Database of stakeholders along the proposed pipeline and associated infrastructure between the Oanob Dam and the Dordabis Iron Ore Mine of Lodestone Namibia (Pty) Ltd.

FARM NAME	CONTACT PERSON / OWNER	TEL / CELL NO	EMAIL
Rehoboth Townlands	Venus Klazen	Venus 0851299899	
	Mr Ronald Windswaai, CEO		<u>ceo@rtc.org.na</u>
	Freddy Shihepo	Freddy 0813058563	freddyflee@gmail.com
Rehoboth Farmers Association	Vinzenco Bertolini	Vinzenco 0811227898	vbertolini@shoprite.co.za
Oanob Dam Resort	Christie Benade		oanobresort@iway.na
Namwater	Johan Somaeb	Johan 0818887946	jdsomaeb@gmail.com
Namwater	Dawid Mocumi	Dawid 0813160613	
NamWater	Jolanda Kamburona	Jolanda 0812178116	kamburonaj@namwater.com.na
Directorate of Water Affairs	Bertram Swartz	Bertram 0812020710	bertram.swartz@mawlr.gov.na
Ptn. 2 of Farm Mooiplaas			-
Ptn. 1 of Farm Vogelpan	JW Wellmann	0811244266	rixiinvest@gmail.com
Kaniegab No 295	Ralph Christians	Ralph 0811274984	ralph.christians@crossroads.africa
Kaniegab	Annes Christians	Annes 0817547413	annes.christians33@gmail.com
Kaniegab	Clive Izaaks	Clive 0811279130	izaksclive328@gmail.com

Kaniegab	Ralph van Wyk	Ralph 0817758035	ralphvanwyk68@gmail.com
Konasib 291	Basil A Rickerts	Basil 0811296996	brickerts@unam.na
Konasib-Wes 1023	Dr F Christians & Robert Hendricks	Robert 0818163593	rob.hen.58@gmail.com
Konasib / Kleinbegin 962	Danny Villinger	Danny 0812917608	ddvillinger4882@gmail.com
Kalkpan 3	Tobie de Klerk	Tobie 0811294484	dolladeklerk@gmail.com
Kalkpan 2	Henry Waterboer	Henry 0812113579	No email address
Rem of Kalkpan	Fanna De Klerk	Fanna 0812007821	stephendk76@gmail.com
Kareeboomvlei	Howard Scholtz	Howard 0811291460	howardscholtz1@mtcmobile.com.na
Koigas (after verification, this farm does not form part of the route)	Franka Engelbrecht	Franka 0817321623	engelbrechtfranka@gmail.com
Namibia 764	Chis Markus	Chris 0813367050	markuschris59@gmail.com
Endlich	Ernst & Rose Mowes	Ernst 081 250 6683 Rose 081 835 1225 Kevin 081 365 7344	kevinm6485@gmail.com
Rem of Endlich	Evert Harmse	081 829 3603	harmsee@bankwindhoek.com.na
Waldheim	Lientjie Strauss (van Wyk)	Lientjie 0811280882	Lientjie2009@gmail.com

Portion of Waldheim (Farm Rochelle)	Ronal L Kubas	Ronald 0811284150; 061379009	rlk@burmeister.com.na
Swartkoppies / Opdam	Family Bock	Synovia Orlam 0817749452	synoviaorlam@gmail.com
Hamis	Cecil Edwin Gille	Regina 0812429661	gilleregina@yahooo.com kingarthur02@iway.na
Rem of farm Hamis	Rosa Stellmacher	Rosa 0814661111	rstellmacher71@gmail.com
Waldburg	Karin Cloete	Karin 0812880836	g.a.korner@gmail.com
	Henry Slinger	Henry 0813514936	7
	Charl Körner	Charl 0811460905	7
	Hannie Stumpfe	Hannie 0813124796	7
Emmabron	Harold Mouton	Harold 081 129 6403	harold@nwbc.com.na
Stinkwater	Frederik Cloete		amowes@unam.na
Stinkwater	Hendrik Reynoldt Otto	Hendrik 0812871955	No email address
Hatsemas 283	Jan and Retha Joubert	Jan 081 2299980	janjoubert@iway.na
Klein Marula	Namib Roses (Quinton Strijbus; Francois du Randt)	Quinton 0818367420	namrose@iway.nam
Marula Game Ranch	Johan Kotze (Manager)	Johan 0811294326	johankotze@iway.na jk@marulapark.com

#### Email correspondence with I&APs of Lodestone's proposed bulk water pipeline between Oanob Dam and the Dordabis Iron Ore Mine

From: Pierre Smit <<u>oudoring@gmail.com</u>>
Sent: Wednesday, July 26, 2023 5:05:32 PM
To: <u>harold@nwbc.com.na</u> <<u>harold@nwbc.com.na</u>>
Cc: 'Werner Petrick' <<u>wpetrick@namisun.com</u>>; Vinzenco Bertolini <<u>vbertolini@shoprite.co.za</u>>;
kevinm6485@gmail.com <kevinm6485@gmail.com>
Subject: Assistance with names of farm owners and contact details

Dear Harold

Thank you for your time earlier today to discuss the matter highlighted in this email.

I am writing this email on behalf of Namisun Environmental Projects and Development (Namisun).

Namisun has been appointed by Lodestone Namibia (Pty) Ltd (Lodestone) to conduct an Environmental Impact Assessment for their proposed bulk water supply pipeline between the Oanob Dam near Rehoboth and the site of the Dordabis Iron Ore Mining Project north of Dordabis. Over a section of the pipeline a 33 kV powerline and two booster pump stations are planned. The route of the pipeline is as follows:

From the base station at the Oanob Dam, the route of the pipeline will follow one of the two Oanob Dam access roads, across the B1, eastwards along the north side of the C25 to Rehoboth Station and follow the D1228 eastward to the D1249. Here the pipeline turns sharply northwards and run along the western side of D1249 to the C23, where it will turn westwards along the south side of the C23 for approximately 5 km to the mine site. The proposed pipeline route is presented in the map attached, highlighting the 16+ farms it will cross.

As part of the assessment process, all affected farms and third parties will be informed about the outcomes and the relevant input from the parties affected will be incorporated into the final report – which will be submitted to the relevant authorities for decision making. For this reason, Namisun wants to obtain the necessary information about the farm owners and their contact details.

You were so kind to promise me your assistance in getting some of this information, and this explains the purpose of this email. For your convenience, I attached a cut-out of the farm map of Namibia to assist with this task. Also attached to this email is a list of farm names and owners which must be updated after your input.

Kindly note that I have directed the same enquiry to the Mowes-family of Farm Endlich as well as Mr Bertolini from the Rehoboth Farmers Association. That is why I included them in this email. Your help is greatly appreciated! Please feel free to contact me if you have any question.

Kind Regards,

Pierre Smit (PhD) Environmental Practitioner +264 81 752 7207 2 August 2023

Good day Sir,

Please do register me as interested and affected stakeholder for this study.

I am on a long-term lease on farm Rochelle [portion of Waldheim].

regards

## Ronald L Kubas Bsc(Eng)(Elec) PrEng

Managing Director



Switchboard +264 61 379000 Direct +264 61 379 009 Mobile +264 81 128 4150 Email <u>rlk@burmeister.com.na</u> Website <u>www.burmeister.com.na</u> Address 126 Andimba Toivo Ya Toivo Str, Suiderhof, Windhoek

Directions to new office

2 August 2023

Good day Pierre

I take note of the mail.

I have amended the spreadsheet.

I added my neighbour Mr. B.A. Rickerts and his contact number, and also corrected the name of our farm.

In our case, the road and road reserves on the D1228 falls within the boundaries of our farm, for which we pay Farm Tax. Do you have any idea how this will impact the pipeline?

I look forward to any further correspondence in regard to the matter.

Sincerely yours

Robert E. Hendricks Mobile: +264 818163593 From: Pierre Smit <<u>oudoring@gmail.com</u>> Sent: 02 August 2023 11:27 To: <u>annes.christians33@gmail.com</u>; 'Vinzenco Bertolini' <<u>vbertolini@shoprite.co.za</u>>; <u>kevinm6485@gmail.com</u>; <u>harold@nwbc.com.na</u>; <u>harmsee@bankwindhoek.com.na</u>; <u>dickr@mawf.gov.na</u>; <u>rstellmacher71@gmail.com</u>; <u>amowes@unam.na</u> Cc: 'Werner Petrick' <<u>wpetrick@namisun.com</u>> Subject: Assistance with contact details

Dear all

I am writing this email on behalf of Namisun Environmental Projects and Development (Namisun).

Namisun has been appointed by Lodestone Namibia (Pty) Ltd (Lodestone) to conduct an Environmental Impact Assessment for their proposed bulk water supply pipeline between the Oanob Dam near Rehoboth and the site of the Dordabis Iron Ore Mining Project north of Dordabis. Over a section of the pipeline a 33 kV powerline and two booster pump stations are planned. The route of the pipeline is as follows:

From the base station at the Oanob Dam, the route of the pipeline will follow one of the two Oanob Dam access roads, across the B1, eastwards along the north side of the C25 to Rehoboth Station and follow the D1228 eastward to the D1249. Here the pipeline turns sharply northwards and run along the western side of D1249 to the C23, where it will turn westwards along the south side of the C23 for approximately 5 km to the mine site. The proposed pipeline route is presented in the map attached, highlighting the 16+ farms it will cross.

As part of the assessment process, all affected farms and third parties will be informed about the outcomes. All relevant input from the parties affected will be incorporated into the final report – which will be submitted to the authorities for decision making. For this reason, Namisun wants to obtain the necessary information about the farm owners and their contact details.

Kindly assist me in making the details on the contact list as comprehensive as possible – to ensure that nobody is left out. Please sms me the information you can help me with, I'll add it to the list then.

For your convenience, I attached a cut-out of the farm map of Namibia to assist with this task. Also attached to this email is a list of farm names and owners which I must update after your input.

Your help is greatly appreciated! Please feel free to contact me if you have any question.

Kind Regards,

Pierre Smit (PhD) Environmental Practitioner +264 81 752 7207 16 August 2023

Hi Pierre

I trust you are doing well,

Please find attached, I have updated my details and would like to know if you have an idea what the pipe size will be and how far from the border fence the pipe will be and will the farm owner get a compensation for this line running on private property?

Regards,



Ralph Christians

Maintenance Manager

E: <u>ralph.christians@crossroads.africa</u> T: <u>+264 61 262 151</u> M:

Agile Minds - Flexible Solutions

A: 74 Rendsburger Street, Lafrenz Industrial Park, Windhoek, Namibia, 10005

INJECTING VALUE INTO YOUR SUPPLY CHAIN



18 August 2023 Dear Sir / Madam

#### NOTICE: EIA FOR LODESTONE NAMIBIA (PTY) LTD'S PROPOSED NEW WATER PIPELINE FROM THE OANOB DAM TO THE DORDABIS IRON ORE MINE

#### <u>SCOPING (INCLUDING IMPACT ASSESSMENT) REPORT AND ENVIRONMENTAL MANAGEMENT</u> <u>PLAN AVAILABLE FOR REVIEW</u>

With reference to earlier correspondence / telephonic discussions regarding the above-mentioned project and EIA process, please be advised that the Scoping (including Impact Assessment) Report and the accompanying Environmental Management Plan are now available for review and comment.

