Husab Mine

Bi-annual Environmental Report for Swakop Uranium's Husab Mine and Associated Linear Infrastructure

Period of: July - December 2022

DOCUMENT INFORMATION

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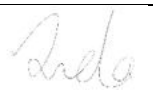
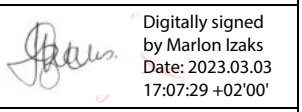
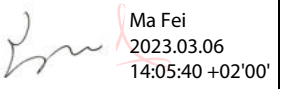
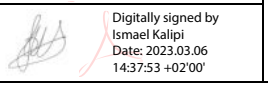
Drafted by:	James Mutenda	**Signature**		**Date**	03/03/2023
Environmental Superintendent:	Marlon Izaks				
Head of Department, SSHER:	Ma Fei				
Approved by:	Ismael Kalipi				

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1. INTRODUCTION

Swakop Uranium (Pty) Ltd (SU) holds ML171 for the Husab Uranium Mine. The mine is situated in the northern most part of the Namib Naukluft National Park (NNNP), about 12 km south-east of Arandis. The Husab Mine will potentially be the second largest “uranium only” mine in the world. Some 15M tonnes of ore will be mined per annum and will be processed on site to produce uranium oxide powder (U_3O_8) for export from Walvis Bay.

Taurus Mineral Ltd (Taurus) of China owns 90% of Swakop Uranium, with Epangelo Mining Company Limited, a Namibian-state owned mining company, having a 10% interest in Swakop Uranium.

This bi-annual environmental report covers environmental aspects of activities conducted by Swakop Uranium on ML 171 and associated linear infrastructure for the period January until end of July 2022. It reports on Swakop Uranium’s general environmental management and reflects operational and contractors’ environmental performance.

This report also describes progress regarding the construction, exploration and mining operational activities associated with the Husab Mine and process plant as well as the linear infrastructure. The information in this document is based on data received from the relevant Swakop Uranium departments and stakeholders.

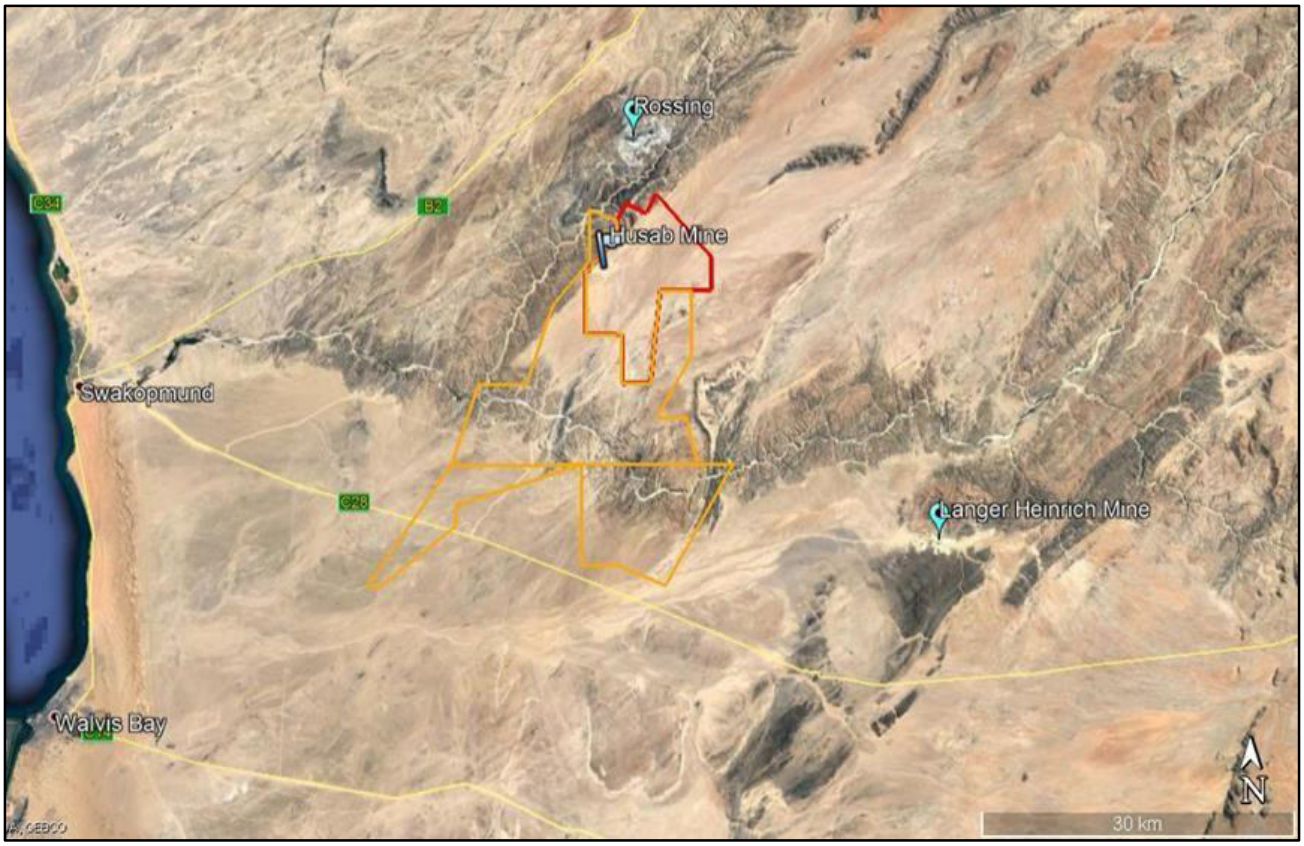


Figure 01: Locality map indicating the Husab Mine Site in correlation with surrounding infrastructure and neighboring mine sites and towns.

2. LOCAL SETTING

The Husab Mine is situated within a unique area of the Namib Naukluft National Park (NNNP) and in close proximity to the Dorob National Park (DNP), about 40 km east of the town of Swakopmund in the Erongo Region of western Namibia.

The mining license (ML 171) covers an area that lies between the ephemeral Swakop and Khan rivers (Figure 2). The Khan River is the main tributary to the Swakop River and their confluence is situated approx. 13 km southwest of the site. A surface water divide splits the area so that part of the site drains towards the Khan River and part drains via a number of small natural water channels (washes) towards the Swakop River.

The site is located on sand and gravel plains comprising alluvium that has variably cemented through calcretisation, although this cover falls away along a northeast-southwest trending scarp line, as the terrain drops down to the Khan River. To the northwest of the scarp and to the very south of the site (where the plain drops down to the ephemeral rivers), water erosion has formed a Badlands environment showing elements of extreme topography, cut by deep river valleys. Several dolerite dykes are intruded that form ridges (some rising 70m above the gravel plains). The slope of the catchment area is generally 1:125 (0.8%). The slope steepens within the mine site area to 1:110 (0.9%) (AQUA TERRA, 2010).

3. PROGRESS OF ACTIVITIES

1. PLANNING & PROJECTS

See below information for the projects implemented for the reporting period: **Table 01: Major projects list**

No.	Project Name	Project Description (brief)
1	Construction of a Sky-way	Still ongoing

2. OPERATIONS

Environmental Clearance Certificate (ECC) and Environmental Management Plan (EMP) Status

During the reporting period, all Environmental Clearance Certificates were valid, no renewals required. The construction of the river diversion channel due to the waste rock expansion had been completed and officials from the government were impressed with entire project.

Processing Plant

1. **Production**

Year to Date (YTD) total tones mined by the end of December 2022 was at 97,395,224 tonnes (t) which was less than the budgeted one of 99,999,999 tonnes (t), which then has a variance of about -3%. Ore tonnes mined (t) was 10,616,759, ore grade mined (ppm) was 553.769 and mined U3O8 in ore tonnes (t) was 5,879 respectively. The water and diesel consumption are detailed below. Water inflow to site for the reporting period was 3,668,043 m^3 while the diesel consumption was 39, 530,116.00l.

2. Tailings Storage Facility General Operational Feedback

Quarterly Tailings Management Review Meeting will be held in March 2023 between SU, SLR and MTO. Key issue to be discussed is the high phreatic level in the dam which is influencing the seepage leak through the starter wall near 2020-SP-004.

The following key actions were raised by SLR for SU and MTO to execute to minimize the solution seepage:

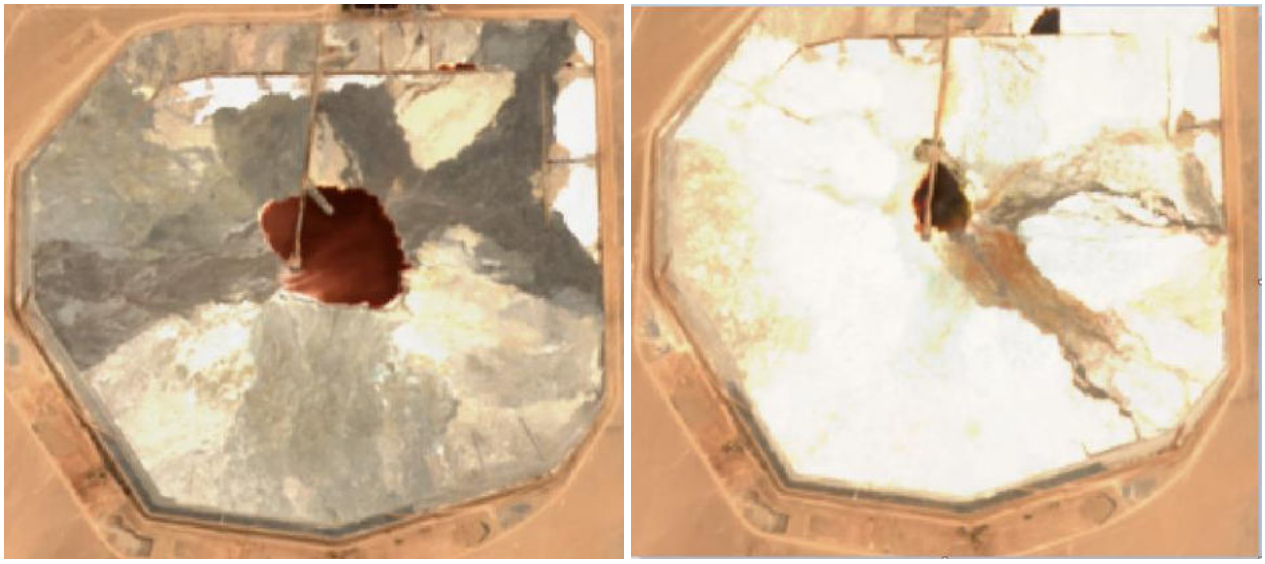
- Install and commission the Independent Decant Return Pipeline to maximize solution return from TSF: **Completed.**
  Cycle the deposition to deposit in thin layers (~ 250mm±50mm): **Implemented**
- Improve availability and reliability of the booster station pumps: **Implemented**
- Commission additional 20 dewatering boreholes: **Completed.**
- Unblock all blocked or clogged underdrains: **Completed and ongoing for sustainability**
- Maintain decant pool footprint below 10 hectares: **Completed**

Additional projects carried out by SU include:

- Procure additional pumps for seepage and upgrade seepage return system: **Pumps installed (5 pumps installed, 2 outstanding)**
- Upgrade return water dam pumps: **Ongoing**
- Construction of additional raw water pond: **Completed**

The following actions are assisting to improve the water balance across the plant and particularly for the TSF:

- Commissioned the 3rd line from return water dam to the decant tank, this will improve decant return from 750 to 1 200m^3/hr which is completed. Average decant return currently at 1 200m^3/hr.
- Fast track liner repair jobs to allow for deposition flexibility and optimization. All liner repairs completed. All deposition points are available on TSF Line 1 except W2, W3 & W4 which are next to the naked liner. All deposition points are available on TSF Line 2 except E3, E4, E5 & E6 which are next to the naked liner. Deposition on the naked liner will occur hydraulically from within the dam and not from these deposition points.
- The plant to be operated at high throughput rate as much as possible to minimize solution losses to the TSF and reduce Raw Water intake. Solution losses to TSF reduced from 1900 m^3/hr to 1600 m^3/hr.
- Review solution measurement points and install flowmeters in identified areas. This should help in improving the water accountability and will lead to better solution management. 50% of the flowmeters has been installed.



(a) (b)

Figure 02: Tailings Storage Dam Pool Control (a) First Half of 2022 (H1) & (b) Second Half 2022 (H2)
The figure above clearly shows a decrease in pool size from H1 2022 (Fig a) to H2 2022 (Fig b), hence the high return recovery achieved in H1 from 50% to 57%, respectively.

Telecommunication Tower(s) and Power Line Infrastructure(s)

The Telecommunications infrastructure and Power line at the Husab Mine has been maintained well according to the ECC and EMP requirements. Various measures are continually enforced to ensure there are no animal

fatalities or negative impacts on the environment. Routine monitoring surveys and/or inspections within each quarter are conducted by SU Environmental staff personnel of these sites. No incidents were recorded for the Telecommunication Tower(s) and the Husab – Lithops Sub-Station power line for the period under review. Various earmarked 33kV power line structures on site were rerouted underground, particularly at crossings. This improvement project is still ongoing.

3. MINING

Mining Operations performance for the second half of 2022 was on target, with total production and ore tons higher than budget by 1% and 2% respectively.

Emulsion Manufacturing Plant

Like many other mines, SU's emulsion manufacturing plant at Husab Mine stores and then mixes relatively inert chemicals (ammonium nitrate and sodium nitrate) and oils (used diesel and machine oil) to produce an emulsified product for use in blasting. The product from the plant is a non-explosive yellowish paste. It was projected that during the initial three years of operation the Husab Mine will require 66 325 t of bulk explosives and 622 568 units of explosives accessories. At peak production the project will consume 52 262 t of bulk and 488 063 units of explosives accessories per annum.

