

NAME OF APPLICANT:

Imerys Refractory Minerals South Africa: t/a Cape Bentonite Mine

REFERENCE NUMBER:

WC 30/5/1/2/2/10076MR

MINING WORK PROGRAMME

Submitted for

A BENTONITE AND ZEOLITE MINING RIGHT APPLICATION

With respect to

**ERF RE/1412 AND ERF 3264 (PREVIOUSLY ERF 1412)
HEIDELBERG, WESTERN CAPE**

**As required in terms of Section 23 (a), (b) and (c) read together with
Regulation 11(1)(g) of the Mineral and Petroleum Resources
Development Act (Act 28 of 2002)**



mineral resources

Department:
Mineral Resources
REPUBLIC OF SOUTH AFRICA

STANDARD DIRECTIVE

All applicants for mining rights are herewith, in terms of the provisions of Section 23 (a), (b) and (c) and in terms of Regulation 11 (1)(G) of the Mineral and Petroleum Resources Development Act, directed to submit an Mining Work Programme, strictly under the following headings and in the following format together with the application for a mining right.

1. REGULATION 11.1(a): FULL PARTICULARS OF THE APPLICANT

ITEM	COMPANY CONTACT DETAILS
Company Name	Imerys Refractory Minerals South Africa t/a Cape Bentonite Mine
Registration Nr	1963/005589/07
Physical Address	Southdowns Office Park Corner John Vorster and Karee Street Irene 0157
Contact Person	Mr Kallie Roos and Mr Siyanda Mabaso
Postal Address	Box 8118, Centurion 0046
Phone	012 643 5880; Cell 079 513 9503
Fax	012 643 1966
E-mail	kallie.roos@imerys.com / siyanda.mabaso@imerys.com
Banking Details	<i>Ecca Holdings (Pty) Ltd-Standard Bank (Centurion Branch):01-26-45-40, Account number: 410305995</i>

ITEM	CONSULTANT CONTACT DETAILS (if applicable)
Company Name	Not applicable
Physical Address	
Contact Person	
Postal Address	
Phone	
Fax	
E-mail	

2. REGULATION 11(1) (b): PLAN SHOWING THE LAND AND MINING AREA TO WHICH THE APPLICANT RELATES (The plan required in term of Regulation 2(2))

Refer to Appendix 1 and Appendix 2

3. REGULATION 11(1) (c): THE REGISTERED DESCRIPTION TO WHICH THE APPLICANT RELATES

Erf RE/1412 and Erf 3264 (Previously Erf 1412), Magisterial District of Swellendam

4. REGULATION 11(1)(d): THE DETAILS OF THE IDENTIFIED MINERAL DEPOSIT

4.1 Resource Particulars

ITEM	DETAIL
Types of Mineral	Bentonite and Zeolite
Locality	Heidelberg
Extent of the area required for Mining	<u>Total properties sizes:</u> Erf RE/1412 – 245ha Erf 3264 – 94ha <u>Total area of rehabilitated Authorised Quarries:</u> Phases 1-15: 16.63ha <u>Authorised Quarry Mined and Currently Under Rehabilitation:</u> Phase 20: 1ha <u>Authorised Quarries still to be mined:</u> Phase 16: 1ha Phase 17: 0.3ha Phase 18: 0.34ha Phase 19: 0.32ha Phase 21: 0.73 <u>Additional Quarries Proposed:</u> Phase 22: 1.49ha Phase 23: 1.24ha Phase 24: 0.7ha Phase 25: 0.78ha <u>Total Mining Activities Area: ±20 ha</u> (includes all activities associated with the proposed bentonite mining such as any explorations required, site establishment, demarcations, excavations, any vehicular movements, access and internal roads, topsoil and overburden storage, implementation of rehabilitation measures etc.)
Extent of the area required for infrastructure, roads, servitudes etc...	2 Hectares (Mining Activities Area)- (includes stockpiling, storm water management and roads infrastructure)
Maximum depth below surface	25-30 m
Minimum depth below surface	1 m
Geological Formation	Kirkwood Formation

4.2 Detail of person that compiled the resource statement

ITEM	DETAILS
Name	Siyanda Mabaso
Qualifications	Honours Degree Geology
Experience	5 years
Professional Body (if registered)	-

Registration number (if applicable)	-
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4.3 Locality Specific Geological Map (in colour)

Refer to Appendix 3

4.4 Exploration result (supporting geological reports to be listed and appended)

Refer to Appendix 4 (Deposit Layout)

This plan summarizes the extent and position of the known deposit on the Erf, which could be easily followed on the surface.