Attached, please find the above-mentioned documents. Electronic copies of the appendices to the report are also available on request to Namisun.

Please send any comments you might have on the report to the undersigned by 18 September 2023.

Kind Regards,

Pierre Smit (PhD) Environmental Practitioner +264 81 752 7207 From: Danny Castelyn [mailto:d.castelyn@lodestonepty.com]
Sent: Wednesday, 18 October 2023 11:58
To: Danny Castelyn <<u>d.castelyn@lodestonepty.com</u>>
Cc: Werner Petrick <<u>wpetrick@namisun.com</u>>; 'Pierre Smit' <<u>oudoring@gmail.com</u>>
Subject: Lodestone Namibia - Project Update for IAPs (October 2023)

To all registered Interested & Affected Parties,

I have attached an update on the **Lodestone Namibia Iron Ore Project** for your information and possible continued interest.

Please do contact me should you have any queries. Due to a large volume of emails that we usually receive from the public please be patient in receiving a response from Lodestone to your email query.

Kind regards,

#### Daniel Castelyn | COO

Mobile: +264 (0)81 144 7868 | Fixed: +264 (0)61 218079



1<sup>st</sup> Floor, 37 on Schanzen Schanzen Street Windhoek, Namibia <u>lodestonepty.com</u>

#### SCOPING (INCLUDING IMPACT ASSESSMENT) REPORT FOR LODESTONE'S PROPOSED NEW BULK WATER PIPELINE FROM OANOB DAM TO THE DORDABIS IRON ORE MINE

### **ISSUES AND RESPONSE REPORT**

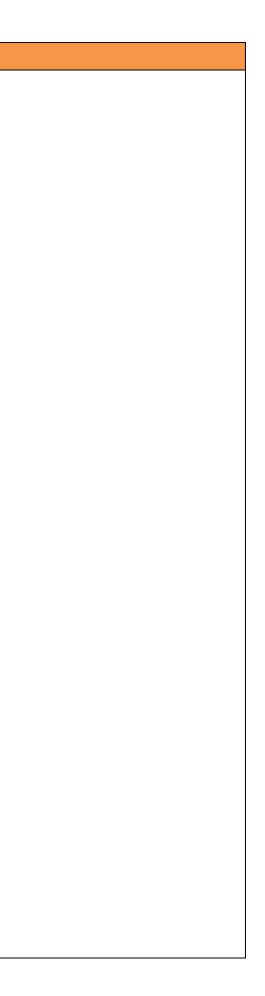
NO.	COMMENT / QUESTIONS / ISSUE RAISED	ORGANISATION	METHOD	RESPONSE
		General: Commer	ncement and schedu	ling of the project
S1	When will the proposed project kick-off?	Marshallino Beukes Journalist	e-mail 30.09.2020	Amongst others, the project schedule is subject to a formalized ag Lodestone.
S2	Does the schedule remain the same?	Henry Mukwendwa Namwater	FG Meeting 10.08.2020	Louestone.
	Concerns about water abstr	action: Lowering of the	e dam level / sustain	ability of water abstraction / regulation and control
OC1	Water Sustainability. Investment loss due to dam water dropping and depleting.	Marc Biederlack Oanob Plot Owner	Comment Sheet 06.08.20	The activities and associated potential impacts relating to the water abstraction) are excluded from 2020-assessment and will be addre
OC2	Devaluation of property as a result of water levels dropping.	Marc Biederlack Oanob Plot Owner	Comment Sheet 06.08.20	agreements between Lodestone and NamWater and the implied p
OC3	What will the maximum annual extraction be? How will Oanob Dam sustain a mine as well as a new village proposed by Dax and Rehoboth Town Council?	Mark Prior Oanob Plot Owner	Comment Sheet 05.08.20	
	What will the maximum annual extraction be? What will be the mine's maximum raw water requirement per annum?	Hugo Scheepers Oanob Plot Owner	Comment Sheet 05.08.20	
OC4		Esther & Matthias Rohr Oanob Plot Owner	Comment Sheet 05.08.20	
OC5	What will the maximum annual extraction be?	FC Rotige Oanob Plot Owner	Comment Sheet 05.08.20	
OC6	How much water per annum will be transported to the mine?	Marshallino Beukes Journalist	e-mail 30.09.2020	
OC7	How many m <sup>3</sup> of water will be extracted per annum from the dam?	Graeme Williamson Oanob Plot Owner	Comment Sheet 05.08.20	
OC8	How much water will be withdrawn from the dam? Who will regulate water drawn from Oanob?	Annerose von Lieres Oanob Plot Owner	Comment Sheet 05.08.20	_
OC9	Who will regulate the amount of water drawn from the dam?	Annerose von Lieres Oanob Plot Owner	Comment Sheet 05.08.20	_
OC10	Extraction volume monthly – pending on the rainy season. What alternative water source for the mine has been implemented?	Fred van Zyl Oanob Plot Owner	Comment Sheet 05.08.20	_
OC11	Annual total water consumption of the mine and associated works	Fred van Zyl Oanob Plot Owner	Comment Sheet 05.08.20	
OC12	Effects on water levels arising out of the needs of a second housing development	Fred van Zyl Oanob Plot Owner	Comment Sheet 05.08.20	_
OC13	How will this affect Rehoboth's water requirements from the dam?	Fred van Zyl Oanob Plot Owner	Comment Sheet 05.08.20	
OC14	Will Oanob Dam be able to cater for the Rehoboth residents as well as the needs of the mine?	Marshallino Beukes Journalist	e-mail 30.09.2020	
OC15	The Acacia Forest just South of Rehoboth relies on water from Oanob Dam. Has this been taken into consideration?	Marshallino Beukes Journalist	e-mail 30.09.2020	
OC16	Oanob water use concern / objection	Francois Retief Rehoboth Resident	Email 05.05.2020	
OC17	How will the water levels in the dam be affected?	Marshallino Beukes Journalist	e-mail 30.09.2020	



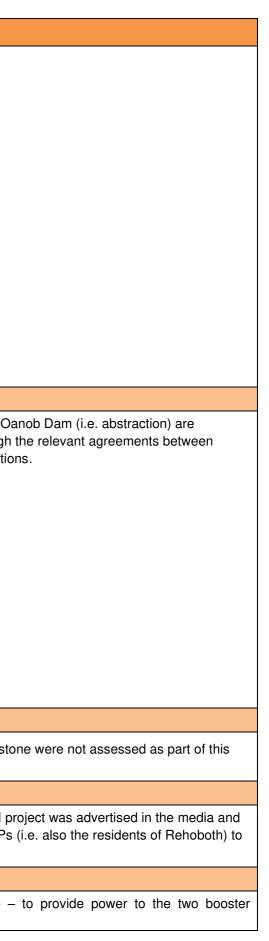
agreement between Namwater and

ater supply from the Oanob Dam (i.e. dressed through the relevant d permits / authorizations.

NO.	COMMENT / QUESTIONS / ISSUE RAISED	ORGANISATION	METHOD	RESPONSE
OC18	Is there an alternative water source for the mine?	Fred van Zyl Oanob Plot Owner	Comment Sheet 05.08.20	
OC19	What will the mine do if there is no water in Oanob Dam?	Fred van Zyl Oanob Plot Owner	Comment Sheet 05.08.20	
OC20	In the last few years the dam has only been at 20% capacity – what will happen when the mine needs water and there is none?	Mark Prior Oanob Plot Owner	Comment Sheet 05.08.20	
OC21	How will the dam support a mine, a proposed new housing development and Rehoboth Town Council?	Mark Prior Oanob Plot Owner	Comment Sheet 05.08.20	
OC22	An in-depth study is required on capacity of dam water especially over drought periods?	Mark Prior Oanob Plot Owner	Comment Sheet 05.08.20	
OC23	What will the annual extraction be? What backup plan is in place to protect the dam from over usage?	FC Rotige Oanob Plot Owner	Comment Sheet 05.08.20	
OC24	Oanob Dam has during the recent past more than once reached critically low water levels under normal circumstances of water consumption. It seems inconceivable and totally unfeasible to maintain a sustainable supply to present consumers – who will also be increasing – when adding an industrial operation consuming large additional volumes to a scarce water supply?	Anton Von Wietersheim Onaob Plot Owner	Comment Sheet 01.09.2020	
OC25	Has water from Oanob Dam been approved?	Marc Biederlack Oanob Plot Owner	FG Meeting 29.07.2020	
OC26	Who has given permission for water from Oanob	Johan Kotze Farm Manager	FG Meeting 07.08.2020	
OC27	What will happen if the dam runs dry?	Marc Biederlack Oanob Plot Owner	FG Meeting 29.07.2020	
OC28	How much water per day will the mine require?	Johan Kotze Farm Manager	FG Meeting 07.08.2020	
OC29	Where does Windhoek get water from – not Oanob and not in the future?	Johan Kotze Farm Manager	FG Meeting 07.08.2020	
OC30	What will happen if Oanob does not have enough water – where will the water come from then?	Eike Krafft Farm Ebenstein	FG Meeting 20.08.2020	
OC31	What happens to the groundwater when Oanob cannot supply?	Eike Krafft Farm Ebenstein	FG Meeting 20.08.2020	
OC32	With the 1.4 Mm <sup>3</sup> /a planned to come from Oanob Dam, what happens if Oanob Dam level runs very low as happened in 2019? My concern is that in such cases the extraction from the boreholes will be significantly increased, hence affecting the region.	Sabine Krafft Farm Ebenstein	Comment Sheet 07.08.2020	
OC33	1.4 Mm <sup>3</sup> /a of bulk water from Lake Oanob (which according to my knowledge has a total capacity of 34Mm <sup>3</sup> ) maybe still sounds reasonable during normal rain years. How certain is it, that this amount of 1.4 Mm <sup>3</sup> /a will be sufficient for the whole duration of the mining activities and what are the chances that this demand for water will increase in the future. Also, what happens if there is a severe drought (similar to the one in 2019) and Lake Oanob is not able to provide the required amount of water?	Kai Uwe Luhl Farmer	Comment Sheet 27.07.2020	
OC34	We are concerned about the water extraction from the Oanob Dam. Water is a very scarce resource. Namibia has many droughts and water scarcity issues. How are you going to deal with this topic when are you are now extracting an environmental resource.	Pascale Paulsmeier Dordabis Resident	Comment Sheet 04.08.2020	
OC35	The amount of water to be used from an already fragile water source is concerning	Wim Steenkamp Avis Resident	Comment Sheet 06.08.2020	
OC36	Water supply and availability	Louis & Gorlia Esterhuizen Finkenstein Estate	Comment Sheet 03.08.2020	
OC37	Water consumption – it was mentioned in the meeting that a 'slight' increase in water consumption is needed – actually it is 50% - not slight. The owners at and resort of Oanob Dam should be involved intis EIA as well as the residents of Rehoboth	Michaela Tietz-von Leipzig Finkenstein Homeowner	Email 07.08.2020	



