Performance Standard

- Boshhoek Smelter
- Eastern Chrome Mines (Helena, Magareng, Thornccliffe)
- Lydenburg Smelter
- Lion Smelter
- Rustenburg Smelter
- Wester Chrome Mines (Kroondal, Waterval, Rietvly, UG2)
- Wonderkop Smelter

# Second Line of Defense Assurance – Planned for 2023

## Environmental Standard

- Boshhoek Smelter
- Eastern Chrome Mines (Helena, Magareng, Thornccliffe)
- Lydenburg Smelter
- Lion Smelter
- Rustenburg Smelter
- Wester Chrome Mines (Kroondal, Waterval, Rietvly, UG2)
- Wonderkop Smelter

## Energy & Climate Change Standard

- Boshhoek Smelter
- Eastern Chrome Mines (Helena, Magareng, Thornccliffe)
- Lydenburg Smelter
- Lion Smelter
- Rustenburg Smelter
- Wester Chrome Mines (Kroondal, Waterval, Rietvly, UG2)
- Wonderkop Smelter

# Second Line of Defense Assurance – Planned for 2023

## Cultural Heritage Standard

- Boshhoek Smelter
- Eastern Chrome Mines (Helena, Magareng, Thornccliffe)
- Lydenburg Smelter
- Lion Smelter
- Rustenburg Smelter
- Wester Chrome Mines (Kroondal, Waterval, Rietvly, UG2)
- Wonderkop Smelter