The emulsion plant is used by our blasting contractor, Beifang Mining, which is used to manufacture emulsion for our open pit blasting activities. Drill and Blasting activities continued as per normal during the reporting period.

Pit Dewatering

The abstraction permit No.11 523 for pit dewatering and dust suppression purposes was issued on the 14 October 2020. Quarterly reporting is conducted as required. During the second half of 2022 the operations dewatered/abstracted 1075 Kiloliters (1075 Cubes) from the pit and the water was mainly utilized for dust suppression.

River diversion project

Swakop Uranium (SU)'s mining department embarked on the redesign the Waste Dump facility at which required extending the footprint area on the eastern side of the waste dump. The existing Waste Dump facility with a footprint of 6.5km^2 was approved following the 2013 Environmental Impact Assessment (EIA). The extended footprint will cover across a 5km reach of the Husab River (an ephemeral drainage line) which will reduce the dump height from 270m to 150m. the benefits of these are:

1. Ensuring geotechnical stability increasing the waste dump footprint and reducing the height.
2. Improving equipment productivity, production & fuel usage (reduce carbon footprint).
3. Reducing visual & dust pollution and surface washing.

Figure 1: The Husab Waste Dump Amendments

In June 2021 the Husab operations Environmental Management Plan was amendment to allow for the existing river to be diverted to accommodate the expansion of the waste dump footprint. The Construction of river diversion commenced in June 2022 and was completed in October 2022. Inspection was conducted by MEFT in November and approval to commence dumping was granted in December 2022.

Trolley Project - Trial

The trolley line project was initiated with the aim to reduce diesel costs by reducing diesel consumption and reducing the operations carbon footprint by switching the Haul trucks engines from diesel to electric power when going up the ramps installed with Trolley assist infrastructure.

or the period July - December 2022, the actual commissioning of the two haul trucks on the trolley assist was conducted. This test provided the actual savings on fuel and improvements in the hauling efficiencies, which will be used to motivate the investments for long term trolley line projects in 2023.

4. WORKFORCE, HOUSING & TRAINING

1. CURRENT WORKFORCE

Swakop Uranium is the second largest employer in the Namibian mining industry, closely aligned with the job creation target as per the Namibian Government National Agenda. The company has under 2000 contractor related staff, however not all of this workforce is on the mine site on a daily basis. The permanent contractor staff amounts to approximately 400 employees. Total workforce end of Dec 2022 was 1674 while the percentage % of Namibian employees was 96.18% and total number of male was 1470 and female was 204 employees end of Dec 2022.

2. HOUSING

SU business partner, Welwitschia Catering Services, has been assigned to manage and maintain the Construction Camp. This includes meal preparations which all employees have access to during lunch periods. SU acquired approval from the Minister of Environment, Forestry and Tourism, for an extension to operate Husab Village for until March 2023.

3. TRAINING & AWARENESS

Swakop Uranium continues to maintain a weekly training schedule, which includes training for both SU and contractor employees. The Training Section trained in total 63 and refresher 1 for SU, 1156 full induction and refreshers 23 for Contractor employees respectively.

The training area was upgraded, for Fire Fighting Training, also erected scaffolding to do practical training for working at Heights and a Tank for confined space training.

For each month in the year, an Environmental Slogan was sent out mine wide and to all contractors. All slogans are shared at all safety platforms and training records are kept as proof of details shared.

5. GENERAL ENVIRONMENTAL MANAGEMENT

1. ENVIRONMENTAL SECTION

At the end of the reporting period, the Environmental Section had 6 day-shift workers on permanent employment and three vacancies. The Senior Environmental Officer, Environmental Field Assistant as well as the Environmental Superintendent. The Section has two main functions, being; Compliance Monitoring and Management, and Biophysical & Biodiversity Monitoring and Management.

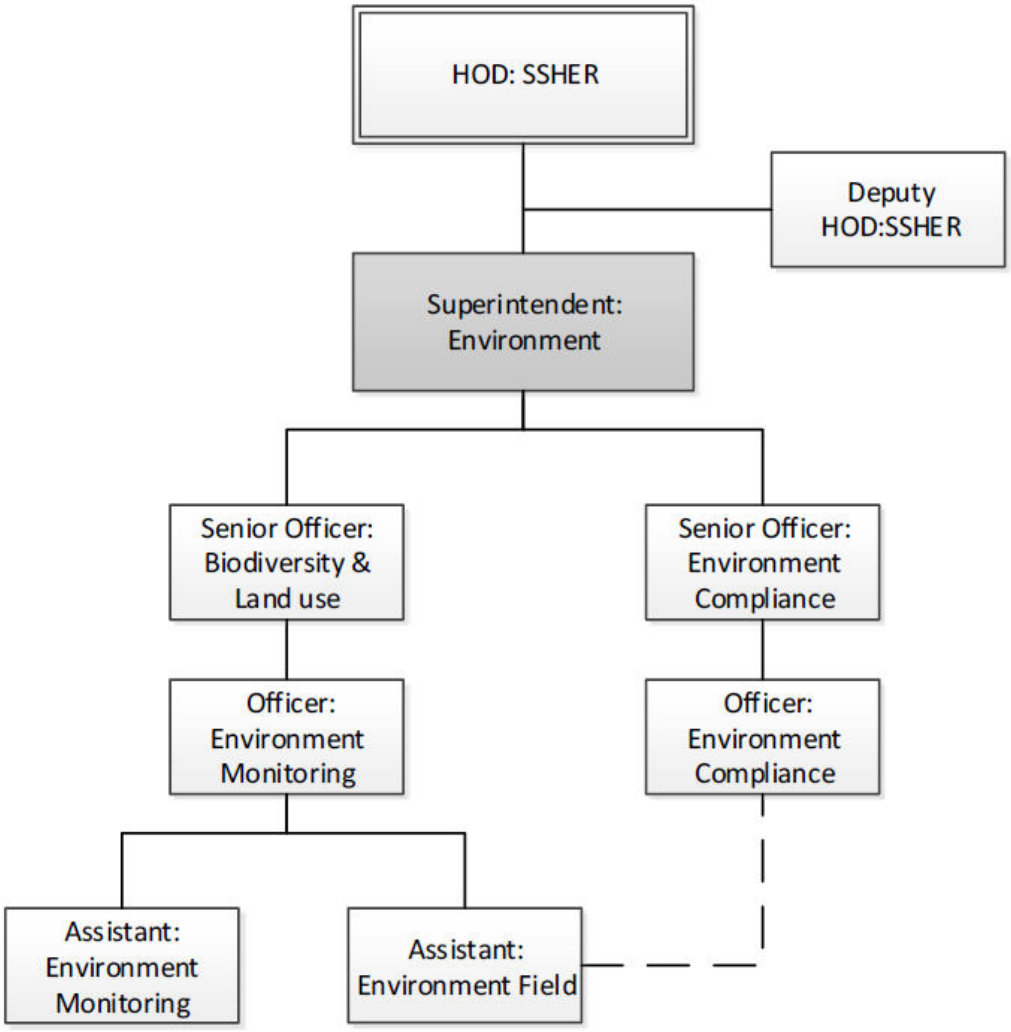


Figure 04: Organogram depicting the structure of the SU Environmental Section under SSHER

2. ENVIRONMENTAL MANAGEMENT SYSTEM

- Swakop Uranium has successfully implemented the certified Integrated Management System (IMS) to ensure that the quality of our products, company performance, personnel health and safety, environmental protection are in line with the Company's strategic objectives.

- Swakop Uranium is ISO 14001:2015 (Environment), ISO 9001:2015 (Quality) and ISO 45001:2018 (Health & Safety) certified.
- Concluded surveillance audits for ISO 9001:2015 (Quality) and ISO 14001:2015 (Environment) standards. Have also successfully transitioned from OHSAS 18001:2007 to ISO 45001:2018 (Occupational Health and Safety) and received ISO 45001:2018 certification during the month of May 2021 amidst these trying times.
- Due to the COVID-19 pandemic situation continuing in the country, no systems related or ICAM training was provided during the reporting period.

3. AUDITS & INSPECTIONS

In accordance to the SU Environmental procedures, a total of 3 internal environmental audits per quarter and 12 internal environmental inspections per month, are to be conducted. These are distributed amongst the section and also used as a tool to develop the skills with regards to environmental compliance of the junior positions within the Environmental Section at Swakop Uranium. Visible Felt Leadership inspections with End User Departments are another tool that is used to check compliance in the field to the EMP(s). Daily informal site inspections are also carried out. Corrective actions for deviations are implemented by the respective departments and contractors, with the Environmental Section facilitating the process. The formal inspections planned for 2022 as per the schedule for the reporting period was influenced by the, staff distribution and vacancy within the Environmental Section team.

Due to the potential risks associated with the Tailings Storage Facility, weekly inspections and site visits are conducted between the SSHER and operational teams however, the frequency of the inspections has decreased due to the controls in place. Areas of concern, recommendations and follow ups on actions are reviewed. There continues to be a large focus on the TSF, with constant engagement regarding the areas of improvement to be implemented as per the emergency action plans developed for the high risk areas of concern. The Engineering Consultant, SLR Environmental Consulting is also readily involved. Some of the repeat findings for the reporting period pertains to the following aspects; spill management and resource wastage.

6. ENVIRONMENTAL MANAGEMENT PERFORMANCE

1. ENVIRONMENTAL INCIDENT SUMMARY (INTERNAL & EXTERNAL REPORTING)

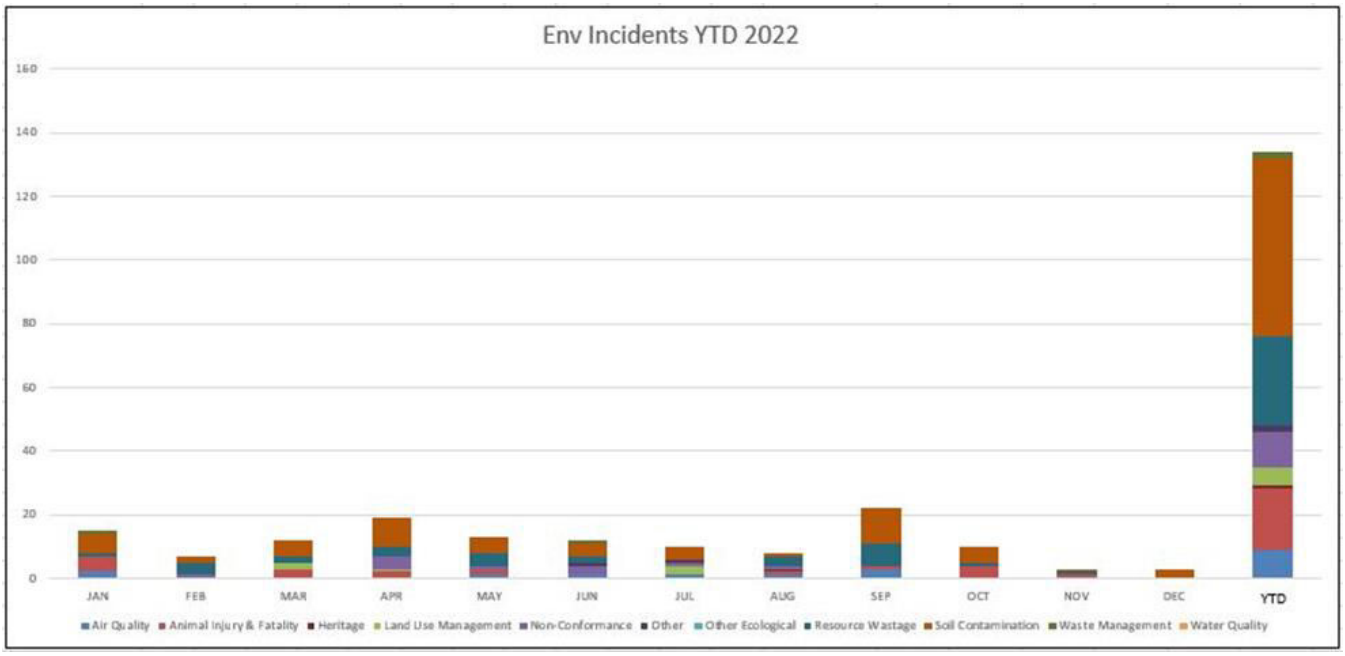


Figure 05: Incident Summary for all incident levels per Category/Type for Jul – Dec 2022 included.

Most of the internal environmental incidents recorded year to date (YTD) in Figure 5 above pertain to lower level incidents that are contained to the local incident site (Level 1). At the end of December 2022, 134 incidents were recorded. The majority of internal incidents relate to soil contamination events, followed by Resource Wastage as this continues to be a recurring challenge. Soil Contamination incidents mostly relate to unexpected equipment failure/damages, pipe bursts and infrastructure overflows. The majority of the animal deaths occurred on the permanent access road. All fauna related incidents are reported directly to the Namib Naukluft National Park and Dorob National Park Wardens in a quarterly animal summary report and immediately for all larger fauna incidents. All reportable incidents to government are further elaborated on in the section below.

2. FEEDBACK ON EXTERNAL REPORTABLE INCIDENTS (LEVEL 2 OR 3)

The following Level 2 environmental incidents were recorded during the reporting period.

1. level 2 - Solution splash over bund wall via TK-002.

7. RESOURCE USAGE

Table 02: Total Consumption per Resource listed for July – Dec 2022

Diesel	39, 530,116.00	liters
Water	3,668,043	m³

Resource usage calculations are indicative of total consumption for all activities under Swakop Uranium. The water category shows less consumption in comparison to the first half of 2022 while the diesel consumption went a bit high.