NO.	COMMENT / QUESTIONS / ISSUE RAISED	ORGANISATION	METHOD	RESPONSE
OC38	What is the monthly water usage of the mine to enable us to calculate how much water will be pumped out of Lake Oanob and will it be sustainable.	Robin Thompson Finkenstein Homeowner	Email 05.08.2020	
OC39	The use of water from Lake Oanob for irrigation purposes by farmers in the area was declined by the Dept of Water Affairs many years ago. Why should the mine be given privilege now?	Robin Thompson Finkenstein Homeowner	Email 05.08.2020	
OC40	What other water sources besides Lake Oanob are available and have the residents of Rehoboth and Dordabis been consulted in this matter? Rehoboth is expanding rapidly. Lake Oanob dropped to 40% capacity last year and the extra water usage by the mine will prove extremely detrimental.	Robin Thompson Finkenstein Homeowner	Email 05.08.2020	
OC41	The sustainability of perpetual withdrawal of 1.4 Mm <sup>3</sup> /a is questioned especially in view of the erratic inflows from year to year and the low dam levels over extended periods. Another township has been approved on the western slope of Lake Oanob.	Hans-Bryan Gerdes Oanob Plot Owner	Comment Sheet 05.08.2020	
OC42	Oanob Dam already supplies water to the water treatment plant in Rehoboth. What would be the effect on the water levels of Oanob Dam with a 500 000 m <sup>3</sup> water increase required? The expected life span of the mine is 20 years. If the country suffers drought again, as in 2019, how will water supply then be managed? Secondary source of water. As boreholes will have a negative effect, lowering of the groundwater table.	Ivan White Farmer Dordabis area	Email 06.08.2020	
	Monitorin	g / Regulation and con	trol over the water a	abstraction from the Oanob Dam
MR1	Will there be monitoring of a minimum water level in the dam?	Fred van Zyl Oanob Plot Owner	Comment Sheet 05.08.20	Monitoring requirements relating to the water supply from the Oa excluded from 2020-assessment and will be addressed through t
MR2	What independent and public forum will be established to monitor extraction and ensure compliance?	Esther & Matthias Rohr Oanob Plot Owner	Comment Sheet 05.08.20	Lodestone and NamWater and the implied permits / authorization
MR3	Who will monitor the amount extracted? Who will ensure extraction is stopped at certain level so as to sustain needed water for fish, wildlife and human consumption – so that it does not run dry?	Mark Prior Oanob Plot Owner	Comment Sheet 05.08.20	
MR4	What independent and public forum will be established to monitor extraction and ensure compliance?	Hugo Scheepers Oanob Plot Owner	Comment Sheet 05.08.20	
MR5	Who will ensure extraction is stopped when sustainable levels are about to be exceeded?	Mark Prior Oanob Plot Owner	Comment Sheet 05.08.20	
MR6	Who will be held responsible should this happen – Oanob Dam cannot sustain a mining operation?.	FC Rotige Oanob Plot Owner	Comment Sheet 05.08.20	
MR7	Will the water extraction be limited and if the dam gets to a certain level will it be stopped? How many m <sup>3</sup> of water will be extracted per annum from the dam?	Graeme Williamson Oanob Plot Owner	Comment Sheet 05.08.20	
MR8	What independent and public forum will be established to monitor extraction and ensure compliance.	Hugo Scheepers Oanob Plot Owner	Comment Sheet 05.08.2020	
		Concerns about water	abstraction from gr	roundwater resources
GR1	We are situated in close proximity to the mine and what effect will the mine have on the underground water system or reservoirs and rivers in the area?	Ingemar Christ, Farm Klipvlei	Comment Sheet 03.09.20	Impacts related to the groundwater abstraction yields of Lodeston EIA.
		Concerns about the en	gagement with Reho	oboth and its residents
R1	Was the Rehoboth community communicated with regarding this proposed water supply pipeline? If yes, when and also what was the feedback from the community? If no, why was it not deemed necessary to engage with the Rehoboth community	Marshallino Beukes Journalist	e-mail 30.09.2020	As per the requirements of the EIA Regulations, the proposed pr site notices were placed at appropriate locations to invite I&APs participate.
		stions related to desig	n and civil works, se	ervitude and access points
DC1	Will the proposed powerline and water pipeline run next to each other?	NP Du Plessis Namwater	FG Meeting 10.08.2020	The powerline will only be along a portion of the pipeline – pumpstations.



NO.	COMMENT / QUESTIONS / ISSUE RAISED	ORGANISATION	METHOD	RESPONSE
DC2	Will the power supply be part of this EIA?	NP Du Plessis Namwater	FG Meeting 10.08.2020	Yes, it was included.
DC3	Size of the pipeline 315mm – what is the mine's demand? What about other users – how will they impact on the size of the pipe?	Henry Mukwendwa Namwater	FG Meeting 10.08.2020	The diameter of the proposed pipeline is based on the water supply as being determined by Lodestone's water demand.
DC4	What will be the size of the pipeline?	Farm owners	Informal meetings – 30.08.23	
DC5	500 m <sup>3</sup> ground level reservoir – what do you want to achieve?	Henry Mukwendwa Namwater	FG Meeting 10.08.2020	The ground level reservoirs are planned at the two booster pumpstations – for control purposes.
DC6	Please advise the pipeline route.	Oanob Plot Owner	FG Meeting 29.07.2020	The pipeline route is described in the report (see Section 4.2.1)."From the base station at the Oanob Dam, the route of the pipeline will follow one of the two Oanob Dam access roads, across the B1, eastwards along the north side of the C25 to Rehoboth Station and follow the D1228 eastward to the D1249. Here the pipeline turns sharply northwards and run along the western side of D1249 to the C23, where it will turn westwards along the south side of the C23 for approximately 5 km to the mine site."
DC7	How will permissions related to the access and servitude be arranged?	Farm owners	Informal meetings - 30.08.23	A servitude of NamWater will be registered, for maintenance purposes. The servitude and permissions for access will be formalized in a contractual agreement between NamWater and the landowners.
DC8	In our case, the road and road reserves on the D1228 falls within the boundaries of our farm, for which we pay farm tax. Do you have any idea how this will impact the pipeline?	Robert Hendriks, Farm owner	e-mail – 02.08.23	The registration of the servitude will be formalized by means of a contractual agreement between NamWater and the individual landowners.
		Offtakes fr	om the pipeline and	powerline
OF1	If there are requests for offtakes from farms along the route – would that be considered?	Farm owner	FG Meeting 10.08.2020	Offtakes might be possible, but this issue would be subject to NamWater's requirements and conditions as per contract with individual users.
OF2	Will there be the possibility for farmers to tap off water from the pipeline and what will the cost be	Harold Mouton, Farm owner, Emmabron	FG Meeting 20.08.2020	
OF3	Can water offtake be arranged for farmers long the route?	Farm owners	Informal meetings - 30.08.23	
OF4	What are the possibilities to be connected to the proposed powerline?	Farm owners	Informal meetings - 30.08.23	Connections might be possible, but this issue would be subject to NamPower's requirements and conditions as per contract with individual users.
		Job creation a	and socio-economic	opportunities
SE1	What kind of work opportunities will be created during the construction of the pipeline and its associated infrastructure?	Farm owners	Informal meetings - 30.08.23	To be determined by Lodestone during the construction period – as per Section 4.3.2. of the report: "At least two teams will conduct work on this project, starting from opposite ends to the middle. Not more than 40 people per team is expected. Typically, temporary construction camps accommodating the workforce will be located close to the work area. These sites will have to be negotiated with the applicable farm owners."





#### LODESTONE NAMIBIA (PTY) LTD

#### EIA AMENDMENT FOR LODESTONE'S DORDABIS IRON ORE MINING PROJECT AND ASSOCIATED INFRASTRUCTURE

#### **BACKGROUND INFORMATION DOCUMENT**

#### **1. INTRODUCTION**

Lodestone Namibia (Pty) Ltd (Lodestone), a privately funded mining company, holds the Mining Licence (ML) 182 within their Exclusive Prospecting License (EPL 7352, which replaced EPL 3112) area. The licence areas are situated in the Khomas Region, approximately 20 km north-west of Dordabis and 75 km south east of Windhoek on the C23 tar road (refer to Figure 1 for the regional locality map of the licence areas).

Lodestone undertook an environmental impact assessment (EIA) process for an iron ore mine and processing plant and associated infrastructure & activities on the EPL area, between 2011 and 2013 and received environmental clearance from the Ministry of Environment and Tourism (MET) (now the Ministry of Environment, Forestry and Tourism [MEFT]) in July 2014. Lodestone subsequently submitted an environmental clearance certificate (ECC) renewal application to MEFT in December 2019, however, for a much reduced scale in activities on ML 182 (i.e. "small Scale Magnetite Mining"). MEFT issued a renewed ECC to Lodestone in June 2020.

Lodestone is currently finalizing their Feasibility Study for the originally planned "Dordabis Iron Ore Mining Project and Associated Infrastructure" on ML 182. However, Lodestone now propose a number of changes to the previously assessed / approved (2013 EIA) project scope relating to the "original bigger scale project". Key amendments are summarised below, and presented in more detail in section 5 and Figures 2 and 3.

#### Mining and processing

- All proposed mining activities are now restricted north of the C23 Road, resulting in an amended mine layout.
- Minor change in design of the two mine pits.
- Minor increase in mining rate and processing.
- Change to the disposal of mineralized waste. Road and rail
  - Minor change to the proposed/approved C23 Road diversion.

- Change in methodology of the final product transportation i.e. to truck the 2.0 million tons per annum final product using sealed containers from site to the Hoffnung rail siding via the C23 Road (i.e. Main Road M0033) and B6 Airport Road (i.e. Trunk Road T0601), from where it will be transported per rail to Walvis Bay for export.
- Various road and intersection upgrades.
- Refurbishment of the Hoffnung siding and the rail line from Hoffnung (opposite Finkenstein) to Gammams Station in Windhoek.

#### Water supply

• Construction of a proposed new bulk water supply pipeline from the Oanob dam to the mine.

#### Power supply

• Construction of a new overhead powerline from the Auas substation to the mine.

These proposed amendments to the original project are a result of the following:

- The ML 182 boundaries restricts the mining and processing activities to the north of the C23 Road.
- Re-evaluation and design of the co-disposal of waste rock and tailings (i.e. processing waste) material as opposed to the previously proposed, separate, waste rock dump and tailings storage facility.
- The position and shape of the final pit boundary was optimised given the geological and economic parameters of the deposit as well as the mining, processing and market parameters.
- Further technical evaluations and changes in project planning by Lodestone concluded the need for various alterations to the support infrastructure and input to the mining and processing activities.

#### 2. WHAT AUTHORISATION IS REQUIRED?

Prior to the commencement of the proposed project amendments, environmental clearance is required in terms of the Environmental Management Act, 7 of 2007 and the associated EIA Regulations (January 2012). Parallel applications for ECCs will be submitted to the Competent Authorities (Ministry of Mines and Energy [MME] for the mining and for the power supply activities; Ministry of Works and Transport (MWT) for the road and rail upgrades / refurbishments; and the Ministry of Agriculture, Water and Land Reform [MAWLR] for the water pipeline activities), who will review the applications and relevant reports and submit their comments to MEFT. A final decision relating to the above mentioned applications will be made by MEFT: Department of Environmental Affairs (DEA).

The related environmental (amendment) process will include: A screening phase; scoping (including an assessment of impacts) phase; and updating the approved Lodestone Project Environmental Management Plant (EMP).

Namisun Environmental Projects & Development (Namisun) has been appointed by Lodestone as the independent Environmental Assessment Practitioner to undertake the EIA process for the proposed project.