4.5 Information required in terms of Regulation 8(in case where the application was preceded by a prospecting right)

Not applicable.

4.6 Mineral Resource Map

Refer to Appendix 4

4.7 Resource Statement

Table 1.1: ERF 1412 Bentonite

	Reserves		Resources		
	Proven	Probable	Measured	Indicated	Inferred
Clay (tons)	36 907	*	*	*	*

Table 1.2: ERF 1412 Zeolite

	Reserves		Resources		
	Proven	Probable	Measured	Indicated	Inferred
Clay (tons)	58 230	*	*	*	28 650t

5. REGULATION 11(1) (e): THE DETAILS OF THE MARKET FOR, THE MARKETS REQUIREMENTS AND PRICING IN RESPECT OF THE MINERAL CONCERNED

5.1 A list of product and their proportionate quantities

Table 2: Product grades produced at Cape Bentonite Mine

Grade	Uses	Annual Consumption (tons)		Price Range*
		Local/Regional	Export	
ECCABOND N	Binder in moulding and pelletising	34 500		3600 – 5000
ECCAGEL	Drilling mud	1000		3800 – 6000
ECCASEAL	Soil stabilizer, Slurry trenching, Dry walling	2000		4000 – 6000
ECCACAT	Cat litter	200		4000 – 6000
ECCAFEED	Binder in feed pelletising	400		3000 – 6000

<i>VARIOUS</i>	<i>Fruit juice and wine clarification, pottery,</i>	<i>100</i>		<i>3600 – 4800</i>
<i>TOTALS</i>		<i>38 200</i>		

5.2 Market for each specific products in terms of Local, Regional, or International (export)

See table 2 above

5.3 Summary of product consumers

Table 3: Product grades produced at Cape Bentonite Mine and main customers.

Grade	Customers
<i>ECCABOND N</i>	<i>Local: SCAW METALS, ATLANTIS FOUNDRY, HERNIC FERROCHROME</i>
<i>ECCAGEL</i>	<i>Local: SAMCHEM International: HALLIBURTON</i>
<i>ECCASEAL</i>	<i>Local: DURA PILING, STEFFANUTTI</i>
<i>ECCACAT</i>	<i>Local: INTERCAN, ARLECO, SA PET</i>
<i>ECCAFEED</i>	<i>Local: CAMELUS VOERE, FEEDPHARM</i>
<i>VARIOUS</i>	<i>Local: VARIOUS</i>

5.4 Summary of customer specifications and details of any proposed beneficiation of the products

Grade	Uses	Beneficiation
<i>ECCABOND N</i>	<i>Binder in moulding and pelletising</i>	<i>Binding properties</i>
<i>ECCAGEL</i>	<i>Drilling mud</i>	<i>Viscosity properties (Suspension of materials within wells)</i>
<i>ECCASEAL</i>	<i>Soil stabilizer, Slurry trenching, Dry walling</i>	<i>Sealing properties</i>
<i>ECCACAT</i>	<i>Cat litter</i>	<i>Absorption properties</i>
<i>ECCAFEED</i>	<i>Binder in feed pelletising</i>	<i>Binding properties</i>
<i>VARIOUS</i>	<i>Fruit juice and wine clarification, pottery,</i>	<i>Filtration properties</i>

5.5 Summary of infrastructure requirement such as road rail way, electricity and water

Cape Bentonite mine is already and currently in production in this mining right, therefore no new infrastructure is required for the applied site. Only the excavator, Dozer, dump trucks and loader currently owned will be utilized on this site and the ore will be transported to the processing plant in Heidelberg. The current existing roads will be used for the transportation of ore & accessing the mining area.

5.6 Summary of other information applied that may influence price, e.g exchange rate, duties, barriers etc.

None

5.7 The price to be used in the cash flow forecast

The price of the main product produced at Cape Bentonite mine with a price range of R 3600-5000

5.8 Confirmation that a specialist market analysis is attached as an appendix which explain the assumption made and how the price was determined

Cape Bentonite has been in production for more than 40 years with an existing customer/client base, therefore no market analysis for this specific site is required.

6. REGULATION 11(1) (f): THE DETAIL WITH THE REGARD OF THE APPLICABLE TIMEFRAME AND SCHEDULING OF THE VARIOUS IMPLEMENTATION PHASES AND A TECHNICALLY JUSTIFIED ESTIMATE OF THE PERIOD REQUIRED

6.1 Time frames and scheduling of the implementation phases

6.1.1 Explanation of time taken to develop the mine and commence production.

The estimated time frame for the proposed mining of the area on the applicable property is ± 5 years.