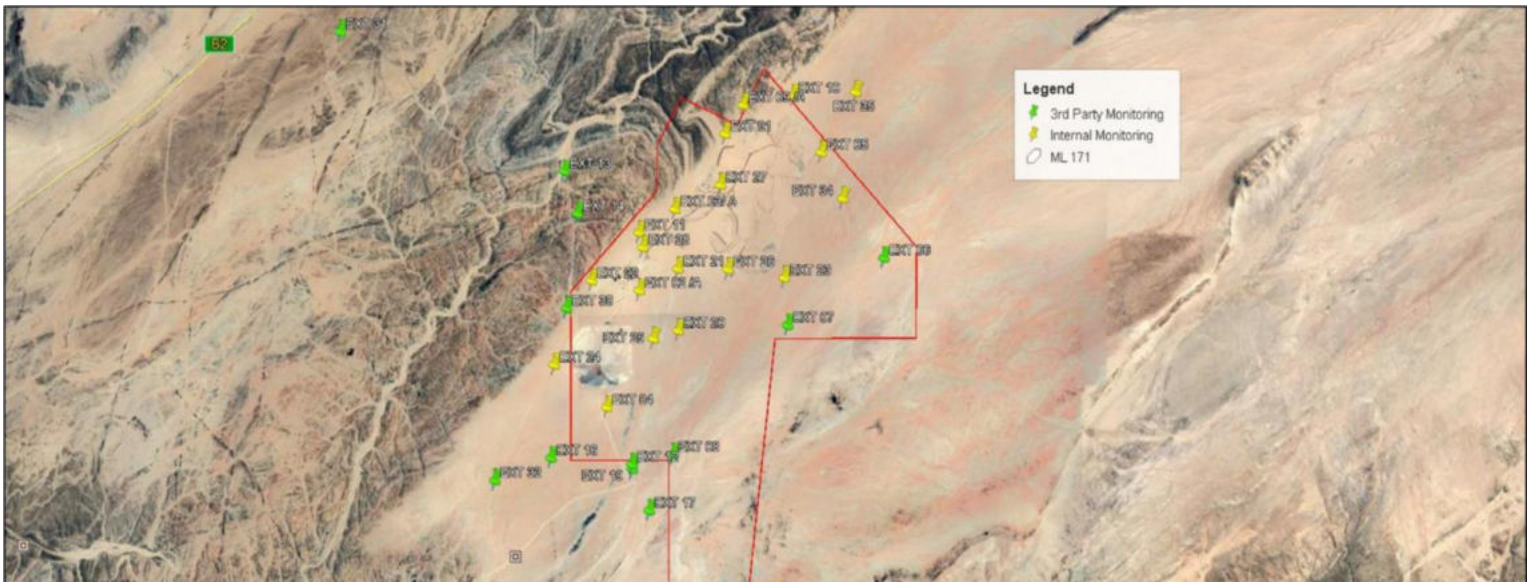
8. ENVIRONMENTAL MONITORING

1. AIR QUALITY

Swakop Uranium conducts dust and passive gaseous monitoring which is analyzed and interpreted by Airshed Planning Professionals (Pty) Ltd & Skyside. This section reports on dust fall, thoracic particulate matter (PM10/2.5), passive gases (VOCs, HF, NO_2, SO_2) and acid mist concentrations.

Dust fall is measured through the collection of fallout dust buckets and reported on a monthly basis as mg/m²/day. The monitoring network comprises of 35 single dust fall units, with an internal investigation ongoing for the area around the Primary Crusher and ROM. The dust fallout rates are screened against the South African National Dust Control Regulations (NDCR) of 600 mg/m²/day for residential areas and 1 200 mg/m²/day for non-residential areas. Containers of a standard size and shape are prepared and sealed in the laboratory and then opened and set up at appropriately chosen sites so that particulate matter can settle into them for periods of 30 ± 2 days.

Figure 06 above: Air Quality Monitoring Network/Points and Type of Monitoring



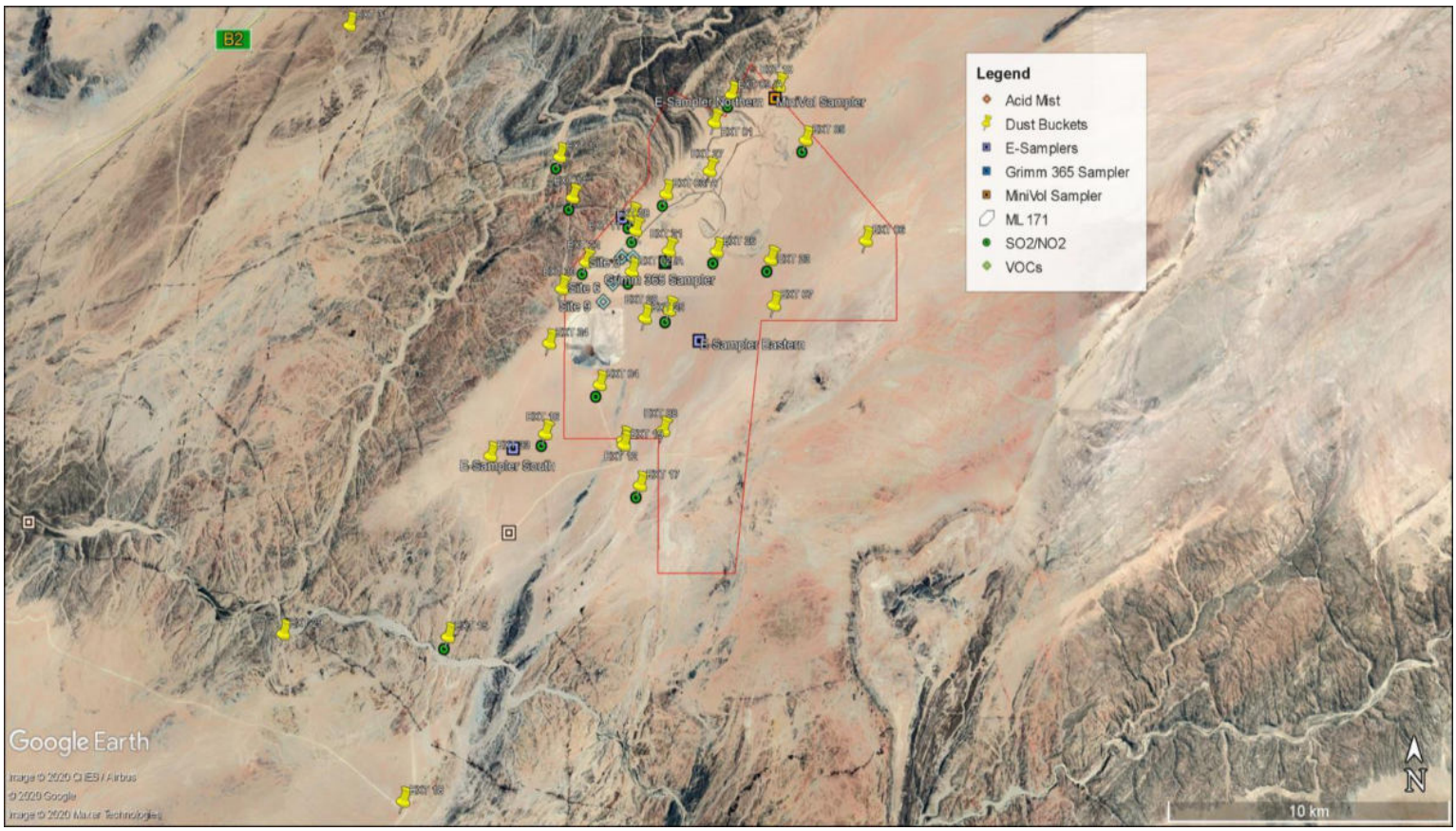


Figure 07: Dust Fall out Internal Monitoring and Third Part Compliance Monitoring locations

PM10 Concentrations

Data availability on PM10 from the three E-Samplers were partly available for the period in review. PM10 concentrations from the E-samplers were adjusted by multiplying the calculated K-factors.

Table 03: Compliance summary of E-sampler data

Awaiting third party compliance report for 2022.

Figure 06: Daily averages of PM10 concentrations as recorded by the E-samplers

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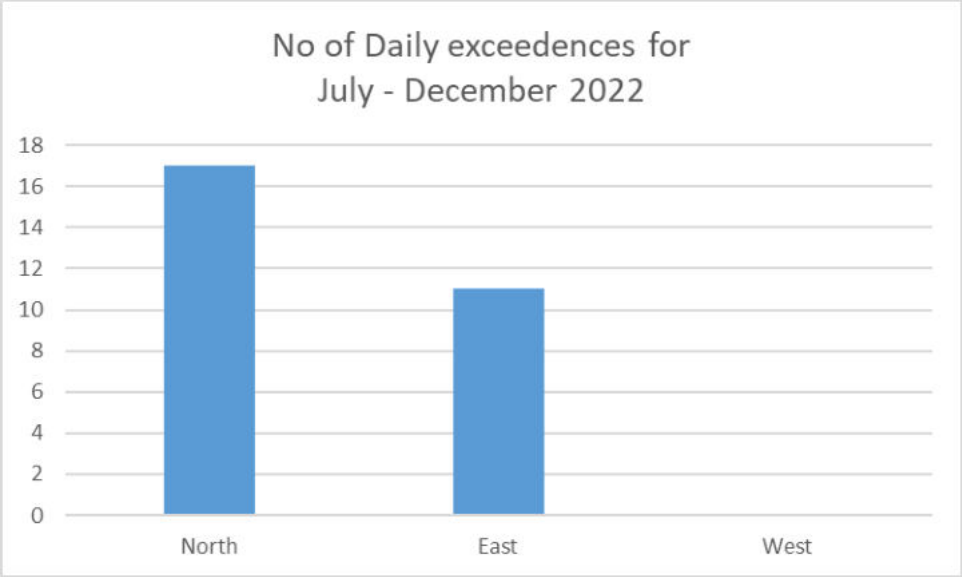

Figure 07: No of daily PM10 Exceedances for 2022

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Figure 08: Polar plots of daily average PM10 concentrations as a function of wind speed and direction

Dust fallout Rates

The Husab Mine July to Dec 2022 monitoring results indicate low dustfall rates at most sampling sites except for EXT 27 and EXT 28.

Ext 27 exceeded the industrial limit (2 400 mg/m²/day) and the non-residential limit (1 200 mg/m²/day) for six non-consecutive months, and EXT 28 exceeded the non-residential limit for four consecutive months. Dustfall rates on average increased at all locations when compared to the first half of 2022

The highest dustfall rate (4 192 mg/m²/day) was sampled at EXT 27 in September 2022, which is also the month with the highest average from all the dustfall units.

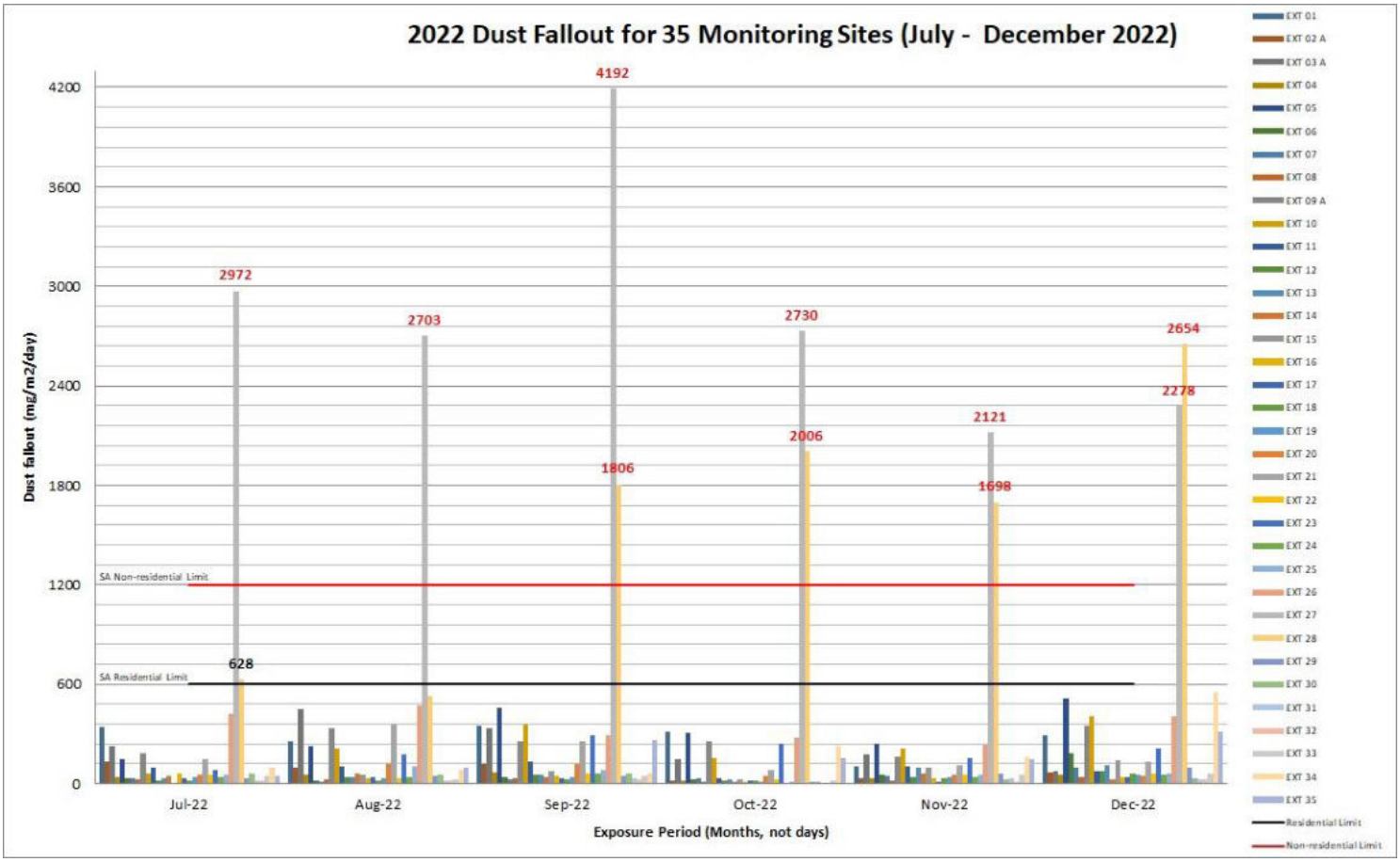
2022 Dust Fallout for 35 Monitoring Sites (July - December 2022)
Dust fallout (mg/m2/day)
4200
3600
3000
2400
1800
1200
600
0
2972
2703
4192
1806
2730
2006
2121
1698
2654
2278
628
SA Non-residential Limit
SA Residential Limit
Jul-22
Aug-22
Sep-22
Oct-22
Nov-22
Dec-22
Exposure Period (Months, not days)
EXT 01
EXT 02 A
EXT 03 A
EXT 04
EXT 05
EXT 06
EXT 07
EXT 08
EXT 09 A
EXT 10
EXT 11
EXT 12
EXT 13
EXT 14
EXT 15
EXT 16
EXT 17
EXT 18
EXT 19
EXT 20
EXT 21
EXT 22
EXT 23
EXT 24
EXT 25
EXT 26
EXT 27
EXT 28
EXT 29
EXT 30
EXT 31
EXT 32
EXT 33
EXT 34
EXT 35
Residential Limit
Non-residential Limit