#### **3. PURPOSE OF THIS DOCUMENT**

This document has been prepared by Namisun to inform you about:

- The proposed project amendments (Section 5);
- The EIA process (section 6);
- The key environmental and social issues (i.e. aspects and potential impacts) (Section 7); and
- How you can register as an interested and /or affected party (I&AP) (sections 4 and 8).

#### **4. PARTICIPATION IN THE EIA PROCESS**

Public participation is an essential part of the EIA process. You have been identified as a possible I&AP who may want to be informed about the proposed project and have input into the EIA process. All comments will be recorded and addressed in the EIA process.

#### HOW TO REGISTER AS AN I&AP

Please register as an I&AP and submit any questions or comments by means of the enclosed registration / comment sheet or through communication with Namisun.

> Attention: Werner Petrick E-mail address: <u>wpetrick@namisun.com</u> Cell number: +264 (0)81 739 4591

#### If you would like your comments to be addressed in the EIA report please submit them by 7 August 2020.

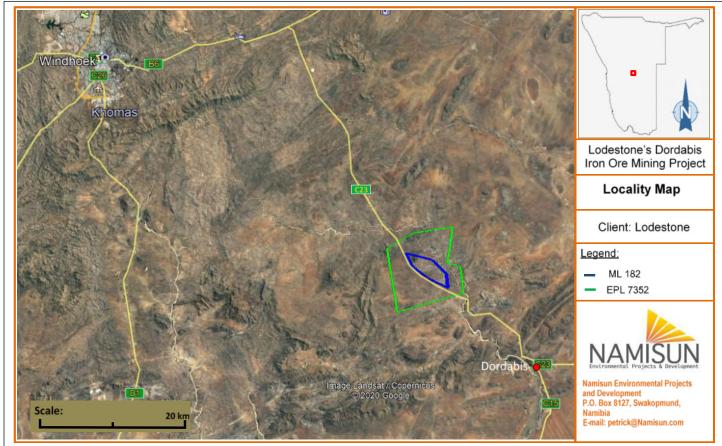


Figure 1: Reginal Locality map of the Dordabis Iron Ore Project (ML area) (Ref: Google Earth)

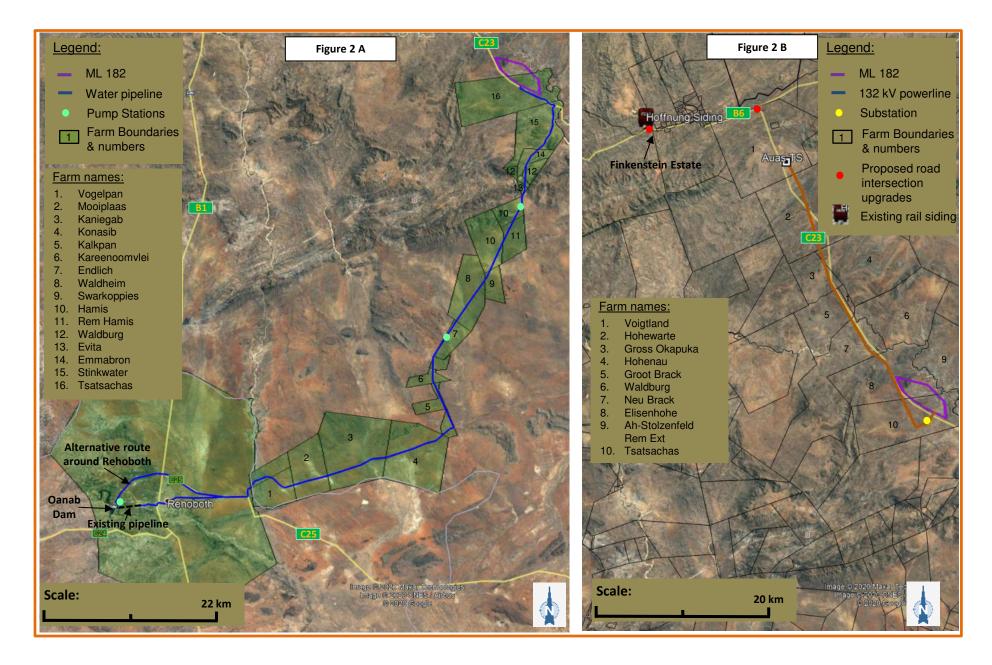


Figure 2 A & B: Locality maps of the Dordabis Iron Ore Project and associated infrastructure (proposed water pipeline route left & proposed 132 kV powerline right) (Ref: Google Earth)



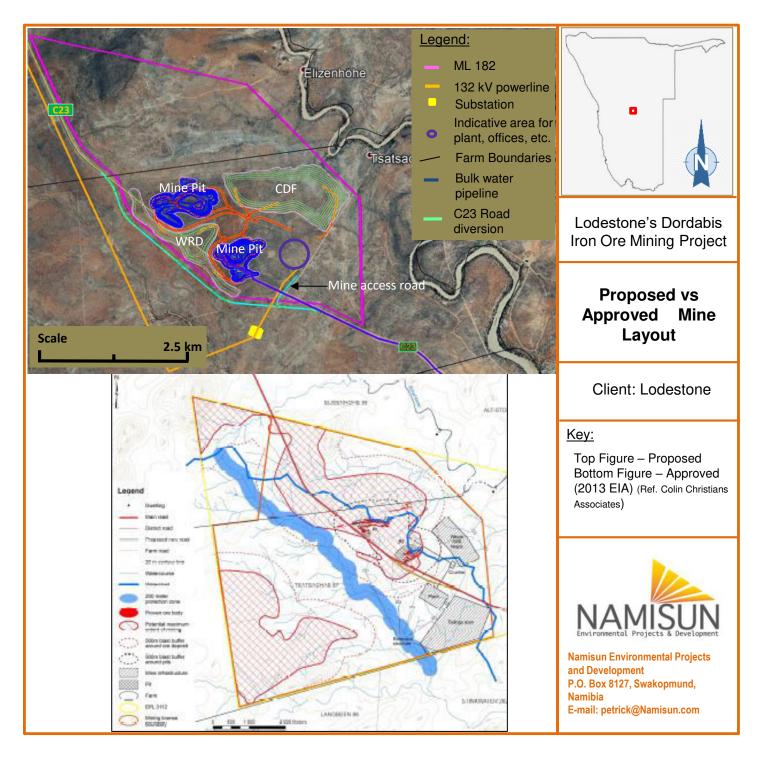


Figure 3: Proposed new (top) vs approved (2013 EIA) (bottom) mining layout



#### **5. PROPOSED PROJECT AMENDMENTS**

The following sections provide a description of the proposed changes to the Dordabis Iron Ore open pit Mining Project and Associated Infrastructure & activities. Where relevant, the proposed new activities and infrastructure are compared with those assessed / approved in the original (2013) EIA.

#### 5.1 MINING AND PROCESSING

The table below provides a summary of the proposed amendments relating to the mining and processing activities and facilities and associated infrastructure. Refer to Figure 3.

TABLE 1: SUMMARY OF THE PROPOSEDAMENDMENTS

FACILITY /	ORIGINAL	PROPOSED
ACTIVITY	(2013 EIA) /	AMENDMENTS
	APPROVED	
Mine layout - mining & processing activities	To the north and south of the C23 Road.	All restricted to north of C23 Road with a smaller overall footprint.
Minable reserves	<ul> <li>Run of mine = 3.4 million tonnes / annum (MTPA) (maximum of 4 MTPA)</li> <li>Total volume of waste rock = 3.1 MTPA</li> </ul>	<ul> <li>Run of mine = 4.13 MTPA</li> <li>Total volume of waste rock = 5.72 MTPA</li> </ul>
Mining rate total (waste rock and run of mine ore)	6.5 M tonnes / annum	10.7 MTPA
Life of Mine (LOM)	13.5 years	19 years
Mill feed (p.a.)	3.4 M tonnes / annum (maximum 4 M tonnes)	4.14 M tons max rate.
Processing method	Conventional gra separation proces	vity and magnetic sing.
Processing peak production	1.2 M tonnes / annum iron concentrate	1.84 dry and 2.0 wet M tonnes / annum iron concentrate
Mineralised waste facility(s)	Tailings storage facility: - Area = 175 ha - Height = 40 m Waste Rock Dump (WRD): - Area = 81 ha - Height = 14.5 m.	WRD and Co- disposal facility (CDF) (i.e. for both waste rock and tailings): WRD: - Area = 65.9 ha - Height = 55 m CDF: - Area = 148.6 ha - Height = 70 m

FACILITY / ACTIVITY	ORIGINAL (2013 EIA) / APPROVED	PROPOSED AMENDMENTS
Water requirements & supply	900,000 m <sup>3</sup> /annum (mine and processing)	1.4 Mm <sup>3</sup> /annum (mine and processing)
	Supply from the Oanob Dam near Rehoboth, however, the technical details, etc. for the pipeline was not yet available and not included in the EIA.	Supply from the Oanob Dam near Rehoboth. Refer to section 5.1.3 for further details.

#### 5.1.1 Mining

As per the original / approved (2013) EIA, conventional open pit mining, i.e. drill and blast followed by load and haul activities are proposed. Both waste rock and ore material will be hauled from the mining area to a specific waste rock dump (WRD), co-disposal facility and ore stockpile locations in the project's mining area, respectively.

#### 5.1.2 Processing

Following crushing and milling of the ore, the iron ore will be concentrated on site using a mechanical process. No chemical processing is required. Crushed rock will travel via conveyor to the processing plant where it will be milled and concentrated by means of a gravity and magnetic separation process.

#### 5.1.3 Mineralised waste facilities

Waste rock which includes barren material and mineralised material with a grade lower than the marginal cut-off grade (i.e. < 0.15%), will be dumped at a dedicated WRD or with the filtered tailings on a codisposal facility (CDF). The dedicated WRD will be located between the pits and the rerouted C23 tar road (see Figure 3).

The plant tailings (i.e. waste stream from the process plant) are a combination of fine and coarse tails that have been dewatered and filtered to maximise water recovery back into the plant. Filtered tailings will be codisposed with mining waste (i.e. waste rock) on a CDF.

The CDF footprint will be approximately 210 ha to store an estimated 83.3 Mm<sup>3</sup> of waste rock and filtered tailings. See Figure 3 for the proposed location of the CDF.

Some of the waste rock ( $\pm$  20.6 Mm<sup>3</sup>), not disposed of at the above mentioned facilities, would be placed in and between the mined out open pits.



#### 5.1.4 Final product transport

Lodestone propose to utilise the existing road infrastructure from the mine site to the Hoffnung siding (see Figure 2B), and the existing rail infrastructure from Hoffnung to Walvis Bay to transport the iron ore product from mine to port.

The processed ore (i.e. 2 million metric tons per annum) will be transported by sealed container trucks along the C23 and B6 roads to the Hoffnung siding. The sealed containers will be loaded onto a train to be transported to Walvis Bay for export. The B6 & C23 road sections will see an increase of traffic by 4% and 95% respectively, which necessitates improvements to intersections for the purpose of road safety (see sections 5.2 and 5.3 for proposed road/rail upgrades/refurbishments).

#### 5.1.5 Water supply

Refer to section 5.3 for the information relating to the bulk water supply pipeline from the Oanob Dam, to be assessed as part of the EIA amendment process.