6.1.2 Explanation of the production build up period once production commences

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6.1.3 Explanation of production decline period (as grades deteriorate).

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6.1.4 Production forecast for each year over the full period applied for based on the above explanations. (Not Life of Mine Calculation).

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6.2 Technically justified estimate of the period required

(Description of the rate of production, estimated payable reserve ratio, efficiency factors and extraction rates, relative to available resources to justify the period applied for)

RESERVES and RESOURCES	PRODUCTION RATE	LOM
95 137t	19 027t/year	5 years

7. REGULATION 11(1)(g)(i): THE DETAILS WITH REGARDS TO THE COSTING OF THE MINING TECHNIQUE, MINING TECHNOLOGY AND PRODUCTION RATES (excluding labour and capital)

7.1 Mine Design Map (include a high level map indicating the basic mine design and schematic mining schedule)

Refer to Appendix 2

7.2 Description of the Mining method's impact on operating cost

7.2.1 Basic overview of the mining Method

Mining is conducted 'in-house' by means of excavators, front-end loaders and 16-ton tipper trucks. The mining method comprises of relatively shallow opencast quarrying. The topsoil and the overburden are removed and stockpiled separately along the perimeter of the quarry. As and when the bentonite is being mined, it is trucked to the Processing Plant at the head offices on Erf 1412, Heidelberg.

Overburden is mined in 20m wide and 3-4m thick benches to expose 3m of bentonite down-dip to be mined. This process is repeated until all bentonite is mined out. Through this process the quarries can reach depths of about 25-30m and no more than half of the quarry size will be open at a time.

Rehabilitation takes place on an ongoing basis as mining proceeds. As the quarry advances along strike, the overburden is progressively replaced to backfill the excavation. The backfilled area is then contoured to prevent erosion, which could be caused by rain and surface water flow. Finally the topsoil is then spread over the disturbed surface area to restore the land to its previous state.

The bentonite found on the mining area is emplaced as relatively thin seams of 1-4m thick. The topsoil is normally less than 30cm thick. Overburden consists of a sequence of siltstone with conglomerate lenses; the latter also form the footwall of the succession.

The timing of the several phases is described on the Mine Layout Plan attached as Appendix 2.

Also refer to Appendix 5 of this MWP for typical cross section of proposed mining method.

7.2.2 Description of equipment and activities impacting on electricity cost

None

7.2.3 Description of equipment and activities impacting on fuel cost

-Excavator * 2
-16 tons Truck *4
-Dozer *2
-30 tons Truck*1

-Loader*2

7.2.4 Description of equipment and activities impacting on cost of stores and materials

-Moving equipment Maintenance -Operation Boards
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7.2.5 Description of equipment and activities impacting on the cost of water

None

7.2.6 Description of equipment and activities impacting on other cost not included above

None

7.2.7 Operating cost forecast (excluding the processing plant and labour) in KZAR for first 5 years

COST CATEGORY	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y 10
Electricity	0	0	0	0	0	0	0	0	0	0
Fuel	-5 948	-6 305	-6 683	-7 084	-7 509	-7 960	-8 437	-8 944	-9 480	-10 049
Stores (Incl. in Plant Costs)										
Water										
Other (OB Stripping/Contractor)	-763	-809	-857	-909	-963	-1 021	-1 082	-1 147	-1 216	-1 289
Total Cost (to be reflected in the cash flow forecast)	-6 711	-7 114	-7 540	-7 993	-8 472	-8 981	-9 520	-10 091	-10 696	-11 338

NB! The costs determined here must explain the costs used in line item 4 of the cash flow forecast required herein under Regulation 11(1) (g)(vi)

- Figure 1:** Cape Bentonite Mine Process Flow sheet.