Figure 09: Dust deposition rates for the reporting period

Average dust fallout per month (mg/m2/day)			
	Whole Network	Compliance	Internal
Month	(35 sites)	(16 sites)	(19 sites)
Jul-22	182	33	307
Aug-22	200	34	339
Sep-22	294	43	504
Oct-22	209	34	372
Nov-22	190	47	311
Dec-22	278	71	454

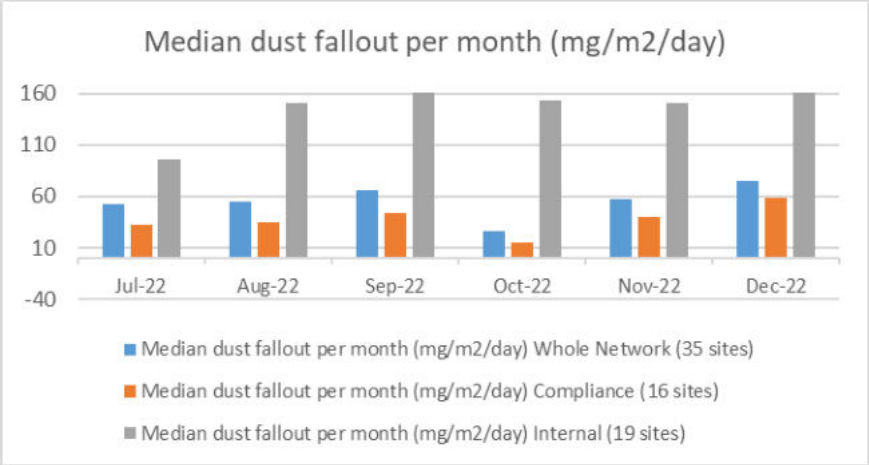

Figure 10: Median dust fallout per month for 2022

Passive Sampling Results

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Table 04: Gasses sampling values for July to December 2022

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Table 05: Acid Mists monitoring values for July to December 2022

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Volatile and Non-Volatile Acids Results

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Table 06: Summary of results for the gasses monitored for period in review

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Table 07: Adopted Air Quality Standards and Evaluation Criteria for the Husab Mine

Adopted evaluation criteria for the Husab Project (subject to change)			
Pollutant	**Averaging Period**	**Selected Criteria**	**Origin**
$PM_{2.5}$	24-hour Mean (µg/m³)	37.5 (a)	WHO IT3 & SA Standard
	Annual Mean (µg/m³)	15	WHO IT3
PM_{10}	24-hour Mean (µg/m³)	75 (a)	WHO IT3 & SA Standard
	Annual Mean (µg/m³)	30	WHO IT3
Dustfall	30-day average ($mg/m^2/day$)	600 (c)	SA NDCR & Botswana Residential limit
		1200 (c)	SA NDCR & Botswana Non-residential limit
		2400	Botswana
SO_2	1-hour Mean (µg/m³)	350 (a)	EC Limit & SA Standard (no WHO guideline)
	24-hour Mean (µg/m³)	50 (b)	WHO IT2 (seen as a per 40% of the SA and EC limits)
	Annual Mean (µg/m³)	50	SA Standard (no WHO guideline)
NO_2	1-hour Mean (µg/m³)	200 (b)	WHO AQG & EC & SA Standard
	Annual Mean (µg/m³)	40	WHO AQG & EC & SA Standard
VOC (Benzene)	Annual Mean (µg/m³)	5	SA Standard (no WHO guideline)
VOC (Toluene)	Hourly Mean (µg/m³)	640	TCEQ Short-term ELS
VOC (Ethyl Benzene)	Hourly Mean (µg/m³)	2560	TCEQ Short-term ELS
VOC (Xylene)	Hourly Mean (µg/m³)	350	TCEQ Short-term ELS
HF (Hydrogen fluoride)	1-hour Mean (µg/m³)	18	TCEQ Short-term ELS
	Annual Mean (µg/m³)	8.7	TCEQ Short-term ELS

Notes: (a) Not to be exceeded more than 4 times per year (SA). (b) Not to be exceeded more than 3 times per year. (c) Not to be exceeded more than 3 times per year or 2 consecutive months.

Conclusions and Recommendations

Conclusions and Recommendations on Air Quality monitoring is inconclusive pending verification and confirmation of compliance monitoring report from the independent consultant

2. GROUNDWATER

The Husab Mine groundwater monitoring network is divided into 4 domains, as seen in the table below. During the course of 2021, eleven (11) monitoring boreholes were drilled around the extension of the Waste Rock Dump (WRD) and west of the Processing Plant:

• Nine (9) were shallow boreholes drilled, where eight (8) is in the Husab drainage channel alluvium and one downstream of GW30, while

• Two (2) were deep boreholes that intersected the regional bedrock aquifer. These were added to the biannual sampling campaigns (SLR, 2022)

The below section covers the groundwater monitoring results from the period July 2022 to October 2022. The external third party monitoring is conducted by SLR Environmental Consulting. This report is basedon groundwater level and quality results for the period above, as well as comparing these to the full time-series data that has been collected since 2010 when monitoring commenced within the four domains (Khan Dome Domain, Welwitschia Husab Domain, Grey Granite Domain, Alluvial Aquifer Domain) defined at Husab Mine.

Table 08: Hydrological Setting of each Domain

Domain	Hydrogeological Unit	Infrastructure
Khan Dome	Anticline exposing gneiss of the Abbabis Metamorphic Complex locally covered with Quaternary Sediments as well as Damara Supergroup calc-silicate rock from the Khan Formation: Very low permeability	Tailings Storage Facility and western side of Processing Plant
Welwitschia / Husab	Syncline/Anticline comprising mainly Damara age schist, marble, limestone and dolomite of the Karibib, Chuos and Rössing Formations. Low to medium permeability	Main mining areas with ore deposits (alaskite intrusions), as well as the eastern side of the Processing Plant.
Grey Granite	Damara age granite and gneiss: Very low permeability	Waste Rock Dump
Alluvial Domain	Alluvial sediment, sand and gravel: medium to high permeability	Abstraction boreholes

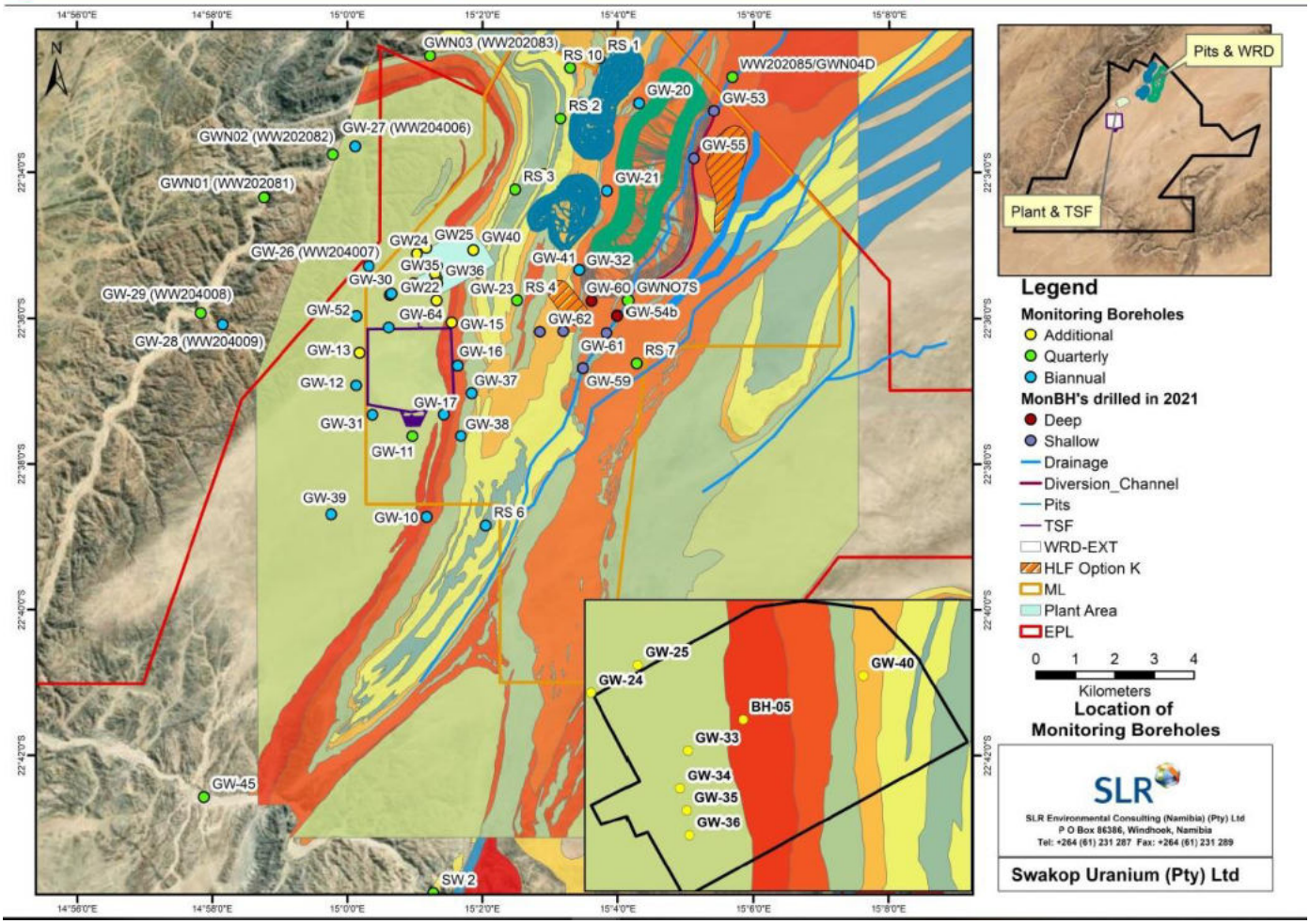
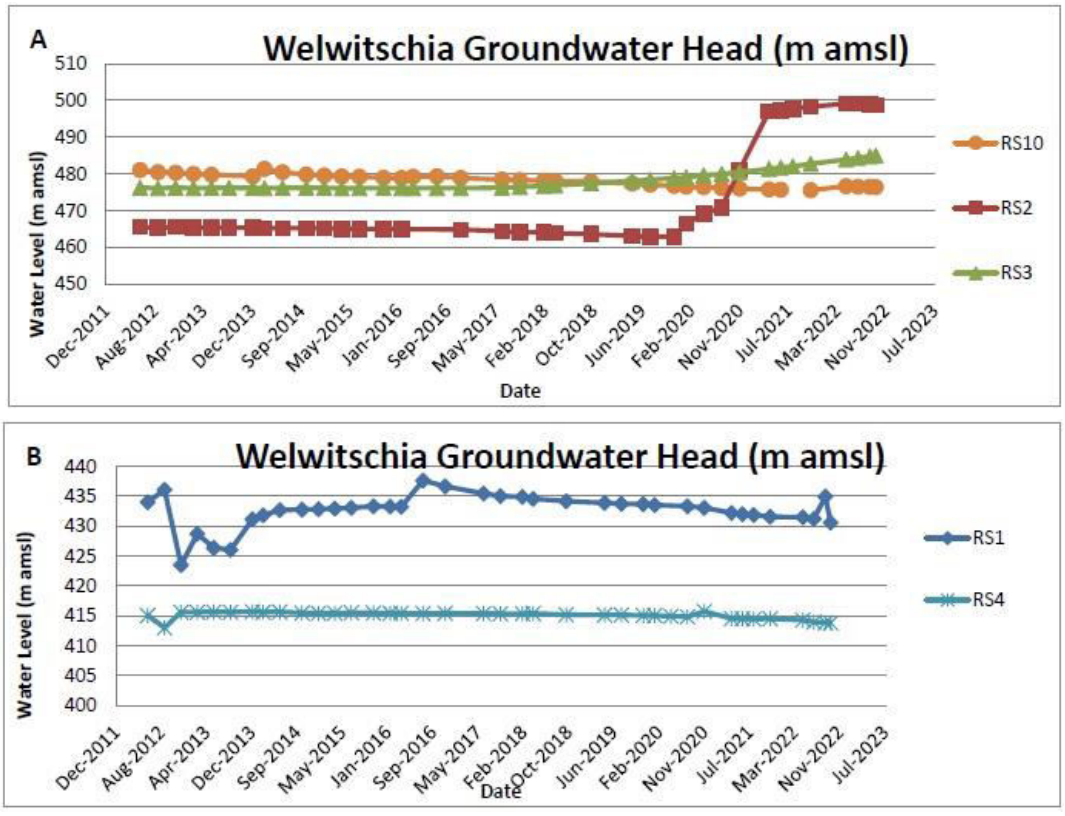