Two existing boreholes on site will be utilised to supply potable water to the plant site, admin buildings, logistics buildings and mining yard. The supply from the boreholes has a combined production rate of 120  $m^3$ /day, which is in excess of what is needed on site in terms of potable water.

#### 5.1.6 Power supply

The original (2013) EIA indicated that the power to the mine would be supplied from the Auas substation on the C23 tar road. The powerline and associated activities were not included as part of the original EIA. The proposed powerline and route alternatives have now been determined by NamPower, in liaison with Lodestone. Refer to section 5.2 for further information relating to the proposed powerline that forms part of this EIA application process.

#### 5.1.7 Additional support site infrastructure

Within the ML area internal roads, power lines, pumps, pipes, water storage and other associated infrastructure and services, process and non-process plant buildings, product handling & loading areas, fuel storage facilities, general waste handling and storage facilities, etc. would need to be constructed.

#### 5.1.8 Employment and housing

The labour requirements for the construction phase would vary from about 100 to a maximum of 500 skilled and unskilled workers.

Lodestone would employ approximately 445 permanent employees at full production.

No on-site housing is planned at any stage (i.e. construction and operations) at the mine. Contractors and permanent mine staff residing in Windhoek and surrounds, i.e. Dordabis, Rehoboth, etc. would travel to the mine and back, on a daily basis.

#### 5.2 RAIL SIDING REFURBISHMENTS 5.2.1 Hoffnung – Weatherly Rail Siding

This siding shall be used as a container (empty and full) storage facility for the mine and the manoeuvrability of the trucks transporting in full containers and returning the empty containers back to the mine. This siding will need to be refurbished to allow the access of the trucks and handling of the containers, including offices and ablutions for the minor workforce stationed there.

#### 5.2.2 Hoffnung – TransNamib Siding

To attain a product capacity of 2 million metric tons per annum, this siding needs to be rebuilt to the "A-Standard". There would be one empty, plus one full trainset moving through this siding every 2.25 hours, in 24 hours per day, 7-days per week and 340 days per year.

#### 5.2.3 Main line – TransNamib

The Main Line between Hoffnung Station and Gammams Station requires rehabilitation and/or upgrading to allow for the safe transportation of maximum 2 million metric tons per annum on this railway infrastructure.

#### 5.3 ROAD UPGRADES

Lodestone will no longer consider a rail link from the Rehoboth rail siding to the Windhoek line, but will truck the iron ore product using sealed containers from the mine to the Hoffnung siding. Improvements to the structural capacity and strengthening of the C23 Road section will be necessary due to the increase in traffic, especially the heavy vehicles from the mine.

The C23 road will be diverted by  $\pm 300$  m south of the Dordabis mine to allow a blasting buffer zone (see Figure 3).

The Auasklip bridge is in close proximity to the current intersection and with the provision of acceleration and passing lanes, to be provided at the C23/B6 intersection, the existing Auasklip River Bridge needs to be widened to account for these additional lanes.

All upgrades to the roads (except for the C23 road diversion) and intersections are in the current road reserve and will be done by Lodestone.

#### 5.4 POWER SUPPLY TO THE MINE

A new 132 kV powerline is proposed for power supply from the Auas NamPower substation to the mine, with a dedicated substation planned at the mine site. The



(indicative) proposed powerline route and substation location is presented in Figure 2B. The route alignment will be to the east of the planned (NamPower) 400 kV line, for which an EIA process has already commenced and is near completion.

An 11 kV line will reticulate power in the mine from the proposed new sub-station. Forecasted power requirement/demand to the mine is 16 MVA.

#### 5.5 BULK WATER SUPPLY TO THE MINE

Raw water for processing and dust suppression will be pumped via a new pipeline from the Oanob Dam. NamWater has confirmed the availability of the required water supply to the mine. Lodestone and all current users (with growth projections) will continue to benefit from a dam abstraction significantly less than the 95% assured yield for life of mine. A pipeline route has been decided following gravel roads, which is the shortest route that follows close to existing roads. The proposed pipeline route is presented in Figure 2 A.

The main pipeline design is for a buried mPVC pipeline and will be  $\pm$  95 km long. The pipeline will have a diameter of 315 mm.

The pipeline will commence from the base pump station at an offtake on the NamWater raw water pipeline. Three booster pump stations will be installed along the pipeline route (refer to Figure 2A). A 500 m<sup>3</sup> ground level reservoir will be constructed at each of the pump stations.

#### 5.6 PROJECT SCHEDULE

The implementation of the proposed project is dependent on, amongst others, the issuing of an ECC by MEFT. Thereafter, and depending on market conditions, construction of the various proposed facilities, refurbishments and upgrades is planned to commence in February 2021. The construction phase would take approximately 22 months to complete before operations can commence.

#### 6. EIA PROCESS

The main objectives of the EIA process are to:

- Provide information on the proposed project and amendments (i.e. activities and facilities / infrastructure);
- Describe the current environment in which it will be situated by updating relevant information from the 2013 (approved) EIA;
- Identifies / update, in consultation with I&APs, the potential negative and positive environmental (and social) aspects;
- Re-assesses the associated potential impacts of the proposed project; and

• Report on measures required to avoid impacts or mitigate such impacts to acceptable levels by updating the approved EMP, where required.

The likely process steps and timeframes of the EIA process are provided in Table 2.

# TABLE 2: EIA PROCESS FOR THE PROPOSEDDORDABIS IRON ORE MINING PROJECT &ASSOCIATED INFRASTRUCTURE PROJECT

#### STEPS IN THE EIA PROCESS PHASE I: Project initiation & Internal Screening

### (May - July 2020)

- EIA project initiation.
- Notify MME, MAWLR, MWT and MEFT through the submission of the EIA Application Forms and online (MEFT) Registration.
- Site visit and identify environmental issues.
- Identify key stakeholders (i.e. update existing Project I&AP database).

#### PHASE II – Combined Scoping & Assessment Phase and Environmental Management Plan (EMP) update (July – December 2020)

- Notify other regulatory authorities and I&APs of the proposed project (via newspaper advertisements, this document, emails, site notices and telephone calls).
- Conduct Key Stakeholder and Focus Group meetings.
- Carry out specialist investigations.
- Re-assess the potential impacts of the proposed Dordabis project activities and compile a Scoping (including assessment) Report and updated EMP.
- Distribute the EIA reports for review and comment by regulatory authorities and I&APs.
- Consider comments received and compile the final reports (including an Issues and Response Report).
- Submit the final reports to MME, MAWLR, MWT and MEFT for their review and decisionmaking.

A draft Scoping Report (including an assessment of impacts) and an updated Environmental Management Plan (EMP) for the proposed project will be made available for public review / comment. Registered I&APs will be notified via e-mail of the review period and the availability of the draft Scoping Report (including impact assessment) and EMP.

The final Report, along with all I&AP comments, will be submitted to MME, MAWLR and MWT for their review and recommendation, after which it will be forwarded to MEFT (Environmental Commissioner) for their review and a final decision.



#### 7. KEY ISSUES RELATED TO THE PROPOSED PROJECT

Key potential environmental issues (i.e. aspects / potential impacts), that need to be assessed (reassessed where relevant) as part of the EIA process, associated with the proposed Project, are described in the sections below.

#### 5.7 MINING AND ASSOCIATED ACTIVITIES

- <u>Groundwater and Surface water impacts:</u> Groundwater contamination; lowering of groundwater level due to pumping from on-site borehole(s); alteration of drainage patterns and pollution of surface water.
- <u>Air Quality:</u> Potential air pollution impacting on third parties' health and causing nuisance as a result of dust from mining and processing activities.
- Noise:

Increase in ambient noise causing disturbance/nuisance.

Biodiversity:

Physical destruction and general disturbance of biodiversity due to site clearance & other construction activities; as well as ongoing operations.

- <u>Archaeology:</u> Destruction and damage to archaeological sites and landscapes on the relevant ML areas.
- <u>Soil:</u>

Impact on land capability and future land use.

- <u>Visual</u>
   Change to the visual landscape / sense of place.
- <u>Blasting / vibrations</u> Blast damage to third party infrastructure.
- <u>Socio-economic</u>:

Positive economic impacts associated with income and employment. Potential negative impacts on neighboring communities due to change of land use; in-migration and health and safety concerns to nearby land owners; nuisance-related disturbance; traffic related impacts (see section 5.8) and hazardous excavations and infrastructure relating to third party safety issues.

#### 5.8 RAIL AND ROAD UPGRADES / REFURBISHMENTS

 <u>Noise</u>: Increase in ambient noise causing disturbance/nuisance. <u>Socio-economic</u>:

Positive economic impacts associated with income and employment during construction activities. Traffic impacts and impacts on road condition.

#### 5.9 NEW 132 KV POWERLINE

• Biodiversity:

Physical destruction and general disturbance of biodiversity during construction. Impact on birds (collision with the powerline and electrocutions).

<u>Archaeology:</u>

Destruction and damage to archaeological sites and landscapes during construction.

<u>Visual</u>

Change to the visual landscape / sense of place due to the overhead powerline.

Socio-economic:

Positive economic impacts associated with income and employment during construction of the powerline. Potential negative impacts on landowners due to a new powerline servitude.

#### 5.10 NEW WATER PIPELINE

• Biodiversity:

Physical destruction and general disturbance of biodiversity during construction of the pipeline.

<u>Archaeology:</u>

Destruction and damage to archaeological sites and landscapes during construction of the pipeline.

• Socio-economic:

Positive economic impacts associated with income and employment during construction of the pipeline.

Potential negative impacts on land-owners due to a new powerline servitude.

#### 8. INVITATION TO REGISTER AND COMMENT

Please complete the enclosed registration/comment form or contact Namisun to register as an I&AP. Various opportunities will be provided for members of the public and identified stakeholders to engage in the EIA process.

For comments to be included in the Scoping (including Impact Assessment) Report they must reach Namisun by **no later than 7 August 2020.** 



#### LODESTONE NAMIBIA

#### EIA AMENDMENT FOR LODESTONE'S DORDABIS IRON ORE MINING PROJECT AND ASSOCIATED INFRASTRUCTURE

#### **I&AP REGISTRATION AND COMMENTS FORM**

DATE:				
I&AP PART	I&AP PARTICULARS:			
NAME AND	SURNAME:			
ORGANISA	TION:			
E-MAIL:				
TEL & CEL	L PHONE NUM	BERS:		
	PLEASE I	DENTIFY	YOUR INTERS IN THE PROPOSED PROJECT:	
	PLE	ASE PRC	OVIDE YOUR COMMENTS / QUESTIONS:	





## Project Update Environmental & Social Focus

October 2023 - prepared by Daniel Castelyn

**Public Distribution** 

### Project Update

Lodestone continues to pursue avenues for funding its high-grade iron concentrate project (>65% Fe) and has nonbinding funding commitments for 75% of its project cost (80 million USD or 1.5 Billion NAD).

The mine is also gearing up to possibly supply a local green hot briquetted iron supplier currently setting up operations in Arandis with iron ore. This will see current operations extended to a full-time basis, but still on the same scale as currently in place.

# High Grade Project Implementation Status

The project timelines are currently forecast to be:

**Phase 1** for the initial export of 1 million tons per year of iron ore concentrate.

- Construction Start of Phase 1 starts second half of 2024.
- First Shipment of High-Grade Iron Concentrate via Walvis Bay in second half of 2025.

