



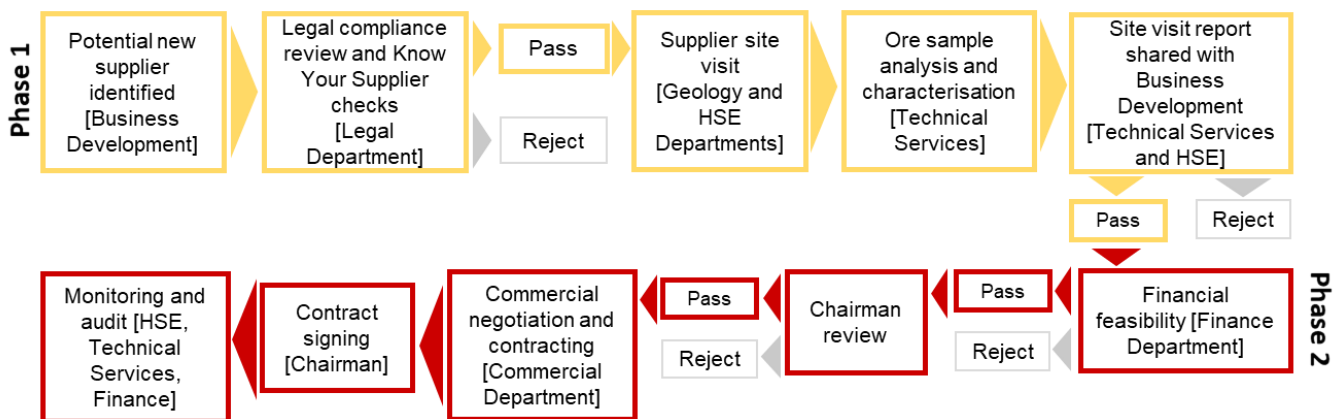
# 2022 report on due diligence activities for Chemaf's copper and cobalt supply chain

V1.0 – July 2023

## 1. Introduction

This report summarizes what was, in broad terms, the management of the company CHEMICAL OF AFRICA SA, in acronym CHEMAF SA, during the year 2022 in term of the responsible sourcing for copper and cobalt ores during this period.

The diagram below describes the due diligence process for minerals sourced by Chemaf from third parties for its mineral processing operations.



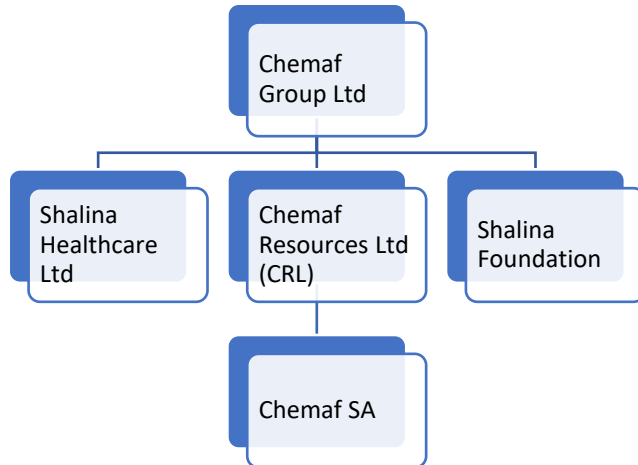
The aim of this process is to ensure that any material we extract at our mine sites and/or procure from third parties to feed to our process plant at Etoile mine, is produced responsibly in line with international market expectations and OECD guidelines.

## 2. Company Information

CHEMICAL OF AFRICA SA, in acronym CHEMAF SA, is a Company specialized in mineral exploration, mining and processing of cobalt and copper established in 2001 in the Democratic Republic of the Congo (DRC).

It is a subsidiary of Chemaf Resources ltd (CRL).

CRL is part of the Chemaf Group, which has over thirty years of operating experience in the DRC. The Group has its roots in the pharmaceutical business. In 1981, it developed a long-established footprint in the DRC, where it still successfully operates. Chemaf Group is headquartered in Dubai.



The company's CID number is CID003264 and has one operating process plant called Etoile Plant, located 10 km North-east of Lubumbashi, at Etoile Mine, Chaussée de Kasenga, Quartier Kalukuluku, Commune Annexe, Lubumbashi, Haut-Katanga, Democratic Republic of Congo.