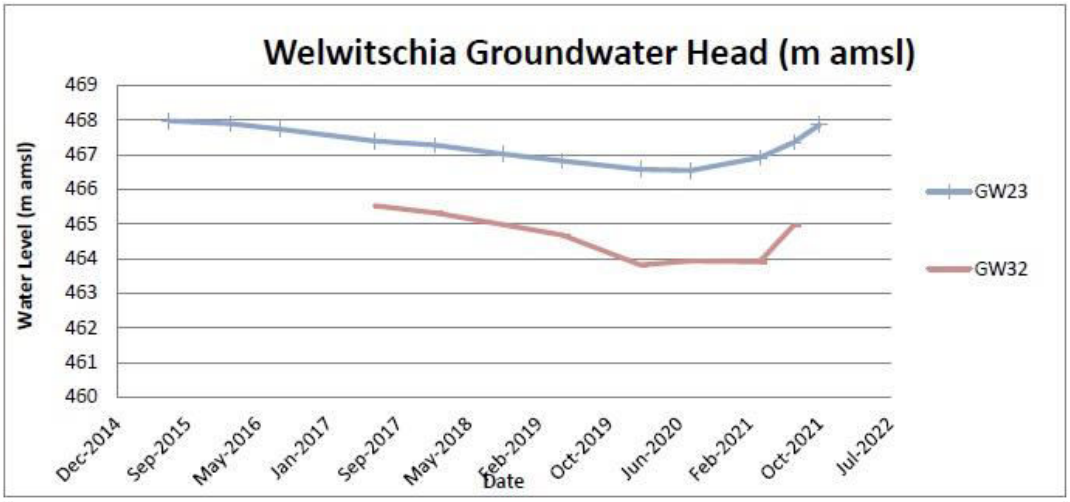
Figure 11: Groundwater Monitoring Network at Husab Mine (ML171 & EPL3138)

8.2.1. Welwitschia Husab Domain

- Sharp groundwater level rise was observed from 2020 in RS2 and RS3, west of Pit Zone 1; the trend continues slightly by May 2022. From December 2019 to May 2022, RS2 levels rose significantly by 36m while RS3 rose by 5m. Further, water level rise of 1m amsl was observed in RS10 from November 2021.
- RS1 and RS4 maintained a slight decline in groundwater levels, However, RS1 displayed a rapid rise in September 2022, which is seen as an error since the water levels returned to its original trend in October 2022.
- Relevant Major-ions levels fluctuated within the limits (indicated in green) determined for the boreholes.

Relevant Metals were observed to be within limits.




Welwitschia Groundwater Head (m amsl)
Water Level (m amsl)
469
468
467
466
465
464
463
462
461
460
Dec-2014
Sep-2015
May-2016
Jan-2017
Sep-2017
May-2018
Feb-2019
Oct-2019
Jun-2020
Feb-2021
Oct-2021
Jul-2022
Date
GW23
GW32

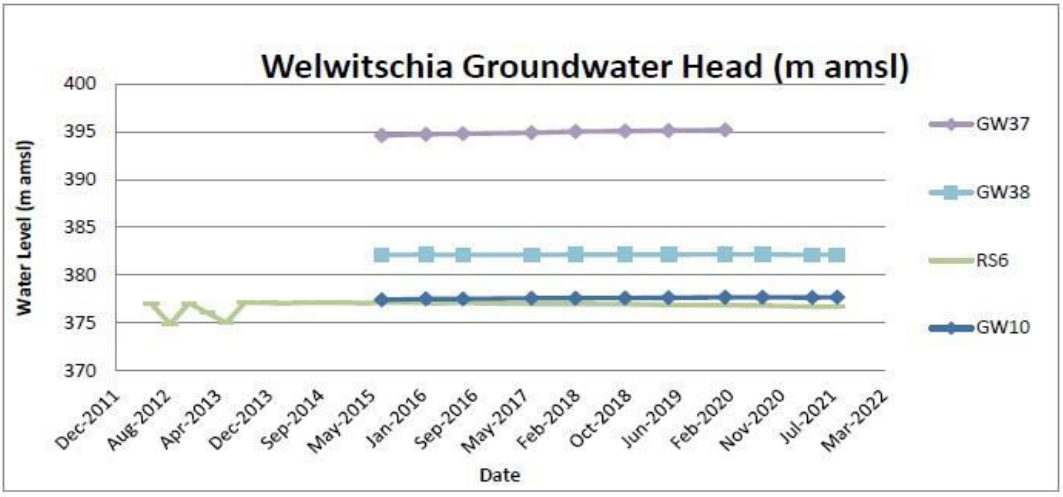

Welwitschia Groundwater Head (m amsl)
Water Level (m amsl)
400
395
390
385
380
375
370
Dec-2011
Aug-2012
Apr-2013
Dec-2013
Sep-2014
May-2015
Jan-2016
Sep-2016
May-2017
Feb-2018
Oct-2018
Jun-2019
Feb-2020
Nov-2020
Jul-2021
Mar-2022
Date
GW37
GW38
RS6
GW10

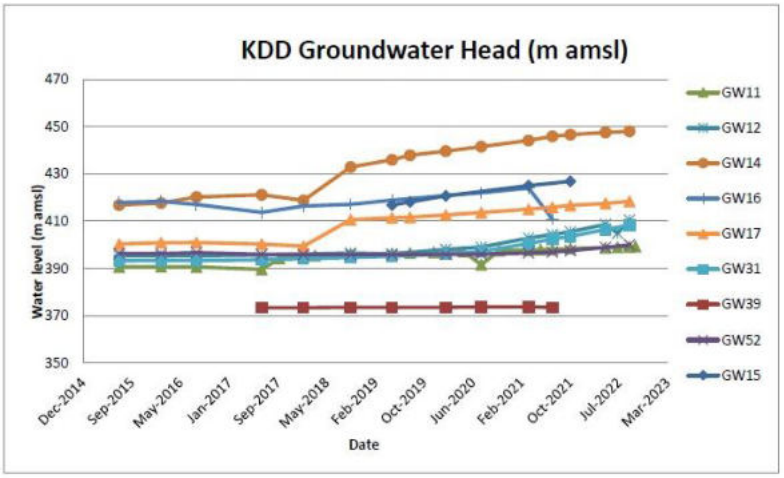
Figure 12: Welwitschia Husab Domain groundwater head at different sites Table 09: Welwitschia Husab Domain groundwater quality summary

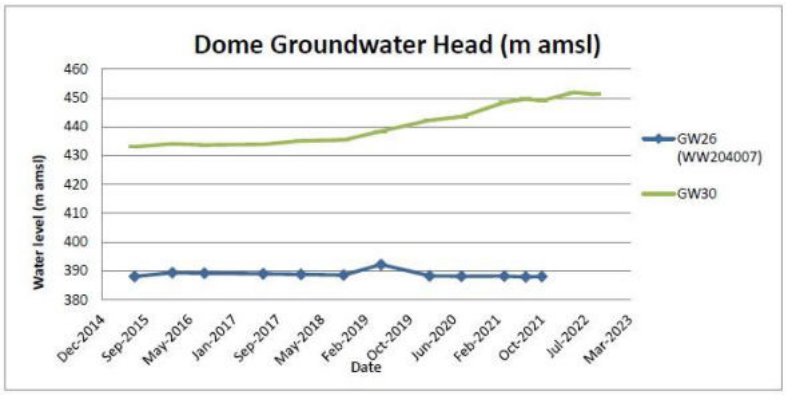
Date	Site	Domain	p H	Total Dissolved Solids (det.)	Sulphate as SO_4^{2-}	Uranium
Jul-2022	RS1	Welwitschia Husab	7.1	12991	3193	3996
Sep-2022	RS1	Welwitschia Husab	7.1	12628	3001	3936
Oct-2022	RS1	Welwitschia Husab	6.9	12384	2917	4388
Jul-2022	RS10	Welwitschia Husab	7.4	1736	365	17
Sep-2022	RS10	Welwitschia Husab	7.6	1965	367	18
Oct-2022	RS10	Welwitschia Husab	7.1	1915	374	33
Jul-2022	RS2	Welwitschia Husab	7.2	38527	2913	26
Sep-2022	RS2	Welwitschia Husab	7.0	37783	2741	33
Oct-2022	RS2	Welwitschia Husab	6.8	36769	2751	19
Jul-2022	RS3	Welwitschia Husab	7.2	22908	3706	87
Sep-2022	RS3	Welwitschia Husab	7.2	22800	3431	86
Oct-2022	RS3	Welwitschia Husab	7.1	23641	3398	95
Jul-2022	RS4	Welwitschia Husab	7.6	3573	982	137
Sep-2022	RS4	Welwitschia Husab	7.8	3692	952	114
Oct-2022	RS4	Welwitschia Husab	7.3	3592	925	145

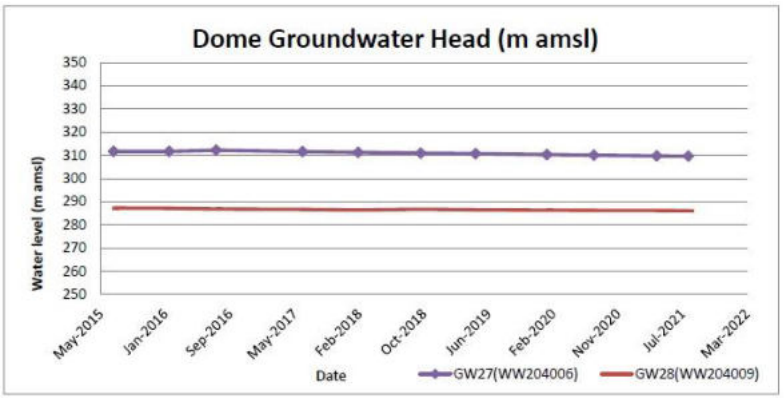
8.2.2. Khan Dome Domain

- During the period under review, groundwater levels in the KDD were observed to maintain a rise in most boreholes at the TSF, a trend that started in 2018. Over this period the highest water level rise has been observed in GW14, up by 29m amsl, followed by GW17 up by 7m amsl, while GW11, GW12, GW15, and GW31 have seen relatively lower water level rise. To the northwest of the TSF, groundwater level rise was observed in GW52, where levels have risen by 4m amsl.
- GW30 showed relatively more significant rise of 18m in water level since July 2017, a trend that continues to be observed up to May 2022 compared to stabilizing levels in GW26.
- Groundwater levels in GW27 and GW28, located at lower altitude on the western edge of the KDD, remain on a slight declining trend.
- Boreholes GW35 and GW36, located in the plant area, are assumed to be polluted from various sources within the mine. This has to be further investigated and monitored.
- Within the plant area, a slight rise in groundwater levels were observed in GW35 and GW33 situated upstream of GW30.
- To the north of the plant, groundwater levels in GW24 have been stable during the period under review.

- At the TSF, slight but steady groundwater level rise was observed in GW15 situated east of the TSF, while GW13 situated west of the TSF showing a similar trend, was observed to have sharp fluctuations in between sampling rounds







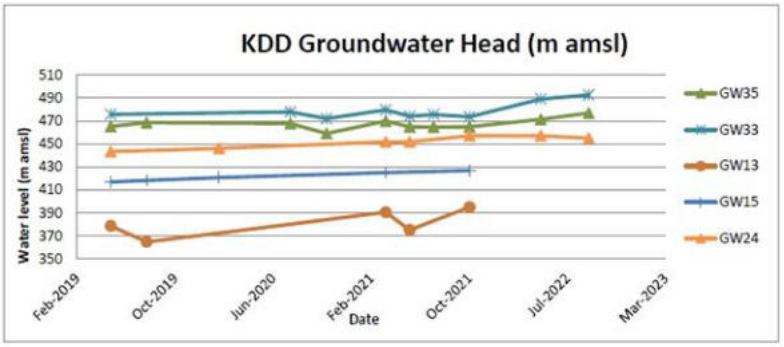


Figure 13: Khan Domain groundwater head at different sites

Table 10: Khan Domain groundwater quality at different sites

Date	Site	Domain	p H	Total Dissolved Solids (det.)	Sulphate as SO_4^{2-}	Uranium
Jul-2022	GW11	Khan Dome	7.2	13323	3319	361
Sep-2022	GW11	Khan Dome	7.2	13529	3120	380
Oct-2022	GW11	Khan Dome	7.0	13758	3069	398
Sep-2022	GW12	Khan Dome	7.5	7934	1159	111
Sep-2022	GW14	Khan Dome	6.9	27926	2267	338
Sep-2022	GW17	Khan Dome	7.0	23599	2931	279
Sep-2022	GW30	Khan Dome	7.4	6379	2663	46
Sep-2022	GW31	Khan Dome	7.3	10 059	1834	632
Sep-2022	GW52	Khan Dome	6.9	4851	707	74

Table 11: Water quality in the additional Khan domain boreholes

Date	Site	Domain	p H	Total Dissolved Solids (det.)	Sulphate as SO_4^{2-}	Uranium
May-22	GW24	Khan Dome	7.4	10699	3310	174
Sep-2022	GW24	Khan Dome	7.0	10676	2934	149
May-22	GW33	Khan Dome	7.5	6260	2792	18
Sep-2022	GW33	Khan Dome	7.2	3 826	2054	18
May-22	GW35	Khan Dome	7.2	16553	3649	4432
Sep-2022	GW35	Khan Dome	7.4	9117	3560	11719
May-22	GW36	Khan Dome	7.5	13230	3542	2313
Sep-2022	GW36	Khan Dome	7.3	17392	4033	2699
May-22	GW63	Khan Dome	7.2	13611	2820	261
Sep-2022	GW63	Khan Dome	7.2	13764	2680	215