8.3 Description of equipment and activities impacting on fuel cost

-Front-end Loader -Fork lift

8.4 Description of equipment and activities impacting on cost of stores and materials

-Plant Maintenance

8.5 Description of equipment and activities impacting on the cost of water

None

8.6 Description of equipment and activities impacting on other cost not included above

Soda ash (improve quality of Bentonite) The Drier Burner is using coal

8.6.1 Processing Plant operating cost forecast (excluding Labour) in KZAR

COST CATEGORY	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y 10
Electricity	-7 909	-8 383	-8 886	-9 419	-9 985	-10 584	-11 219	-11 892	-12 605	-13 361
Fuel (Incl. in Mining cost)										
Maintenance and repairs	-530	-561	-595	-631	-669	-709	-683	-724	-767	-813
Stores and materials	-19 928	-21 124	-22 391	-23 735	-25 159	-26 668	-28 268	-29 964	-31 762	-33 667
Water										
Soda ash and Coal	-3 018	-3 199	-3 391	-3 594	-3 810	-4 039	-4 281	-4 538	-4 810	-5 099
Total Cost (to be reflected in the cash flow forecast)	-31 336	-33 216	-35 209	-37 321	-39 561	-41 934	-44 450	-47 117	-49 944	-52 941

NB! The costs determined here must explain the costs used in line item 5 of the cash flow forecast required herein under Regulation 11(1)(g)(vi)

9. REGULATION 11(1) (g) (iii): DETAIL AND COSTING OF THE TECHNICAL SKILLS, EXPERTISE AND ASSOCIATE LABOUR IMPLICATIONS REQUIRED TO CONDUCT THE PROPOSED MINING OPERATIONS

9.1 Organizational structure of the mine

9.1.1 Description of position requiring certificates of competency and under which skills category they have been budgeted for

None(Cape Bentonite mine will use currently employed competent Mine Manager and competent operators on the site)

9.1.2 Description of which part or parts of the mining operation will be outsourced (if any)

9.1.2.1 Description of position requiring certificates of competency and under which skills category they have been budgeted for

None

9.2 Costing of the skills categories in the mining operation to determine if technical competence has been budgeted for: Complete the following tables:

With Cape Bentonite currently producing and planning on continuing operations after the end of the mining of this particular proposed deposit, the skills required for the mining operations will be unchanged during the LOM.

MINE EMPLOYEES

Personnel of the Mine's Payroll: (Years 1 to 5)

CATEGORY	LOM	
	NO OF POSITIONS	BUDGET
Top management	0	-
Senior management	0	-
Professionally qualified and experience specialist and mid-management	5	-
Skilled technical and academically qualifies workers, junior management, supervisors, foreman and superintendent	8	-
Semi-skilled and discretionary decision making Non-permanent employee	40	-
TOTAL PERSONNEL EXPENDITURE	53	32 206

SUBCONTRACTORS EMPLOYEES (if applicable)
(Duplicate this form for each Subcontractor)

CATEGORY	LOM	
	NO OF POSITIONS	BUDGET
Top management	<i>0</i>	-
Senior management	<i>0</i>	-
Professionally qualified and experience specialist and mid-management	<i>0</i>	-
Skilled technical and academically qualifies workers, junior management, supervisors, foreman and superintendent	<i>0</i>	-
Semi-skilled and discretionary decision making Non-permanent employee	<i>0</i>	-
<i>TOTAL PERSONNEL EXPENDITURE</i>	<i>0</i>	-

TOTAL COST OF ALL TECHNICAL SKILLS AND SERVICES REQUIRED TO OPERATE THE MINE

CATEGORY	LOM
In house skills and services	32 206
Skills and services provided by subcontractors	2 532
Skills and services provided by service providers	12 133
TOTAL BUDGET FOR TECHNICAL SKILLS AND COMPETENCE	46 871

NB! The total budget for technical skills and services and competence must be transferred to line item 6 in the cash flow forecast

10. REGULATION 11(1)(g)(iv): DETAIL AND COSTING OF REGULATORY REQUIREMENTS IN TERMS OF THE ACT AND OTHER APPLICABLE LAW, RELEVANT TO THE PROPOSED MINING OPERATION

10.1 Environmental cost forecast

10.1.1 Rehabilitation estimate cost

At a rate of R 213 184/ha, the estimate global cost for the rehabilitation of the quarries still to be rehabilitated of 7.9ha will be R1 684 153.60
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10.1.2 Socio-economic impact cost estimate

Not applicable for this specific site

10.1.3 Summary of Environmental cost

Estimated Environmental and Rehabilitation cost

CATEGORY	COST ESTIMATE
a)Progressive total for rehabilitation	SAME AS ABOVE
b) Cost to mitigate socio-economic conditions of directly affected persons	-
TOTAL COST	SAME AS ABOVE

10.2 Other Regulatory Costs

CATEGORY	BUDGET
Royalties	-
Mine Health and Safety regulations	-
Occupational health	-
Rate and taxes	-
National skills fund	-
Other:Specify	-
TOTAL COST (Include amount into the cash flow forecast – Line 7)	-