**Phase 2** which will see a ramp up of up to 2 million tons per year by 2027 for a further 15+ years.

This will be Namibia's only Iron Ore Producing Mine and Namibia's Largest Single Logistics Operation by the year 2027.



## Legal Compliance

- ✓ Environmental Clearance In Place by the Ministry of Environment, Forestry and Tourism (MEFT) March (mining) & May (and powerline) and currently submitted for renewal including an independent audit by Namisun in early 2023.
- $\checkmark$  Mining, Processing, Inland Logistics activities & 132kV Powerline to site approved and in renewal.

Environmental Impact Assessments currently underway & completion for submission to MEFT by October/November 2022.

- Water Pipeline: The mine will require about 2 million cubic meters of raw water from Oanob Dam by 2024/2025. The independently assessed assured yield of Oanob dam is 5 million cubic meters per year (1% chance of drying every 200 years based on 101 years of meteorological modelling and 30+ years of data from Oanob itself).
- Interim Water: Treated (Grey) Wastewater sourced from Ujams Wastewater Treatment Plant in Windhoek North will be an interim solution until the Oanob pipeline is completed.
- Long Term Rail Logistics: Lodestone <u>no longer</u> intends to use the Hoffnung siding (opposite Finkenstein Estate) to Windhoek North Railway line (through Avis/Klein Windhoek/CBD) but will instead eventually road truck the final concentrate from the mine site to WINCON (Windhoek Northern Industrial) Terminal as a bulk only commodity. A rail link may be considered in the long term which connects the mine site to the Windhoek South mainline via Aris.



### **Current Activities**

The mine currently operates on a customer order basis, supplying both cement factories with good quality iron ore for their clinker production. This means the mine operates on a small-scale basis for about 3 months a year and then stops production and supplies iron ore from product stockpiles from the remainder of the year.

Z1/180



## Memorandum

## Subject: EIA SCOPING (INCLUDING IMPACT ASSESSMENT) REPORT AND EMP FOR THE PROPOSED NEW WATER PIPELINE OF LODESTONE NAMIBIA (PTY) LTD FROM THE OANOB DAM TO THE DORDABIS IRON ORE MINE.

Submission of the final reports to the Office of the Director: Water Resources Management at the Ministry of Agriculture, Water and Land Reform (MAWLR) as the competent authority.

The Environmental Impact Assessment (EIA) process for the above mentioned project has been completed. Please find herewith the final EIA Scoping (including Impact Assessment) Report with the Environmental Management Plan (EMP) associated with the proposed new water pipeline (and associated infrastructure) to the Dordabis Iron ore mine. Also attached to the letter, is a copy of the Application Form for the Environmental Clearance Certificate (ECC). Please review the Application with the report before sharing your comments with the Ministry of Environment, Forestry and Tourism (MEFT) – office of the Environmental Commissioner, who will make the final decision regarding the Application.

As described in the report, please note that the scope of this assessment covers only the potential impacts associated with the construction and operations of the proposed bulk water pipeline and associated infrastructure. The future abstraction from the Oanob Dam is not part of this application and reports, as further explained below.

Despite consultations between Lodestone Namibia (Pty) Ltd (Lodestone) and NamWater since 2019 and an independent verification of the abstraction rates, an abstraction agreement between the two parties still needs to be finalised. Therefore, it was necessary to address this matter during a virtual meeting in October 2023, which was attended (amongst others) by Mrs Ivondia Karumendu of the Directorate Water Resources Management at the MAWLR. During the meeting it was decided that NamWater will arrange an internal meeting to consolidate information about the earlier negotiations with Lodestone and that the process to reach an agreement between the two parties will continue (see minutes attached to this memorandum). It is thus assumed that an abstraction agreement will be reached between Lodestone and NamWater.

Once the review of the attached EIA report by your good office has been completed, kindly share the report as well as your recommendations with the MEFT: Department of Environmental Affairs for their final review and decision regarding the application.

Yours sincerely Namisun

#### ENVIRONMENTAL IMPACT ASSESSMENT (EIA) FOR THE PROPOSED NEW WATER PIPELINE FROM THE OANOB DAM TO THE DORDABIS IRON ORE MINE

## MINUTES OF MEETING BETWEEN LODESTONE NAMIBIA (PTY) LTD, NAMWATER, THE DIRECTORATE OF WATER RESOURCES MANAGEMENT AND NAMISUN

	MEETING DET	AILS		
DATE	2 October 2023			
TIME:	10:00			
VENUE:	Virtual (via Zoom)			
PROJECT:	The proposed bulk water pipeline betw Ore Mine	ween the Oanob Dam and the Dordabis Iron		
PURPOSE:	The objectives of the meeting:			
	• To share information about the p	proposed project.		
	To provide information about the stakeholders.	EIA process and the engagement with		
		reement between Lodestone and NamWater the context of the assessment process.		
	• To discuss the way forward, especially considering the submission of the final documents to the authorities for decision making.			
ATTENDANCE:	Name:	Organisation:		
	Andries Kok	NamWater		
	Godfrey Pazvakawambwa	NamWater		
	Henry Mukendwa	NamWater		
	Jolanda Kamburona	NamWater		
	Stefanus Mukuya	NamWater		
	Ivondia Karumendu Ministry of Agriculture, Water and Lar Reform (MAWLR) – the Directorate o Resources Management			
	Danny Castelyn	Lodestone Namibia (Pty) Ltd (Lodestone)		
	Werner Petrick	Namisun		
	Pierré Smit	Namisun		

#### 1. OPENING OF THE MEETING AND GENERAL INTRODUCTION

Pierré Smit welcomed everyone to the meeting and set the context and reasoning of the meeting.

#### 2. INFORMATION SHARING

Pierré Smit shared information about the project and the EIA process, with added information from Danny Castelyn and Werner Petrick.

#### 3. DISCUSSION (QUESTIONS AND ANSWERS)

A few questions / comments / issues were raised during the meeting. These have been recorded in the attached table (see Appendix 1).

#### 4. CLOSE

The meeting was closed by 11:00

## APPENDIX 1: QUESTIONS / COMMENTS / CONCERNS RAISED, WITH RESPONSES PROVIDED

NO.	KEY ISSUES RAISED
1	Namisun emphasized that the application and associated EIA process relates to the proposed water pipeline and not the water supply from the Oanob Dam (i.e. water abstraction). The water abstraction / supply to Lodestone remains the responsibility of NamWater (including the related permits and other authorizations, etc.). All parties agreed.
2	The water supply requirements for the project are 2.0 million cubic meters per annum (Mm <sup>3</sup> /a).
3	The proposed target date for having the bulk water supply available on the mine site is at the end of 2026, depending on the funding of the project.
4	The proposed intake point for the pipeline is planned at the same intake for the treatment plant. Clarity on this location needs to be confirmed by NamWater and if the point of intake is at a different location, a new application (or an amendment) might be required.
5	It was confirmed that discussions between NamWater and Lodestone about the proposed abstraction of water from the Oanob Dam dates to 2019. Although NamWater has (informally) confirmed the availability of the required water supply to the mine, a formal agreement between Lodestone and NamWater still needs to be formulated.
6	The Directorate of Water Resources Management at the MAWLR as the competent authority, indicated that an agreement between Lodestone and NamWater is important for their consideration of the proposed pipeline EIA and Application for an ECC, during the review process. Alternatively, proof of the negotiations to set up the formal agreement between NamWater and Lodestone must be provided.
7	NamWater will arrange an internal meeting to consolidate information about the earlier negotiations and the work conducted as part of a possible agreement with Lodestone.
8	Lodestone and NamWater will continue with the work to reach a formal agreement between the two parties.
9	Landowners along the proposed pipeline route were consulted during the EIA process, initially (during the parallel EIA process for the mine and the pipeline) as well as during the 'completion of the assessment phase'. One of the issues raised during these engagements was the possibility of offtake points for individual landowners, which was addressed in the EIA report and accompanying Environmental Management Plan.

#### Record of interactions with stakeholders

Farm Name	Contact person / Owner	Tel / cell no	E-mail	Comments
Rehoboth Townlands	Venus Klazen	Venus 0851299899	-	Contact Venus on 2 Aug on phone; all communication must go through the office of the CEO.
	Mr Ronald Windswaai, CEO		<u>ceo@rtc.org.na</u>	Sent documents per email on 18 Aug. No response received.
	Freddy Shihepo	Freddy 0813058563	freddyflee@gmail.com	Delivered a copy of the executive summary at Freddy's office. Sent full set of documents on 1 Sep per email. No response received.
Rehoboth Farmers Association	Vinzenco Bertolini	Vinzenco 0811227898	vbertolini@shoprite.co.za	Sent email on 16 Aug 2022. Sent documents per email on 18 Aug. Assistance per phone, sms and email with missing details on database. Response - positive about development in the area.
Oanob Dam Resort	Christie Benade		<u>oanobresort@iway.na</u>	Sent email on 16 Aug 2023. Sent documents per email on 18 Aug. Deliver executive summary on 30 Aug at the resort. No response received.
Namwater	Johan Somaeb	Johan 0818887946	jdsomaeb@gmail.com	Deliver executive summary to Johan onsite on 30 Aug. No response received.
Namwater	Dawid Mocumi	Dawid 0813160613		
NamWater	Jolanda Kamburona	Jolanda 0812178116	kamburonaj@namwater.co m.na	Talked on phone to Jolanda on 18 Aug; sent documents per email on 18 Aug and deliver executive summary to Jolanda on 31 Aug. No response received.
Directorate of Water Affairs	Bertram Swartz	Bertram 0812020710	bertram.swartz@mawlr.gov .na	Sent documents per email on 25 Aug. No response received.
Ptn. 2 of Farm Mooiplaas			-	Apparently Karl Denk passed away. After many efforts, no certainty was obtained about the farm owner(s) or their contact details. An

				email was sent to denkalice300@gmail.com, which was unanswered.
Ptn. 1 of Farm Vogelpan	JW Wellmann	0811244266	rixiinvest@gmail.com	Sent sms on 15 Aug; talked again and sent documents per email on 1 Sep. Response - positive about development in the area.
Kaniegab No 295	Ralph Christians	Ralph 0811274984	ralph.christians@crossroad s.africa	Sent sms and email on 15 Aug. Sent documents per email on 18 Aug. No response received.
Kaniegab	Annes Christians	Annes 0817547413	annes.christians33@gmail.c om	Talked to Annes on 2 Aug; sent an email on 2 Aug; sent documents per email on 18 Aug. No response received.
Kaniegab	Clive Izaaks	Clive 0811279130	izaksclive328@gmail.com	Deliver a copy of the executive summary on the farm (to Abner) on 30 Aug. Talked to Clive and sent full set of documents on 1 Sep per email. Response - positive about development in the area.
Kaniegab	Ralph van Wyk	Ralph 0817758035	ralphvanwyk68@gmail.com	Talked to Ralph and sent full set of documents on 1 Sep per email. Response - positive about development in the area.
Konasib 291	Basil A Rickerts	Basil 0811296996	brickerts@unam.na	Sent sms on 15 Aug; sent email on 16 Aug. Sent documents per email on 18 Aug. No response received.
Konasib-Wes 1023	Dr F Christians & Robert Hendricks	Robert 0818163593	rob.hen.58@gmail.com	Communicate per email on 2 Aug. Sent documents per email on 18 Aug. Response - positive about development in the area.
Konasib / Kleinbegin 962	Danny Villinger	Danny 0812917608	ddvillinger4882@gmail.com	Sent sms on 15 Aug; sent email on 16 Aug. Sent documents per email on 18 Aug. No response received.
Kalkpan 3	Tobie de Klerk	Tobie 0811294484	dolladeklerk@gmail.com	Deliver a copy of the executive summary on the farm on 30 Aug. Response - positive about development in the area. Sent full set of documents on 1 Sep per email.