8.2.3. Grey Granite Domain

- During the period under review, groundwater levels fluctuation was insignificant in monitoring boreholes GWN07S, RS7 and GW202085 to north and south of WRD. The sharp decline in GW202085, recorded in April 2021 is seen as an error in records because levels returned to general position by June 2021.
- Between the pits and the WRD, groundwater levels in GW20 were observed to increase slightly while GW41 and GW21 showed a relatively stable water level, with GW21 showing a relatively stable groundwater water level trends.
- Uranium concentrations were within limits (indicated in green)

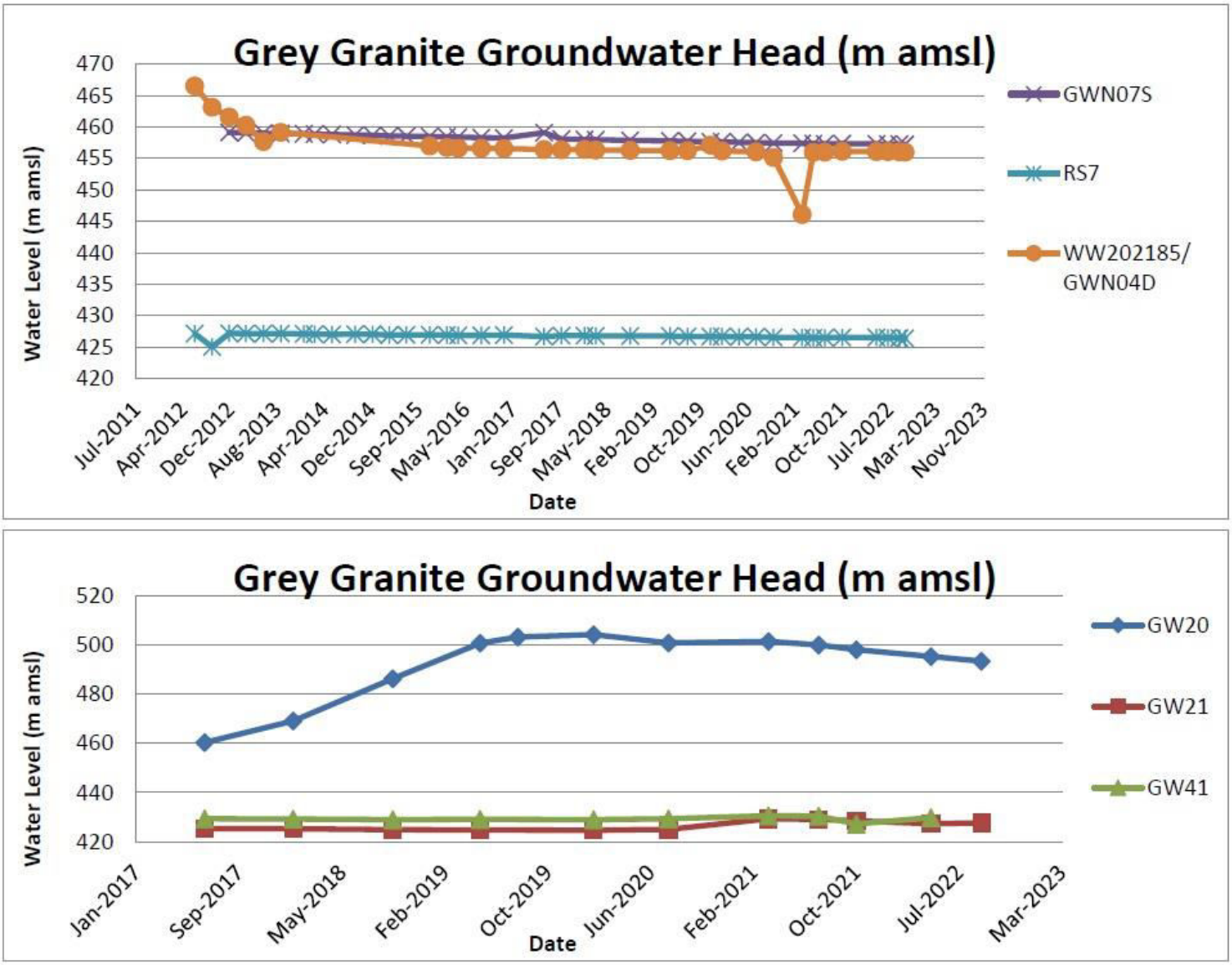


Figure 14: Grey Granite groundwater head at different sites

Table 13: Grey Granite Domain groundwater quality at different sites

Date	Site	Domain	p H	Total Dissolved Solids (det.)	Sulphate as SO_4^{2-}	Uranium
Sep-2022	GW20	GreyGranite	7.1	22856	2738	254
Sep-2022	GW21	GreyGranite	7.4	11175	2883	134
Sep-2022	GW41	GreyGranite	7.4	10063	2951	148
Jul-2022	GWN07S	GreyGranite	7.2	6142	1914	107
Sep-2022	GWN07S	GreyGranite	7.3	6276	1857	104
Oct-2022	GWN07S	GreyGranite	7.0	6324	1810	70
Jul-2022	RS7	GreyGranite	6.9	31492	2802	58
Sep-2022	RS7	GreyGranite	7.0	32554	2579	59
Oct-2022	RS7	GreyGranite	6.6	31916	2501	59
Jul-2022	WW202185/GWN04D	GreyGranite	7.2	4673	1780	17
Sep-2022	WW202185/ GWN04D	GreyGranite	7.3	4745	1699	19
Oct-2022	WW202185/ GWN04D	GreyGranite	7.0	4656	1769	38

8.2.4. Alluvial Aquifer Domain

- Groundwater levels in the Swakop River boreholes have been on a declining trend, with the last good recharge event during the floods in the 2010/2011 rainy season, when the groundwater level rose between 5 and 8m. The declining trend in Figure 15, continues to be obseverved during 2022 sampling seasons.
- Groundwater levels in the Khan River alluvial continue to be stable with slight fluctuations during the period under review. The run off events recorded during 2020 and 2021 are yet to show in the water table.
- Relevant Major-ions levels are within the limits (indicated in green) determined for the boreholes, except the Sulphate concentration for GWN03/WW202083 which had concentrations below its set limits.
- Relevant Metals were observed to be within limits.

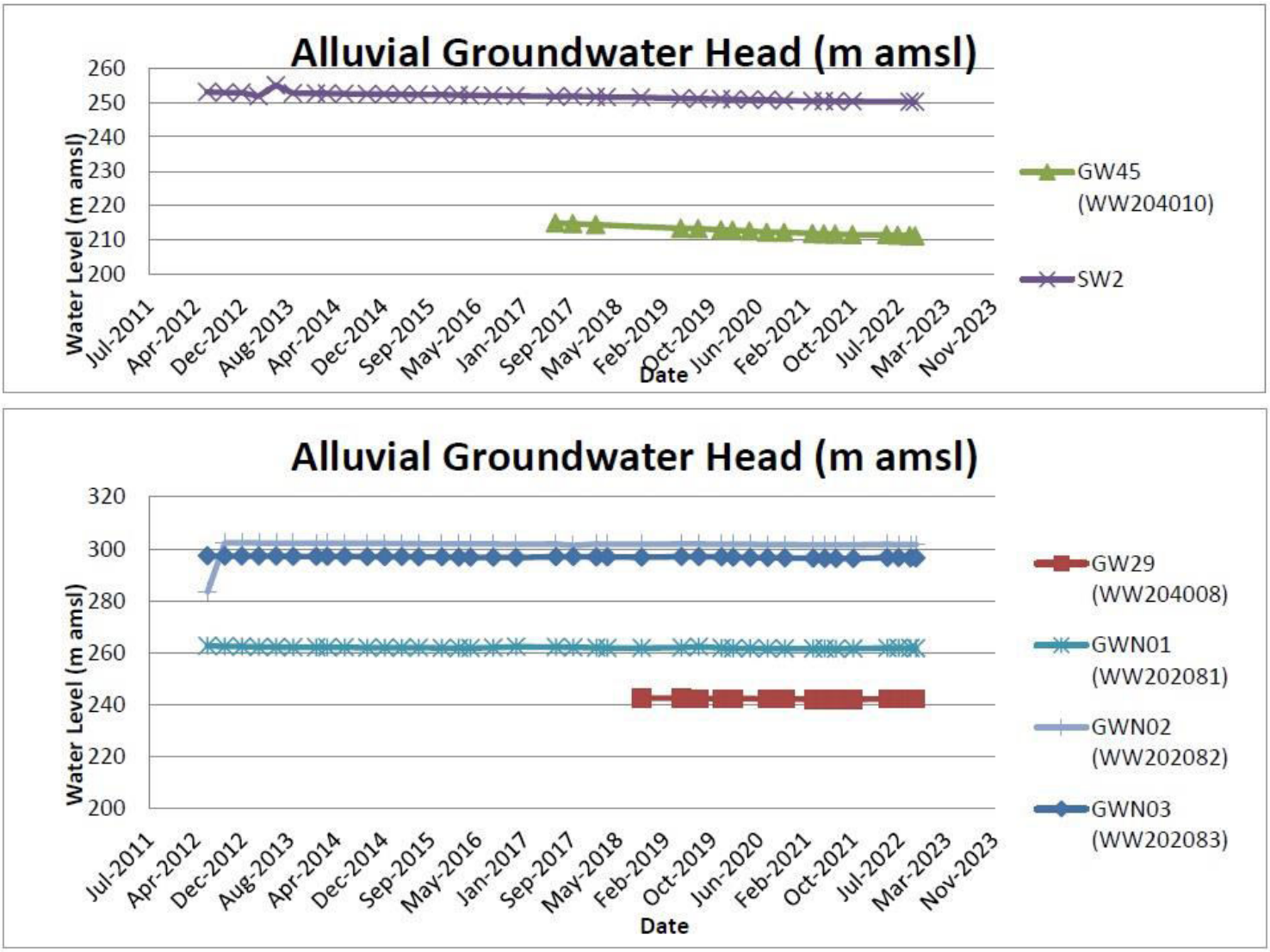


Figure 15: Alluvial Domain groundwater head at different sites

Table 14: Alluvial Domain groundwater quality at different sites

Date	Site	Domain	p H	Total Dissolved Solids (det.)	Sulphate as SO_4^{2-}	Uranium
Jul-2022	GW29 (WW204008)	KhanAlluv	6.9	6190	898	251
Sep-2022	GW29 (WW204008)	KhanAlluv	7.2	6477	964	192
Oct-2022	GW29 (WW204008)	KhanAlluv	7.2	6632	954	234
Jul-2022	GW45 (WW204010)	SwakopAlluv	7.4	2988	426	54
Sep-2022	GW45 (WW204010)	SwakopAlluv	7.5	2860	418	30
Oct-2022	GW45 (WW204010)	SwakopAlluv	6.9	2974	431	34
Sep-2022	SW2	SwakopAlluv	7.1	5397	699	142
Oct-2022	SW2	SwakopAlluv	6.7	5210	628	81
Jul-2022	GWN01 (WW202081)	KhanAlluv	7.0	5944	859	231
Sep-2022	GWN01 (WW202081)	KhanAlluv	7.2	6190	950	192
Oct-2022	GWN01 (WW202081)	KhanAlluv	7.1	6500	932	233
Jul-2022	GWN02 (WW202082)	KhanAlluvial	7.0	5682	814	195
Sep-2022	GWN02 (WW202082)	KhanAlluvial	7.2	5954	883	174
Oct-2022	GWN02 (WW202082)	KhanAlluvial	7.0	6141	849	218
Jul-2022	GWN03 (WW202083)	KhanAlluv	7.0	5314	764	249
Sep-2022	GWN03 (WW202083)	KhanAlluv	7.2	5637	808	145
Oct-2022	GWN03 (WW202083)	KhanAlluv	7.0	5884	767	216

8.2.5 Recommendations

- Groundwater levels continue to rise at the plant area, TSF as well as between the pits and the WRD. However, decline is still observed west of the pit zone. The fact that these changes are being picked up are an indication that these boreholes are serving their purpose as an early warning system.
    - These groundwater level changes at the Pit and TSF are not yet linked to mining activities. This trend is likely due to continued water level recovery in rock formations of very low permeability and natural groundwater recharge as groundwater level decline and increase appears natural, especially as no pollution is observed in the respective boreholes.
    - At the plant area, however, possible artificial sources of recharge may be responsible for fluctuations of the water table in the boreholes. This is due to high uranium concentration in the groundwater and the fluctuating nature of the water levels (GW35 and GW36). The water level assessment report by SLR (2021 indicated that all four boreholes in the plant area are reacting to a similar “recharge event” from a likely artificial source within the plant. This seepage can emanate from banded walls, ponds and associated infrastructure.
- Groundwater quality in the various domains remains within baseline limits.

- Sulphate concentration that was observed still randomly elevated in many boreholes across domains in the first biannual report of 2021, is no longer considered an issue to investigate after parameter limits were revised.
- Uranium concentration was observed to be generally within baseline values for most boreholes in all four domains. This is not the case at the Plant area, where high uranium concentration is still observed. The high concentrations of uranium in some plant boreholes (e.g., GW35 and GW36), in combination with fluctuating water levels, are an indication of potential groundwater pollution.