The costs thus derived must be clearly explained and used to justify the numbers that area reflected in line item 7 of the cash flow forecast required in term of regulation 11(1)(g)(vi)

11. REGULATION 11(1) (g)(viii): PROVISION FOR THE EXECUTION OF THE SOCIAL AND LABOUR PLAN

11.1 The following table must be duplicated here from the table in Section 5: Financial Provision of the Social and Labour Plan

ITEM	2024	2025	2026	2027	2028
HUMAN RESOURCES DEVELOPMENT	R242 000	R189 000	R115 500	R155 500	R155 000
LOCAL ECONOMIC DEVELOPMENT	R410 000	R900 000	R450 000	R50 000	R50 000
MANAGEMENT OF DOWNSCALING	The total cost of retrenchment and downscaling currently is R2 779 520.				
ESTIMATED TOTALS PER YEAR	R652 000	R1 089 000	R565 500	R205 500	R205 000

The costs quantified in the aforesaid categories must justify the numbers that are reflected in line item 8 of the cash flow forecast required in terms of Regulation 11(1)(g)(vi)

12. REGULATION 11(1)(g)(iv): DETAILS REGARDING OTHER RELEVANT COSTING, CAPITAL EXPENDITURE REQUIREMENTS AND EXPECTED REVENUE APPLICABLE TO THE PROPOSED MINING OPERATION

12.1 Expected revenue

12.1.1 Explanation of revenue determination (given the prices of the various relevant products and byproducts produced) how the price referred to in item 5.9 above, and the production referred to in item 6.1.4 above was arrived at and applied at and applied to each year's production estimate in order to estimate revenue.

Revenue is determined by Production sales of Bentonite and Zeolite Locally and for export. Sales prices consists of Product Sales price, Packaging (if applicable) and Transport to the Customer (depending on Income Terms with the Customer)

12.1.2 Revenue forecast (for each year of the full period applied for based on the above explanations. Note that this revenue estimate must be stated both here and in line item 3 of the cash flow forecast required below in terms of Regulation 11 (1)(g)(vi).

Year	Revenue
Year 1	162 349 073
Year 2	172 090 017
Year 3	182 415 418
year 4	193 360 343
Year 5	204 961 964
Year 6	217 259 681
Year 7	230 295 262
Year 8	244 112 977

12.2 Estimated Capital expenditure

12.2.1 Initial capital expenditure

Not applicable – mine already operational.

12.2.2 Ongoing Capital Expenditure

None for this specific farm/property.

12.2.3 Summary in a 10 year Tabular format

Not applicable for this specific site

12.3 Explanation and summary of other cost

Not applicable for this specific site

12.4 Summary of capital and other costs.

Not applicable for this specific site

(Note! The total amounts must be transferred to line item 9 of the cash flow forecast require in terms of Regulation 11(1)(g)(vi) below.)

	Life of Mine Projected Cash Flow B24-12 to F28-12 IRMS Cape Bentonite
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[illegible]

14. REGULATION 11(1)(g)(vii): DETAILS REGARDING THE APPLICANT RESOURCES OR PROPOSED MECHANISM TO FINANCE THE PROPOSED MINING OPERATION, AND DETAILS REGARDING THE IMPACT OF SUCH FINANCING ARRANGEMENTS ON THE CASH FLOW FORECAST

14.1 Financing the cash flow

Imerys will be able to generate enough resources out of the Operating capital (e.g. 13)
Refer to Appendix 6: Financial and Technical Competence Report