This facility is processing copper and cobalt products.

### 3. RMAP Assessment Summary

Etoile Plant has undergone the initial RMAP audit from 3<sup>rd</sup> May 2019 to 4<sup>th</sup> May 2019, covering an assessment period from 4<sup>th</sup> January 2018 to 31<sup>st</sup> March 2019. This assessment was conducted by the firm Arche Advisor. The same firm conducted a Re-audit assessment from 28<sup>th</sup> April to 29<sup>th</sup> April 2022. This RMAP assessment is valid for one year.

The assessment summary report is public and available at [www.chemaf.com](http://www.chemaf.com)

### 4. Company Supply Chain Policy

The extraction, handling, processing, transportation, and trade of minerals has the potential to contribute to, benefit from, or result in significant adverse impacts thus, our due diligence process particularly focusses on the adverse social and environmental impacts associated with the extraction and processing of copper and cobalt within our operating areas and supply chain and we are therefore committed to avoid the use of conflict minerals, which directly or indirectly finance or benefit armed groups and/or involve other serious human right abuses.

To mitigate all the risk in relation to the mineral supply chain, our Mineral sourcing policy is fully aligned with the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from CAHRA's areas.

The policy is associated with a company risk register which is a risk tracking document based on a risk matrix, assessment, and mitigation measures. The risk register covers and addresses all the risks identified in Annex II of OECD Guidance.

The Mineral sourcing policy is reviewed and approved by the high management for its implementation. It has been widely shared with relevant stakeholders (suppliers, customers, employees etc.) and it is available on the company website at [www.chemaf.com](http://www.chemaf.com).



## 5. Company Management Systems

Chemaf runs all its mineral supply chain programs, as described in our Responsible Minerals Sourcing policy. The due diligence activities are actively supported by Chemaf's leadership and senior management, including the Chemaf's Chairman of the Board, Chemaf's MD, Director Finance & Accounting, VP SHREQ and VP CSR/ER and implemented by management teams responsible for overseeing health, safety, environment, community relations, geology, technical services, production, and commercial activities within the company.

The commitment of Chemaf is to develop a robust and responsible business by working alongside upstream and downstream partners, regulators, the DRC government and non-governmental organizations in order to ensure that our social and environmental impacts are managed, and that opportunities for local communities are leveraged. This commitment has remained unchanged during 2022.

The Due diligence program is coordinated as below:

<i>Sr. No</i>	<i>Activity</i>	<i>Responsible</i>
1	Overall responsible	V/P CSR/ER - Business Development
2	Sites assessments	Geologists and safety officers
3	KYC on suppliers	Legal Dpt
4	Ore Supplier Contract management	procurement / Commercial manager
5	Overall Mineral process flow	The GM process
6	Mass balance	The GM Technical services
7	Policies & SOP	The Audit and Compliance Mgr
8	Environment, health & safety	Safety and Environmental Mgrs
9	Community	CSR officer
10	Training	HR Training officer
11	Mining activities	The GM Mining

## 6. Mining operations and ore supply chains in 2022

### 6.1. Mining excavations for ores and feed to of the Etoile hydrometallurgical plant

*The summary of mining production and plant feed from different oxide mineralized pockets from the Etoile mine and other sources is described in the table below:*