- Recommendations:
  - Sulphate concentration that was observed to increase in the Khan Domain in borehole GW31 and GW52 and should be monitored closely.
  - TDS concentrations were observed to increase in GW31 and GW52, exceeding its limits. These should be monitored closely.
  - Uranium concentration was observed to be generally within baseline values for most boreholes in all four domains. This is not the case at the Plant area, where high uranium concentration is still observed. The high concentrations of uranium were measured in GW31, in combination with fluctuating water levels are an indication of potential groundwater pollution.

Table 15: Parameters analyzed by laboratories from samples collected (Major Ions & Metals)

Analytical Laboratory		DDScience		HYDROISOTOP	
MAJOR IONS	UNIT	TOTAL + DISSOLVED METALS	UNIT	RADIONUCLIDES	UNIT
pH		Aluminium as Al	µg/l	^{234}U Uranium	mBq/l
Electrical Conductivity	mS/m	Antimony as Sb	µg/l	^{235}U Uranium	mBq/l
Turbidity	NTU	Arsenic as As	µg/l	^{238}U Uranium	mBq/l
Total Dissolved Solids (calc.)	mg/l	Barium as Ba	µg/l	^{230}Th Thorium	mBq/l
P-Alkalinity as CaCO3	mg/l	Beryllium as Be	µg/l	^{232}Th Thorium	mBq/l
Total Alkalinity as CaCO3	mg/l	Bismuth Bi	µg/l	^{210} Po Polonium	mBq/l
Total Hardness as CaCO3	mg/l	Boron as B	µg/l	^{210} Pb Lead	mBq/l
Ca-Hardness as CaCO3	mg/l	Cadmium as Cd	µg/l	^{226}Ra Radium	mBq/l
Mg-Hardness as CaCO3	mg/l	Chromium as Cr	µg/l	^{228}Ra Radium	mBq/l
Chloride as Cl	mg/l	Cobalt as Co	µg/l		
Fluoride as F	mg/l	Copper as Cu	µg/l		
Sulphate as SO_4	mg/l	Iron as Fe	µg/l		
Nitrate as N	mg/l	Lead as Pb	µg/l		
Nitrite as N	mg/l	Lithium as Li	µg/l		
Sodium as Na	mg/l	Manganese as Mn	µg/l		
Potassium as K	mg/l	Mercury Hg	µg/l		
Magnesium as Mg	mg/l	Molybdenum as Mo	µg/l		
Calcium as Ca	mg/l	Nickel as Ni	µg/l		
Free and saline ammonium	mg/l	Selenium as Se	µg/l		
Stability pH, at 25°C		Strontium as Sr	µg/l		
Langelier Index		Tellerium as Te	µg/l		
Ryznar Index		Tin as Sn	µg/l		
Corrosivity ratio		Titanium as Ti	µg/l		
		Uranium as U	µg/l		
		Vanadium as V	µg/l		
		Zinc as Zn	µg/l		

9. WASTE MANAGEMENT

Rent-a-Drum disposes waste from site at permitted landfill facilities and recycling facilities. Radioactive contaminated waste is managed and Rent-a-Drum disposes waste from site at permitted landfill facilities and recycling facilities. Radioactive contaminated waste is managed and disposed of on site, either in the Waste Rock Dump or in the Tailings Storage Facility. Concrete rubble is also disposed of on site at a designated area.

Waste is separated into general waste, hazardous/hydrocarbon waste, recycled waste, radioactive and building rubble at source. Signage is both in English and Chinese and the bins are colour coded according to waste recyclable material/type. Both wheelie bins and skips are used as waste containers. General waste is disposed of at the Swakopmund Landfill site, hazardous/hydrocarbon waste is disposed of at the Walvis Bay Hazardous Landfill Site and medical/sanitary waste is burned at the Cottage Hospital incinerator in Swakopmund. Recyclable material is separated before disposal and recorded separately in 1 Cube bags. We also donate woven packaging bags to the Ohorongo RDF Power Plant.

The following were improvements that occurred during the reporting period:

1. Cleaning of the ‘’ Old Wood Yard ‘’ adjacent to the SU Shovel Yard. Off-site disposal of general waste, wood and steel waste was at about 99% done by the end of Dec 2022.
2. Repacking of loose Sulphur bags into big bulk bags started and about 50 bulk bags was filled with loose Sulphur bags. One load loose Sulphur bags was disposed of at the SU Waste Rock Dump as a test for future disposal of the Sulphur bags.
3. Radiation cleaning of wear plates of the SU Mills started and a total weight 3,092,320KG of was disposed of and sold as scrap steel.
4. Shovel cables was cut into short pieces, 3m long, and a total weight off 214,120KG was disposed of as scrap steel.
5. Oil, acid and water mixed in 1000lt IBC’S was pumped out by a new service provider and a total quantity of 9900lt was disposed and treated off site correctly.
6. About 2500 empty oil drums was disposed of site during the named period.
7. Fluorescent tubes of 9 years were crushed in one month and is now safely stored in lockable drums on site, awaiting a disposal permit to be granted by South Africa.
8. Cleaning of the ‘’ Salvage Yard ‘’ next to WTY. Off-site disposal of general waste, wood and steel waste was at about 1% done by the end of Dec 2022 official start date November.

10. SEWERAGE TREATMENT PLANT

The Sewerage Treatment Plant was designed to cater for extensive daily fluctuations, and consists of three parallel treatment trains to cater for the full population of the temporary construction camp and onsite operational facilities. Trickling filter technology was chosen because it constitutes simple but extremely versatile technology, does not require skilled operators and gives a final effluent of high quality that can be discharged back into the environment or re-used as recycled water in the process plant and for dust suppression. Major treatment components in this plant include anaerobic digestion in a septic tank, carbon removal and nitrification in a trickling filter, solids removal by means of a secondary clarifier, and disinfection in a chlorine contact tank. The final effluent produced at the sewage treatment plant, mixed with the cooling water from the processing plant, is disposed into the environment (i.e. used as dust suppression) for mining operations. This water quality has to conform to the amended General Standards water quality requirements as laid down in the Government Gazette R553 dated 5 April 1962 and modified as recommended in Cabinet Decision 461/85, before it is discharged into a watercourse (i.e. environment).

Table 16: Standards as laid out in the Government Gazette Regulation R553 of 5 April 1962, in Section 21(1) and 21(2) of the Water Act (Act No 54 of 1956).

RAW AND FINAL WATER QUALITY AND FLOW			
	Per Train	*Total*	
Plant capacity	200	600	m3/d (max)
No of people	1350	4000	PE
Flow rates:			
Average dry weather flow (ADWF)	8.35	25	m3/h
Peak hydraulic flow (PWWF)	25	75	m3/h
Inflow water quality:			
COD	800		mg/L
BOD	350		mg/L
NH4-N	35		mg/L

Swakop Uranium acknowledges that the performance of the sewage treatment plant varied considerably over the past six months. Usual testing shows that Chemical Oxygen Demand (COD), Ammonia Nitrogen and Total Suspended Solids levels haven't always met the regulatory standards. Swakop Uranium has taken this into consideration and it currently trying to eliminate this problem through:

- Regular inspection and maintenance of the sewage treatment plant.
- Liaise with the expert services from Aqua services in terms of diagnostic testing and plant maintenance
- Improved sampling methodology by incorporating more of the parameters set out to be tested in the permit and procuring chlorine meter to take the chlorine levels on a daily basis.
- De-sludge lift stations to improve STP performance as regards high nutrients, high TSS and biodegradable constituents.
- Provide adequate training from a certified sewage treatment plant entity to the operators and involved parties.

11. STAKEHOLDER ENGAGEMENT, MANAGEMENT & COMMUNICATION

Stakeholder Engagement

Swakop Uranium remains committed to engaging on a regular basis with its internal and external stakeholders through various forums. No complaints were received during the reporting period.

Table 17: List of Stakeholder engaged during the period as well as a brief description of the type of engagement

Name of Organizatio n	Power/Expectations/Interests related to SU
Mine Workers Union BEC	This entity represents employees in the Bargaining Unit and is concerned with the overall well-being of the employees in regards to all matters of the work environment e.g. Safety, Remuneration, Development etc.
Ministry of Mines & Energy	This entity represents the interest of government and monitors the company's mining operations in regards to overall compliances to standard regulations, overall sustainability and other terms of our EPL etc.
Ministry of Environment &Tourism	The Husab mine operates in the Namib Naukluft Park, as such the MET monitors the company's overall compliance to required standards by company's operating in parks in terms of Nature and Conservation etc.
Ministry of Trade & Industrializati on	The Husab mine is Namibia's largest operating mine and this entity is concerned with creating business opportunities especially for SME's resulting from big projects such as Husab
Namibia Radiation Protection Authority	The NRPA's mandate where businesses such as Husab is concerened is to protect human beings (workers and the public) from risks resulting from radiation exposure.
Office of the Governor - Erongo	The Governor is appointed by the President to represent the Office of the President at regional level where government matters are concerned. The expectation from businesses such as Husab is to contribute to prosperity for its host community.
Chamber of Mines Nambia	To protect the interest of its members while promoting sustainable growth of mining and exploration so as to maximise economic gain for the Namibian nation.
Namibia Police	NAMPOL is concerned with the Safety & Security of all the people within the borders of Namibia. The company maintains a friendly relationship with the Nampol Erongo Region and supports the entity's community relations operations.
Nampower	Supply of Power to the Husab Mine
Namwater and ORANO	Supply of Water to the Husab Mine

12. GENERAL SAFETY & SECURITY MANAGEMENT

- All major security fences as well as the stock fences are in place and maintained. These demarcate the security zones which were introduced as per the Security Access Control procedure and the revised Site Radiation Management Plan. FPR & Processing Lab are established Radiation Controlled Areas and the rest of the Mine Site declared as Supervised areas – Public areas are still the Private Vehicle Parking and outside the outer perimeter and main entrance boom gates.
- Details of all employees as well as visitors and contractors are loaded onto the Access Control System database. Authorized access profiles are configured per access card. Electronic access control systems are in place and maintained at the Mining, Ore Processing Plant, FPR, Admin, LDV & HDV Workshops, Ammonia Storage, Husab Village & Processing Lab Pedestrian Access Security Zones.
- CCTV Surveillance and Emergency Call Center is in place and maintained. Ammonia Gas Release, SO2/SO3 Gas releases as well as Radioactive U3O8 spills, Acid burns and general fires are still the most prominent emergency risks. Apart from a site-wide fire detection and prevention system of which alarms are monitored 24/7 at the Security Operations Room, we have trained Emergency Responds Proto-teams as well as Medics on 24/7 shifts. Husab Site has a fully equipped Emergency Clinic that is managed by a qualified Sister. Fully equipped Ambulances, Fire Trucks, a Spill Trailer and a Multi Causality Trailer are in place.
- Vehicle access is controlled with the application and issuing of site discs. Vehicles are required to undergo roadworthy as well as mine readiness inspections before discs are authorized.
- FPR, SX, Ammonia Storage, Bulk Sulphur, TSF and NNNP border, the Husab Village, Admin Blocks, Private vehicle parking, Main Site Entrance and the permanent access road at the B2, are controlled by third party Private Security Service providers.
- Property controls (private and company) are in place as per the Waybill procedure.
- IMS Document re-certification received again. All Medical equipment is calibrated and Ambulances and Site Clinic Certification awarded by the MOH.
- Internal training for Fire Marshalls, Basic Firefighting, SU Emergency SOPs and Work instructions, and general Proto-team refresher training are ongoing.
- Business Continuity and Crisis Management Plans completed and introduced. Mock Drills for all identified scenarios are scheduled and executed as per plan.

13. BIODIVERSITY MANAGEMENT

1. FAUNA & FLORA

An update of the Biodiversity Sensitivity of habitats in the vicinity of Husab Mine took place, after the implementation of a number of monitoring and research projects, as well as recent Impact Assessments, where data become available.