Kalkpan 2	Henry Waterboer	Henry 0812113579	No email address	No email address, only telephonic contact. Deliver a copy of the executive summary on the farm (to Henry) on 30 Aug. Response - positive about development in the area.
Rem of Kalkpan	Fanna De Klerk	Fanna 0812007821	stephendk76@gmail.com	Talked to Fanna on 2 Aug; sent an email on 2 Aug. Sent documents per email on 18 Aug. No response received.
Kareeboomvlei	Howard Scholtz	Howard 0811291460	howardscholtz1@mtcmobil e.com.na	Talked to Howard on 2 Aug; Sent an email on 2 Aug. Email bounced, sent another email with documents to new address on 18 Aug. Response on 18 Aug - positive about development in the area.
Koigas (after verification, this farm does not form part of the route)	Franka Engelbrecht	Franka 0817321623	engelbrechtfranka@gmail.c om	Sent sms on 15 Aug; Talked and sent email to Franka on 17 Aug. Sent documents per email on 18 Aug. No response received.
Namibia 764	Chis Markus	Chris 0813367050	markuschris59@gmail.com	Sent sms and email on 15 Aug. Sent documents per email on 18 Aug. No response received.
Endlich	Ernst & Rose Mowes	Ernst 081 250 6683 Rose 081 835 1225 Kevin 081 365 7344	kevinm6485@gmail.com	Talked to Ernst on 25 July; talk to and sent email to Kevin on 25 July. Sent documents per email on 18 Aug. Talk again with Ernst on 30 Aug - positive about development in the area.
Rem of Endlich	Evert Harmse	081 829 3603	harmsee@bankwindhoek.c om.na	Talked to Evert on 2 Aug; Sent an email on 2 Aug. Sent documents per email on 18 Aug. No response received.
Waldheim	Lientjie Strauss (van Wyk)	Lientjie 0811280882	Lientjie2009@gmail.com	Talked to Lientjie and sent email on 16 Aug. Sent documents per email on 18 Aug. No response received.
Portion of Waldheim (Farm Rochelle)	Ronal L Kubas	Ronald 0811284150; 061379009	rlk@burmeister.com.na	Received an email from Ronald on 2 Aug, requesting to be registered as I≈ Sent an

				email on 2 Aug. Sent documents per email on 18 Aug. No response received.
Swartkoppies / Opdam	Family Bock	Synovia Orlam 0817749452	synoviaorlam@gmail.com	Talked to Synovia and sent documents on 1 Sep. No response received.
Hamis	Cecil Edwin Gille	Regina 0812429661	gilleregina@yahooo.com kingarthur02@iway.na	Talked to Arthur and sent email on 16 Aug. Sent documents per email on 18 Aug to Arthur and on 1 Sep to Regina. No response received.
Rem of farm Hamis	Rosa Stellmacher	Rosa 0814661111	rstellmacher71@gmail.com	Talked to Rosa on 2 Aug; Sent an email on 2 Aug. Sent documents per email on 18 Aug. No response received.
Waldburg	Karin Cloete	Karin 0812880836	g.a.korner@gmail.com	Talked to Karin on 7 Aug; Sent email to Karin on 15 Aug. Sent documents per email on 18
	Henry Slinger	Henry 0813514936		Aug and again on 1 Sep. No response received.
	Charl Körner	Charl 0811460905		
	Hannie Stumpfe	Hannie 0813124796		
Emmabron	Harold Mouton	081 129 6403	harold@nwbc.com.na	Talked to Harold on 26 July; Sent an email on 26 July; Sent an email on 2 Aug. Sent documents per email on 18 Aug. No response received.
Stinkwater	Frederik Cloete		amowes@unam.na	Farms Stinkwater & Volmoed has been consolidated to Farm Volmoed, Farm nr 1000; Sent an email on 2 Aug. Sent documents per email on 18 Aug. No response received.
Stinkwater	Hendrik Reynoldt Otto (Community Leader)	Hendrik 0812871955; 0814202521	No email address	Talked to Hendrik on 18 Sep to confirm that no input or comment was received.
Hatsamas 283	Jan and Retha Joubert	Jan 081 2299980	janjoubert@iway.na	Talked to Jan on 18 Sep. Jan confirmed that Hatsemas 283 is not on the western side of the C23 road.

Klein Marula	Namib Roses (Quinton	Quinton	namrose@iway.na	Talked to Quinton on 18 Sep. Quinto
	Strijbus; Francois du	0818367420		confirmed that Klein Marula is not situated on
	Randt)			the western side of the D1249 road.
Marula Game	Rashid Sadarov	Johan	johankotze@iway.na;	Talked to Johan on 18 Sep. Johan confirm that
Ranch	(Manager Johan Kotze)	0811294326	jk@marulapark.com	Caos, the farm where Marula Game Ranch is situated, is not on the western side of the C23
				road.



# LODESTONE NAMIBIA (PTY) LTD

## PROPOSED NEW WATER PIPELINE FROM THE OANOB DAM TO THE DORDABIS IRON ORE MINE

## SCOPING (INCLUDING IMPACT ASSESSMENT) REPORT (EXECUTIVE SUMMARY)

Prepared for: Lodestone Namibia (Pty) Ltd



#### **DOCUMENT CONTROL**

Report Title	SCOPING (INCLUDING IMPACT ASSESSMENT) REPORT FOR LODESTONE'S PROPOSED NEW BULK WATER PIPELINE FROM THE OANOB DAM TO THE DORDABIS IRON ORE MINE
Report Author	Pierré Smit
Report Reviewer	Werner Petrick
Client	Lodestone Namibia (Pty) Ltd
Project Number	NSP2023LS2
Report Number	3
Status	Executive Summary for Public Review
Issue Date	August 2023

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The views expressed in the document are the objective, independent views of the author. Neither the author nor Namisun Environmental Projects and Development (Namisun) have any business, personal, financial, or other interest in the proposed project apart from fair remuneration for the work performed. The content of this report is based on the author's best scientific and professional knowledge, input of personnel of Lodestone Namibia (Pty) Ltd, input from the environmental specialists, the relevant environmental legislation as well as available information and previously conducted studies. Namisun cannot verify all information contained in this report and relies on the information shared by the team of Lodestone Namibia (Pty) Ltd as being accurate.

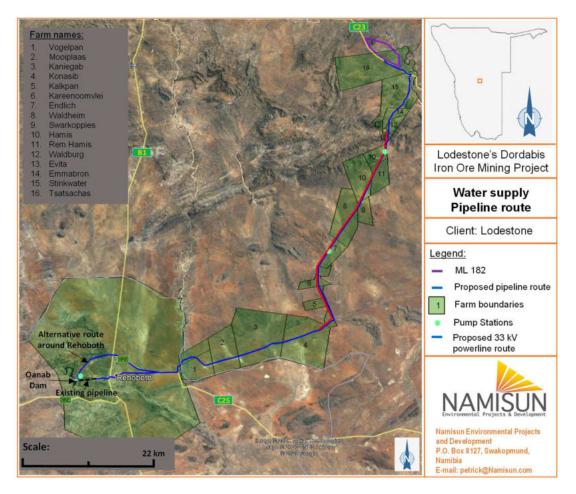
Namisun reserves the right to modify the report in any way deemed necessary should new, relevant, or previously unavailable or undisclosed information become available that could alter the assessment findings. This report must not be altered or added to without the prior written consent of the author. Namisun accepts no responsibility for damages, if any, suffered by any third party because of decisions made or actions based on this document.

## **EXECUTIVE SUMMARY**

#### 1. GENERAL INTRODUCTION

Lodestone Namibia (Pty) Ltd (Lodestone) intends to construct a buried bulk water pipeline to supply water from the Oanob Dam to the mine site. Lodestone approached NamWater in 2014 to discuss this possibility, and although NamWater confirmed the availability of the required water supply, the formal agreement between Lodestone and NamWater still needs to be formulated.

The proposed pipeline follows a route indicated in Figure A and will pass through farmlands, following existing district roads. A new above-ground powerline will also be installed over a section parallel to the water pipeline to provide power to two booster pump stations.



#### FIGURE A: PROPOSED ROUTE OF THE BULK WATER SUPPLY PIPELINE

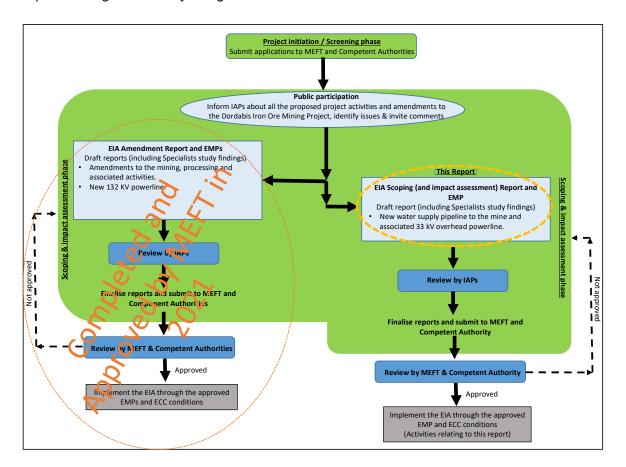
SCOPING (INCLUDING IMPACT ASSESSMENT) REPORT FOR LODESTONE'S PROPOSED NEW WATER PIPELINE FROM THE OANOB DAM TO THE DORDABIS IRON ORE MINE (EXECUTIVE SUMMARY)



This Scoping (including impact assessment) Report summarises the Environmental Impact Assessment (EIA) process being followed for Lodestone's proposed bulk water supply pipeline. It includes an assessment of the environmental impacts that the proposed project is likely to have. The proposed management and mitigation measures relating to the proposed project are documented in the Environmental Management Plan (EMP), which accompanies this report.

#### 2. ENVIRONMENTAL IMPACT ASSESSMENT PROCESS

ElAs are regulated by the Ministry of Environment, Forestry and Tourism (MEFT) in terms of the Environmental Management Act, 7 of 2007. This Act was gazetted on 27 December 2007 (Government Gazette No. 3966) and its associated regulations were promulgated in January 2012 (Government Gazette No. 4878). The ElA process steps for the prosed project are explained diagrammatically in Figure B.



## FIGURE B: THE EIA PROCESS FOR THE PROPOSED PROJECT



Prior to the commencement of the proposed pipeline, an application for an environmental clearance will be submitted in terms of this Act and the associated EIA Regulations to the Ministry of Agriculture, Water and Land Reform (MAWLR), as the competent authority. MAWLR will review the application and relevant reports and submit comments to the Ministry of Environment, Forestry and Tourism (MEFT) for the review and decision making.

Registered Interested and Affected Parties (I&APs) are given an opportunity to comment on this Scoping (including Impact Assessment) Report. The comment period is from 18 August 2023 to 18 September 2023, after which the report will be updated and finalized, with due consideration of the comments received, for submission to the MAWLR and the MEFT for decision-making.