Source	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Cumul-22
<b>Slimes Reclamation</b>	70175	44181	24796	11823	5381	0	1330	16218	18929	14244	273	0	<b>207349</b>
Cu contenu	1041	649	351	131	46	0	17	232	233	162	3	0	2865
Co contenu	253	165	85	34	15	0	5	63	65	41	1	0	728
<b>HMS Floats and Spirales tails</b>	0	10116	14917	21846	21858	5353	2592	0	0	0	0	0	<b>76682</b>
Cu contenu	0	128	198	259	281	57	31	0	0	0	0	0	954
Co contenu	0	24	39	50	56	15	7	0	0	0	0	0	191
<b>Etoile extension</b>	2023	0	7386	3100	11876	10401	14115	719	13540	16685	2179	0	<b>82023</b>
Cu contenu	3.6	0	12	3	11	10	9	1	18	30	2	0	98
Co contenu	5.4	0	25	10	39	32	50	2	45	61	8	0	278
<b>Kimbaseke Extention</b>	14427	14164	16426	33154	27685	10267	0	17384	15339	16875	2102	852	<b>168674</b>
Cu contenu	145	99	127	263	215	97	0	120	125	154	16	4	1365
Co contenu	75	50	51	129	85	42	0	77	80	100	9	3	701
<b>Kimbaseke Inside pit</b>	0	0	0	0	0	0	48224	52788	27328	20527	23019	3421	<b>175307</b>
Cu contenu	0	0	0	0	0	0	431	540	265	208	224	32	1700
Co contenu	0	0	0	0	0	0	263	278	151	124	138	17	970
<b>Cutback</b>	19755	21781	18114	10557	3628	12185	3373	0	0	0	0	0	<b>89391</b>
Cu contenu	242	270	237	127	35	119	29	0	0	0	0	0	1059
Co contenu	28	29	28	20	4	18	4	0	0	0	0	0	131
<b>Cutback-Extn</b>	0	0	0	0	0	0	17969	0	0	0	0	0	<b>17969</b>
Cu contenu	0	0	0	0	0	0	262	0	0	0	0	0	262
Co contenu	0	0	0	0	0	0	26	0	0	0	0	0	26
<b>Rejets rivière Kibasa</b>	0	0	2369	3290	6789	8300	4764	2062	10988	9419	10574	3412	<b>61965</b>
Cu contenu	0	0	23	45	77	97	61	22	135	152	168	31	811
Co contenu	0	0	6	19	32	35	25	9	52	41	48	23	290
<b>Concentré de Surya Mining</b>	0	0	649	0	1835	0	0	0	0	0	0	0	<b>2485</b>
Cu contenu	0	0	28	0	66	0	0	0	0	0	0	0	94
Co contenu	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Etoile main Surface stockpile</b>	19662	23421	20474	26396	23011	21848	3207	0	16332	16803	12375	0	<b>183529</b>
Cu contenu	227	269	234	308	267	210	29	0	134	172	112	0	1961
Co contenu	41	60	55	57	43	41	5	0	29	42	31	0	406
<b>EMP Millimetre</b>	0	0	0	0	0	7348	0	0	0	0	26040	50818	<b>84206</b>
Cu contenu	0	0	0	0	0	91	0	0	0	0	252	472	815
Co contenu	0	0	0	0	0	21	0	0	0	0	128	168	317
<b>Mufunta</b>												15554	<b>15554</b>
Cu contenu												216	216
Co contenu												7	7
<b>Autres</b>												5417	<b>5417</b>
Cu contenu												139	139
Co contenu												31	31
<b>Total Minerais alimenté</b>	<b>126042</b>	<b>113663</b>	<b>105131</b>	<b>110165</b>	<b>102062</b>	<b>75701</b>	<b>95574</b>	<b>89170</b>	<b>102456</b>	<b>94552</b>	<b>76561</b>	<b>79475</b>	<b>1170552</b>
Cu (%T)	1.32%	1.25%	1.15%	1.03%	0.98%	0.90%	0.91%	1.03%	0.89%	0.93%	1.01%	1.12%	1.05%
Co (%T)	0.32%	0.29%	0.28%	0.29%	0.27%	0.27%	0.40%	0.48%	0.41%	0.43%	0.47%	0.31%	0.35%

## 6.2. Production of copper and cobalt hydroxide at the Etoile mine hydrometallurgical plant

The production at the SX-EW plant (Etoile Mine) carried out during the entire period from January to December 2022 is as follows:

Production (Tonnes-metal)	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Cumul-22
<b>Cuivre</b>	1174	1081	1029	865	802	564	763	652	773	753	618	829	<b>9903</b>
<b>Cobalt</b>	266	210	209	207	230	155	224	281	282	315	263	212	<b>2854</b>
recuperation Cu	70.50%	78.80%	92.50%	81.82%	83.44%	84.50%	79.9%	81.2%	82.2%	78.8%	80.42%	83.87%	82.93%
recuperation Co	57.7%	61.07%	79.90%	81.23%	105.57%	80.35%	72.02%	79.77%	76.61%	77.08%	75.73%	75.92%	74.87%



The factory's production was particularly disrupted by untimely power cuts and the general situation of the energy deficit in the region.