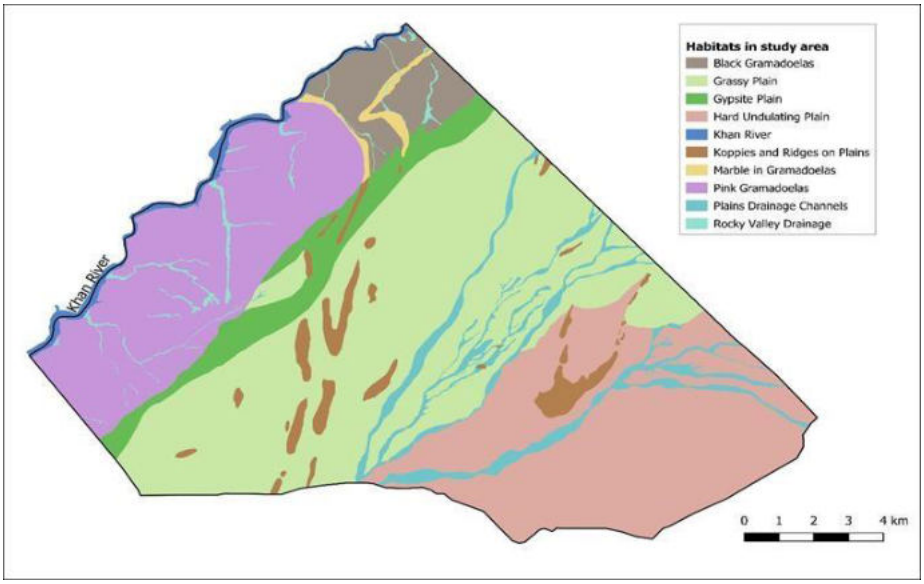


Figure 19. Updated Habitats of the Husab study area

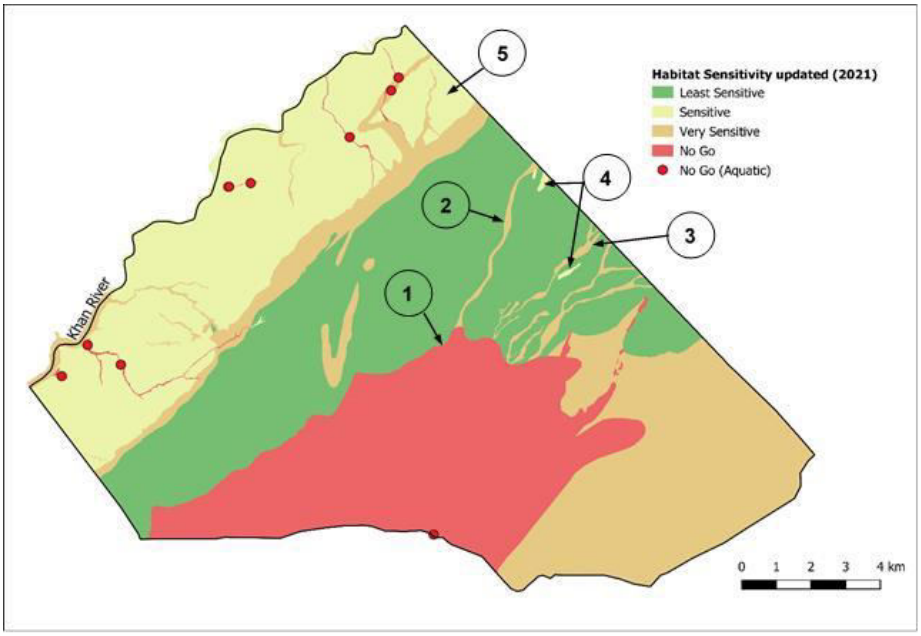


Figure 20: Updated habitat sensitivity map for the Husab Study Area

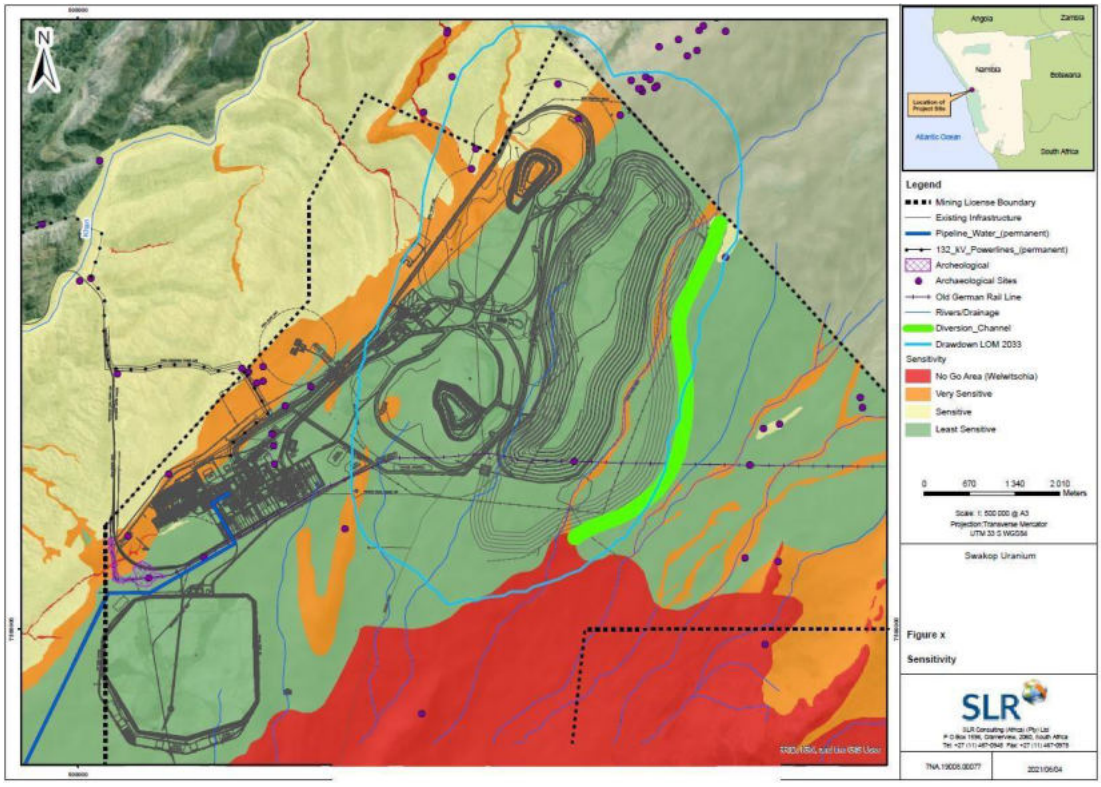


Figure 21: Updated sensitive areas map for the Husab Mine Site

Furthermore, good progress was made during 2021 on the NURMU/SU Long-term ecological monitoring and research framework.

The Monitoring Framework for the Husab Mine contains the outcomes of a five-year period study.

- Welwitschia Health, Riparian vegetation health and Hartmann's mountain zebra movements have been identified for continued monitoring.
- Perennial shrub health and Husab Sand Lizard monitoring to occur should activities/footprint of the mine increase.
- No further monitoring needed for gerbils.

A monitoring protocol has been developed for the Husab Mine to assist with the continued and/or future monitoring.

Status of Post-graduate studies forming part of the NURMU/SU Long-term ecological monitoring and research framework:

- PhD degree: Riparian vegetation health Thesis write-up in progress.
- PhD degree: Welwitschia ecohydrology data collection in progress.

- MSc degree: Husab Sand Lizard habitat preference Thesis write-up is done.

2. SOIL MANAGEMENT

Table 18: Topsoil volume table indicating total volumes accumulated at each topsoil stockpile for the reporting period

Topsoil Stockpile	Volumes (Loose) m³	Topsoil Stockpile	Volumes (Loose) m³
SP1	5467	**SP6**	**89824**
SP2	8904	SP7	5042
SP3	11036	SP8	28291
SP4	170411	SP9	12525
SP5	80899	SP10	17245

Topsoil was added to topsoil stockpile No.6 (SP6) during the reporting period. This is the result of mining stripping activities, with a focus on new mining expansions from both Zone 1 (expansion south/south east) and Zone 2 (expansion south/south west). Additionally, mining have commenced with the expansion of the waste rock dump towards the south.

Figure 22: Indicating Topsoil Stockpiles and their Locations at Husab Mine

14. VISUAL ASPECTS

The visual monitoring was done internally – the burning of blasting waste material, as required by the Explosives Act of Namibia, often causes large volumes of smoke that spreads to a high elevation, which poses as a visual aspect. Further visual aspects include the dust accumulated from the process plant and mining activities that are visible during operation. The strong east weather events experienced on site during the reporting period also cause visual disturbance, however this is due to natural events. No external complaints were received related to visual disturbance(s).

15. NOISE & VIBRATION MANAGEMENT

It can be concluded that the vibrations during the reporting period should not have caused damages to surrounding or third party brick or mortar structures as all the vibrations was recorded and captured below the USBM and OSMRE standard.

The Mineral Resource Management Geotechnical team is responsible to assess pit conditions after every blast and communication is sent out for specific high risk areas (embargos) following the aforementioned pit inspections.

No complaints were received during the reporting period or noted visual damages to structures.

Please refer below for an example of a monitoring event report.

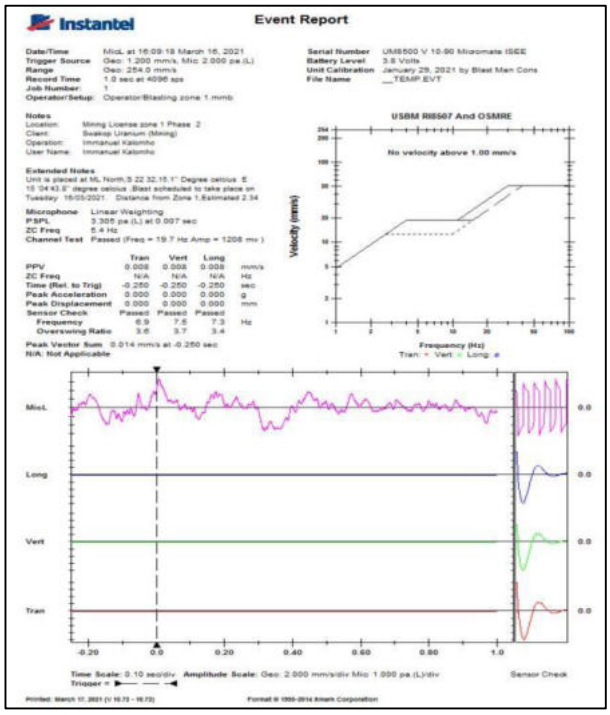


Figure 23: Example of a Noise & Vibration Monitoring blast event

16. SOCIO ECONOMIC ASPECTS

Our Brand Slogan: More than mining and what it means to us

In our quest to become a world-class Namibian uranium producer, we are proud of our continued efforts to improve our social impact output. For the reporting period, we have continued to consult and engage with stakeholders on pertinent issues relating to our social impact. The Office of the Company which is responsible

for managing Corporate Social Responsibility also improved its visibility and strengthened it community relations.

Communication/Community Relations

We improved our efficiency in maintaining the Corporate Communication and Swakop Uranium lines of communication as we endeavor to be the preferred link, in terms of information sharing between stakeholders and other business units of the company, such as; Supply Chain Management (Local Procurement) and the Human Resources Department (Recruitment and Bursary) purposes.

17. RADIATION MANAGEMENT

The Radiation Management Plan (RMP) for uranium mining and processing was approved by the National Radiation Protection Authority (NRPA) and has been implemented. The RMP is currently being reviewed and updated to include mine closure and any applicable updates from the September 2019 approved EIA Amendment and EMP amendments.

18. HERITAGE RESOURCE MANAGEMENT

No archaeological audits were conducted during the period under review – due to national Covid-19 restrictions. The Environmental Field Team continue to conduct monthly monitoring at all sites, this includes the fixed view point photography sites. There are 12 dedicated sites for the latter monitoring. Artefacts range from a variety of metal and tin pieces from the old German railway activities. An archaeological audit is planned for the next reporting period.

19. STORM WATER MANAGEMENT

Swakop Uranium is in the process of finalizing the design for the improvement of storm water controls in the Processing Plant and in the Mining area. Both projects are underway with a Capital Application for the Processing area and a project review for the Mining area. Bund integrity especially in the plant area, has been one of the major challenges leading to more spillages however, more inspection to follow in the next reporting period to help lessen even more further spillages from occurring due to the mentioned bund issues.

No issues observed on the storm water controls currently in place. Continuous maintenance is being carried out for existing structures in operations.

20. ROAD-USE MANAGEMENT

Road safety is communicated during induction training and toolbox talks as well as in site bulletins. The permanent speed monitoring stations that were installed during the previous reporting period on the permanent

access road are fully operational. These monitors can calculate the average speed that all vehicles were travelling on the main access road. This programme has been extended to the other roads on the mine site.

Speed camera monitoring of vehicle speeds by the onsite Security contractor continued on the access road and on site.

Transgressions for both systems are reported and logged and where required the Employees Relations team is in contact with end users to implement corrective actions with their team members.

21. MINE CLOSURE

Swakop Uranium finalised its first (draft) Husab Mine Rehabilitation, Restoration and Closure Plan (RRCP) in October 2018. During the reporting period SU was busy finalizing Phase 2 of its in depth social component of its closure plan.

The following work will take place during 2022:

1. Closure Costing Liability to be updated.
2. EXCO to approve the Social Action Plans that will be endorsed by the company.
3. First meeting of the Swakop Uranium Closure Committee to take place.
4. The Husab Mine Rehabilitation, Restoration and Closure Plan to be updated, sent for internal and external comment and once approved by EXCO to be submitted to MME and MEFT for final approval.

22. CONCLUSION

During the reporting period the COVID-19 pandemic did not have much influence on operations, unlike previously for the same reporting period. Strict COVID-19 management controls continued within the company onsite and was seen in the stats as well to be working.

Plant Operation ran inefficiently due to low water inventory, Ball Mill frozen charge and Sag Mill liner failures. The water to ore ratio was 0.64 m3/t versus the plan 0.60m3/t due to low water inventory in December. Low Milling throughput rate resulted in low percent solids deposited at the Tailings Storage Facility.

Solution returned from TSF was 57% during H2, 2% above budget, compared to the 50% recovery that was achieved during H1. This was an exceptional period in terms of solution return, a direct result of the Independent Decant Return Pipeline that was installed in Q3. Consistent plant operation is highly dependent on Tailings Return Solution, however, the supply from NamWater has slightly improved with daily inflow ranging from 1 100 to 1 380 m3/hr.

Any potential environmental threats for this period have been indicated in the report. All environmental aspects and potential impacts are monitored continuously through the dedicated compliance and environmental

biodiversity and bio-physical monitoring schedules/plans. During the reporting period the main impact focus areas being monitored of concern was the FPR bund issues, monitoring the fluctuations in groundwater rest water levels and water chemistry, increases in noted air quality parameters (reviewing dust suppression controls), Sewerage Treatment Plant Compliance and spillage/effluent management. Swakop Uranium had a decrease in total environmental incidents recorded during the period, which could mean lessons learnt from previous incidents were taken into consideration in order to avoid more incidents from occurring.

The main focus areas for the next reporting period is the following; to focus on building an environmental workshop, expanding the current bio-physical and biodiversity monitoring networks, finalizing the additional groundwater drilling programme, upgrading the storm water controls for operations, finalizing the Social Engagement Plan/Strategy of the Husab Rehabilitation, Restoration and Mine Closure Plan, and improving awareness and proactive controls on site with regards to spill management and control. Additionally, as per document control requirements, various procedures and work instructions are required to be updated.

Swakop Uranium remains committed to ensuring overall compliance to its approved Environmental Management Plan(s) requirements.