## 2.1 <u>EIA Team</u>

Namisun Environmental Projects and Development (Namisun) is an independent environmental consultancy firm appointed by Lodestone to undertake this EIA.

Werner Petrick, the EIA project manager has more than twenty-four years of relevant experience in conducting / managing EIAs, compiling EMPs and implementing EMPs and Environmental Management Systems. Werner has a B. Eng (Civil) degree and a master's degree in environmental management and is certified as lead environmental assessment practitioner (EAP) and reviewer under the Environmental Assessment Professionals Association of Namibia (EAPAN).

Dr Pierré Smit, the project coordinator, holds a PhD in Landscape Ecology and has more than twenty-eight years of experience in environmental management, managing environmental assessment and the implementation of EMPs and Environmental Management Systems in Namibia.

### 2.2 <u>Steps in the public participation process</u>

All comments, questions and issues that have been raised throughout the process by authorities and I&APs are provided in Appendix E of this report.

The steps that were followed as part of the consultation process are summarised below:

• Namisun notified MEFT and MAWLR in July 2020 of the proposed project through a Background Information Document (BID).



- The application for authorization form was submitted to MAWLR (as the competent authority) and the application was registered onto MEFT's online registration system.
- Namisun developed an EIA I&AP database. This database is updated as and when required, throughout the EIA process.
- The BID was distributed via email to relevant authorities and I&APs on the I&AP stakeholder database and copies were made available on request.
- The purpose of the BID was to inform I&APs and authorities about the proposed activities, the EIA process being conducted, possible environmental impacts and ways in which I&APs could provide input to Namisun. Attached to the BID was a registration and response form, which provided I&APs with an opportunity to submit their names, contact details and comments on the project.
- Emails were sent to I&APs on the database specifically for the pipeline. Site notices for the
  overall Dordabis Iron Ore Mining Project were placed five locations near the Hoffnung
  rail siding, near the entrance of the Finkenstein Estate, at the entrance to the site of the
  Dordabis Iron Ore Mine, at the Dordabis Clinic, and at the Shoprite shopping complex in
  Rehoboth. This was done to notify I&APs of the proposed project; the EIA process being
  following and who to contact for further information requirements. A copy of the email
  notification and photos of the site notices that were displayed are attached in Appendix C.
- Block advertisements were placed in the Market Watch as part of the following newspapers:
  - The Namibian Sun (24 and 31 July 2020)
  - *Die Republikein* (24 and 31 July 2020)
  - Allgemeine Zeitung (24 and 31 July 2020)
- Focus group meetings were held with the following key stakeholders:
  - Farmers of the Dordabis area, face-to-face and via Zoom-calls.
  - o NamWater.
  - Landowners along the pipeline route were visited face-to-face and the project was discussed with them individually.
  - Telephonic discussions were also held with the Stinkwater and Hatsamas community representatives.
  - Minutes of the various meetings were taken and documented.
- An electronic and or hard copy of the Executive Summary was made available to the identified I&APs on the stakeholder database during the public review period between 18 August and 18 September 2023.
- Electronic copies of the full Scoping Report and EMP (excluding the appendices) are available during the public review period to all register I&APs on request.



• I&APs have the opportunity to review the draft report and submit comments in writing to Namisun before 18 September 2023.

### 3. DESCRIPTION OF THE PROPOSED PROJECT

Recent water supply requirements for Lodestone's proposed Dordabis Iron Ore Mining Project on ML 182 were determined at 2.0 million cubic meters per annum (Mm<sup>3</sup>/a). It was independently assessed that the potential water supply from the Oanob Dam would be sufficient for the project needs. It must be stated that Lodestone had consultations with NamWater in 2019, 2020 and 2021 and independent verification of the abstraction rates were presented during these sessions. Based hereupon, it is proposed that bulk raw water will be supplied by NamWater with a ~102 km long buried pipeline, for mining, processing, and associated activities during operations of the full-scale project.

#### 3.1 Project location

The location of the proposed pipeline is indicated in Figure A.

### 3.2 <u>Project design and proposed activities</u>

An offtake point for the proposed water pipeline is planned below the wall of the Oanob Dam. The offtake will provide water to a 2,000 m<sup>3</sup> ground level reservoir at the base pump station, to ensure a consistent flow from the base station into the pipeline. Two more booster pump stations are planned along the pipeline, each with a 500 m<sup>3</sup> ground level reservoir for control purposes.

From the base station at the Oanob Dam, the route of the pipeline will go along one of the two access roads to the dam, across the B1, eastwards along the north side of the C25 to Rehoboth Station and further along the D1228. Here the pipeline turns sharply northwards and run along the western side of D1249 to the C23, where it will turn westwards along the south side of the C23 to the mine.

An earth embankment with a smooth 1.5 mm HDPE lining will act as a terminal water reservoir onsite, to where the water will be supplied by the pipeline.

A new dedicated 33 kV above-ground powerline will be installed along a section of the pipeline to provide power to two booster pump stations. This powerline will run from a connection with the existing 33 kV Seeis-Dordabis distribution line to the main (base) pump station via the two booster pump stations, over 38 km along the D1249 gravel road, and adjacent to the proposed new water pipeline.



Since no infrastructure is allowed within the road reserve of any Namibian public road, a 15 m wide servitude will be created on farmland 5 m outside the road reserve boundary and the same servitude will be used for the powerline.

### 3.3 <u>Construction activities</u>

The following activities are expected:

- Surveying and setting out of the final pipeline / powerline route.
- Clearing the servitude (from large trees, shrubs, bushes, etc.).
- Pegging of the pipeline and powerline.
- Trenching and excavations for the pipeline.
- Drilling of holes by means of a compressor drill rig for the poles of the powerline.
- Drilling and blasting, where required.
- Cleaning, grubbing and bulldozing.
- General earthworks, including levelling and piling of soil.
- Excavations for foundations.
- Planting of poles for the powerline, using a 4x4 truck.
- Storage and handling of material (sand, rock, cement, chemical additives) in work areas.
- Water utilization.
- Operation and movement of construction vehicles.
- Refuelling of equipment.
- Handling, storage, and transportation of non-hazardous and hazardous waste.
- Disposal or treatment of contaminated soil.

All the components for the water pipeline and powerline construction will be transported to site by road on low-bed trailers. No significant impacts associated with traffic interruption are expected on these roads due to the construction activities.

Concrete will be mixed and poured onsite; subsequently all concrete constituents (crushed stone, cement, water, and sand) will have to be transported to site.

### 3.4 *Employment and accommodation of workers*

At least two teams will conduct work on this project, starting from opposite ends to the middle. Not more than 40 people per team is expected.



Typically, temporary construction camps accommodating the workforce will be located close to the work area. These sites will have to be negotiated with the applicable farm owners.

## 3.5 <u>Access roads</u>

As the pipeline will run along the reserves of existing roads, the main access to the pipeline will be from the reserves of the existing roads, i.e. the B1, the C25, the D1228, the D1249 and the C23 roads. In liaison with landowners, local tracks will be used where additional access is necessary.

## 3.6 <u>Hazardous substances</u>

Diesel will be used for vehicles and generators, petrol will be used for vehicles and oil, grease and lubricants will be used by vehicles and equipment. Existing suppliers in Windhoek and Rehoboth will be used and no storage onsite will be done.

## 3.7 <u>Waste management</u>

Non-hazardous domestic and industrial waste, in relatively small volumes, as well as hazardous industrial waste (e.g., hydrocarbons) will be generated during the construction phase.

All waste will be contained in a manner that there can be no discharge or contamination and will be removed from site daily, for disposal at permitted landfill sites at Rehoboth and Windhoek. Recyclable items are to be sorted and stored in temporary containers and removed to relevant recycling centres (where possible). Hydrocarbon waste and potential hydrocarbon spills from vehicles and machinery will be scooped into bags and taken to a permitted disposal site.

## 3.8 <u>Sanitation</u>

Portable toilets and ablution facilities will be placed onsite to ensure that sewage is contained and disposed of appropriately.

## 3.9 Fire management

Active areas will be cleared of grass, dry wood and anything that might increase the risk of starting an unintentional fire. Smoking will only be allowed in dedicated smoking areas. No open fires for cooking will be permitted. Gas stoves will be used when required. Fire extinguishers will be available onsite.

### 3.10 Construction phase timing

Commencement of construction is subject to regulatory approval as well as the formulation of an agreement between NamWater and Lodestone. Lodestone plans to commence with full-scale



operations at the mine towards 2025 / 2026, when the 2.0 Mm3 water per annum would be required. Construction of the proposed pipeline and powerline would take approximately 12-18 months.

#### 4. IDENTIFICATION AND DESCRIPTION OF POTENTIAL ENVIRONMENTAL IMPACTS AND ASSESSMENT FINDINGS

The following issues were identified by the environmental team, in consultation with stakeholders, and require further assessment:

- Impacts on flora.
- Impacts on fauna.
- Impacts on avifauna (with specific reference to the accompanying powerline).
- Impacts on soil.
- Impacts on archaeology.
- Visual impacts (associated with the new powerline).

The outcome on the assessment is described in Chapter 8 of this document. A summary of the assessment findings is presented in Table A.

#### TABLE A: SUMMARY OF POTENTIAL IMPACTS ASSOCIATED WITH THE PROPOSED BULK WATER SUPPLY PIPELINE AND RELATED POWERLINE

POTENTIAL IMPACT	SIGNIFICANCE		
POTENTIAL IMPACT	Before mitigation	After mitigation	
Potential negative biological impacts			
Physical destruction of vegetation and associated habitats, particularly sensitive habitats and protected plant species	н	М	
Illegal harvesting of camelthorn wood or aloes	L	L	
Physical destruction of habitats and animals	М	Μ	
Poaching, killing of animals and the illegal collecting of animals	L	L	
Noise, dust, light, and chemical pollution	L	L	
Rehabilitation and decommissioning	L	L	
Disturbance of birds during construction	М	L	
Collision of birds with overhead powerline	M-H	L-M	
Electrocution of birds on overhead powerline	M-H	L	
Bird nesting on overhead powerline	M-H	L	
Potential negative impacts on soil			
Disturbance to soil with resulting erosion	Н	L	

SCOPING (INCLUDING IMPACT ASSESSMENT) REPORT FOR LODESTONE'S PROPOSED NEW WATER PIPELINE FROM THE OANOB DAM TO THE DORDABIS IRON ORE MINE (EXECUTIVE SUMMARY)



POTENTIAL IMPACT	SIGNIFICANCE			
FOTENTIALIMITACI	Before mitigation	After mitigation		
Establishing of alien invasive species on areas of disturbance	М	L		
Potential negative impacts on archaeology				
Disturbance and damage to heritage sites	L	L		
Potential negative visual impacts				
Reduced visual resources for sensitive receptors relating to the 33kV powerline, reservoirs, and pump stations	М	L-M		

#### 5. WAY FORWARD

For the way forward the final report (including the comments from I&APs) will be submitted to the MAWLR and MEFT for their review and decision.

#### 6. ENVIRONMENTAL IMPACT STATEMENT AND CONCLUSIONS

Namisun believes that a thorough assessment of Lodestone's proposed bulk water supply pipeline and associated infrastructure has been achieved and that an environmental clearance certificate could be issued on condition that the management and mitigation measures in the EMP be adhered to.