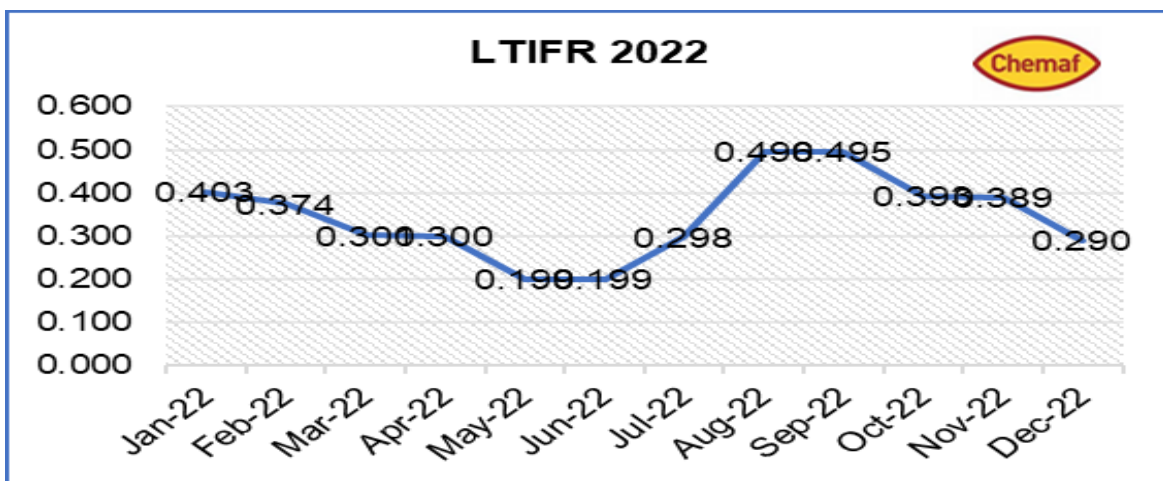
### 6.3. Environment and safety

For the year 2022, CHEMAF SA totaled 9,676,999 free man-hours.

The table below gives us the 2022 annual summary on the safety stats (incidents/accidents):

MOIS	Near miss	Environment	First Aid Incident	LTI	Property Damage	MTI	Major/Fatality
Jan-22	03	00	04	00	04	01	00
Feb-22	05	00	02	00	01	00	00
Mar-22	00	00	00	00	08	03	00
Apr-22	00	01	02	00	02	01	00
May-22	20	01	07	00	04	01	00
June-22	17	01	07	00	04	00	00
July-22	06	00	00	01	04	00	00
Aug-22	00	00	01	02	04	01	00
Sept-22	10	04	02	00	07	01	00
Oct-22	00	00	00	00	08	02	00
Nov-22	01	00	02	00	10	01	00
Dec-22	00	00	00	00	08	1	00
YTD Year 22	61	07	27	03	65	12	00
Total Year 21	12	04	27	06	32	04	00

The frequency rate of accidents with lost time (LTIFR):





## 7. Risk Management

In accordance with the Annex II of the OECD Guidance risks, below table from our risk register document, shows risks assessments and mitigations measures as developed in 2022 for our operation. The risk rating was found to be *low* or *moderate* for all the risks identified. We continue to strengthen and roll out our due diligence process across all our operations and those of third-party suppliers where applicable.

At Etoile, in 2022, we have not sourced any ore from ASM operations and thus, the risks associated with ASM activities are non-existent.



#	Risk Name	Risk Description	Cause(s) Description	Consequence(s) Description	Current Controls & Action(s)	New Controls & Action(s)	RESIDUAL RISK RATING - AFTER NEW CONTROLS			
							Consequence rating(1-5)	Probability rating(1-5)	Risk Rating	Risk Level
1	Extraction, Transport or trade of minerals	Human rights abuses	Human right violations	Responsible mineral sourcing contravention to OECD Annex II requirements	1. Voluntary Principles on Human rights and security adopted at Chemaf SA. 2. The VPHRS have been include in various policies and procedures on Chemaf SA 3. Training and awareness of the VPHRS are conducted to Chemaf employees as well as security personnel	1. Internal and external audits on Human Rights policies and procedures at Chemaf	5	1	5	Moderate
2	Public or private security forces	Human rights abuses	Human right violations	Human Rights contravention to OECD Annex II requirements	1. Voluntary Principles on Human rights and security adopted at Chemaf SA. 2. The VPHRS have been include in various policies and procedures on Chemaf SA 3. Training and awareness of the VPHRS are conducted to Chemaf employees as well as security personnel and public security forces employed by Chemaf.	1. Internal and external audits on Human Rights policies and procedures at Chemaf	5	1	5	Moderate
3	Community Relations	Interference with operations by community stakeholders due to dispute with Chemaf. Security risk to employees and contractors	Community dispute	Stoppage of supply chain deliveries as well as product shipment	1. Infrequent engagement pre-Covid with forums held 2. Relocation initiatives	1. Stakeholder engagement program 2. Public Grievance system implementation 3. Good community relations and management	4	1	4	Low
4	Social Governance	Non compliance to social legal requirements as well as world best practice	Compliance to Local government laws and regulations	Inadequate social mitigation	1. Engagement with communities 2. Grievance mechanism	1. Implementing World Bank and Equator Principles to achieve international social management standards	4	1	4	Low
5	Labour Relations	Interference in operations by labour and labour brokers Security risk to employees and contractors	Labour brokers not paying employed labour	Operation interference causing delays to the business plan execution	1. Tender process 2. Contract compilation	1. Contractor management 2. Monthly Contract obligations reviews 3. Regular Contractor engagement	4	1	4	Low
6	Contractor Management	Interference in Operation execution Security risk to employees	Contract dispute Contract companies not paying their employees	Operation interference causing delays to the business plan execution	1. Tender process 2. Contract compilation	1. Contractor management 2. Monthly Contract obligations reviews	4	1	4	Low
7	Child Labour	Any form of forced or child labour for the mining, transport, trade or sale of ores	Breach of DRC Labour Law Non-compliance to Chemaf Child Labour Policy	Forfeit of financial support from financing entities Reputational Damage	1. Compliance to the Chemaf Child Labour Policy	1. Reference to the Child Labour Policy in the Procurement Policy 2. Inclusion of the Policy in the Procurement Contracts with all Stake holders 3. Scheduled audits will be planned to review the compliance to procedures, policies and standards	5	1	5	Moderate
8	Forced Labour	Any form of forced labour for the mining, transport, trade or sale of ores	Breach of DRC Labour Law Non-compliance to Chemaf Labour Policy	Forfeit of financial support from financing entities Reputational Damage	1. Forced Labour Policy	1. Reference to the Forced labour Policy in the Procurement Policy 2. Inclusion of the Policy in the Procurement Contracts with all Stake holders 3. Scheduled audits will be planned to review the compliance to procedures, policies and standards	5	1	5	Moderate
9	Slave Labour	Any form of slaved labour for the mining, transport, trade or sale of ores	Breach of DRC Labour Law Non-compliance to Chemaf Labour Policy	Forfeit of financial support from financing entities Reputational Damage	1. Modern Slavery Policy	1. Reference to the Modern Slavery Policy in the Procurement Policy 2. Inclusion of the Policy in the Procurement Contracts with all Stake holders 3. Scheduled audits will be planned to review the compliance to procedures, policies and standards	5	1	5	Moderate
10	Direct and in-direct support to non-state armed groups	Reputational impact Legal implications Human rights violations	Security of permit concessions	Reputational impact Legal implications Human rights violations	1. Provision of security forces according to legal requirements for securing the mining concessions	1. External and internal auditing on security management 2. Stakeholder engagement to determine any Human Rights deviations.	4	2	8	Moderate
11	Bribery & fraudulent misrepresentation of the origin of minerals	Reputational impact Legal implications Human rights violations	Non disclosure of ore supply chain	Reputational impact Legal implications Human rights violations	1. Responsible sourcing initiatives 2. RMI audits	None	4	2	8	Moderate
12	Money laundering	Reputational impact Legal implications Human rights violations	Reputational impact Legal implications Human rights violations	Reputational impact Legal implications Human rights violations	1. Implementation of SAP	None	4	1	4	Low
13	Payment of taxes, fees & royalties due to governments	Legal requirements	Legislation requirements	Legislation requirements	1. Compliance with DRC Mining Code 2. Compliance to regulatory requirements of the DRC	None	3	1	3	Low



## **8. A look ahead**

This 2022 responsible sourcing report is the third published by Chemaf and is part of our efforts to ensure our due diligence activities comply with industry requirements. Going forward, we are committed to continually improve our public reporting on supply chain due diligence.

Authorised Signatory