14.2 Detail regarding the financing arrangement

NA

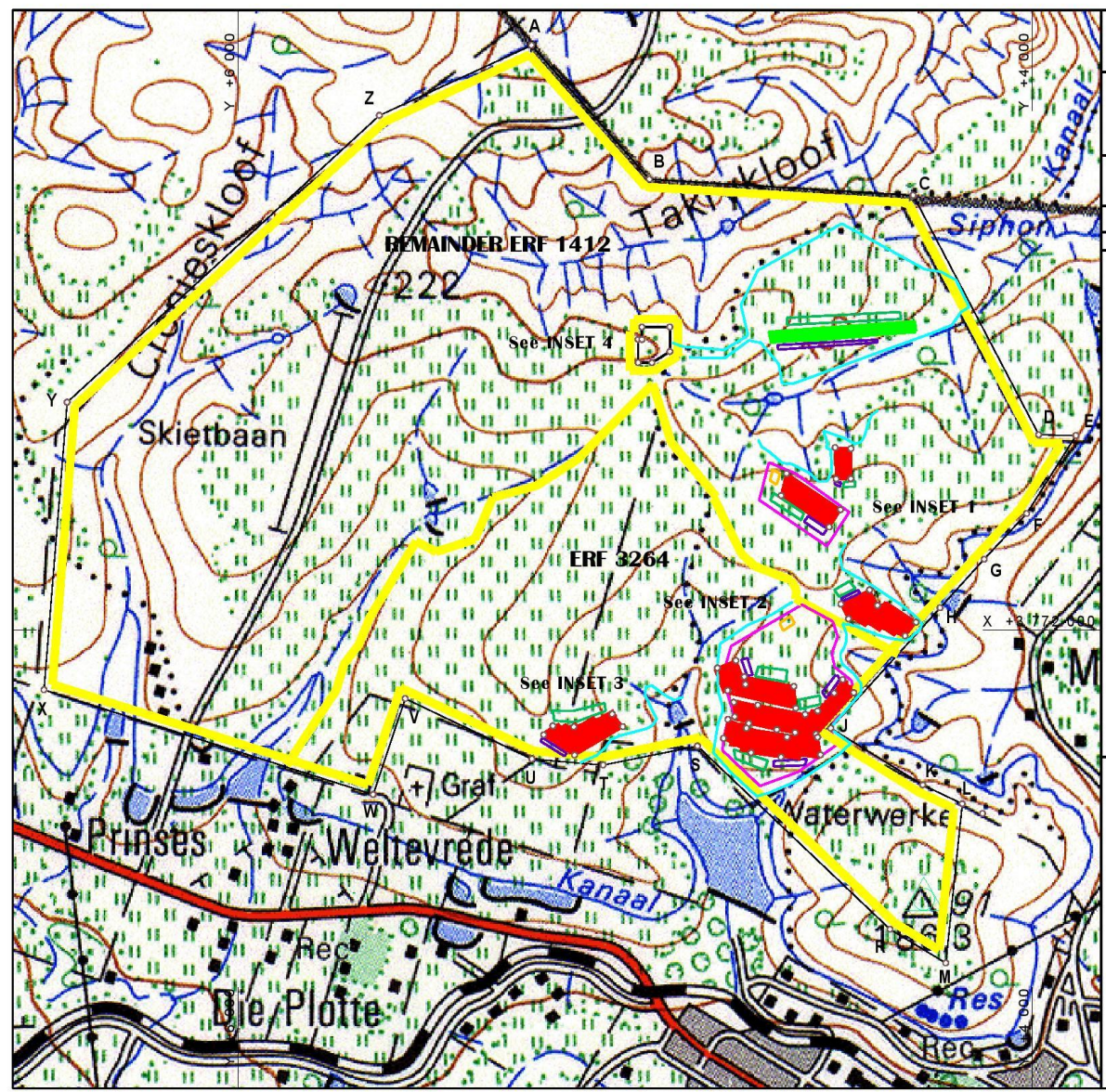
14.3 Confirmation of supporting evidence appended

See point 13

15 REGULATION 11 (1) (h): UNDERTAKING, SIGNED BY THE APPLICANT, TO ADHERE TO THE PROPOSALS AS SET OUT IN THE MINING WORK PROGRAMME

Herewith I, the person whose name and identity number is stated below, confirm that I am the Applicant or the person authorised to act as representative of the Applicant in terms of the resolution submitted with the application, and undertake to implement this mining work programme and adhere to the proposals set out herein.

Full Names and Surname	XOLISA MVINJELWA 
Identity Number	6907055952089



IMREYS REFRACTORY MINERALS SOUTH AFRICA (Pty) Ltd
MINING RIGHT.

Holder of Right. IMREYS REFRACTORY MINERALS SOUTH AFRICA (Pty) Ltd Reg.No.1973/012351/07	WG.21 East Name Y Metres X
MINERAL MINED : BENTONITE AND ZEOLITE	ERF 1412 and ERF 3264
CO-ORDINATE LIST WGS Hartebeesthoek 94	A +5 260,40 +3 770 528,69
PORTION DESCRIPTION	B +4 963,85 +3 770 865,99
The figure A B C D E F G H J K L M R S T U V W X Y Z A excluding the figure 1A 1B 1C 1D 1E 1F 1G 1A (Erf 1925) represents a mining right area in extent 338,1634 hectares on	C +4 299,66 +3 770 906,25
ERVEN 1412 and 3264 HEIDELBERG 244,50 and 93,66 ha respectively	D +3 963,54 +3 771 508,92
Situated in the HEIDELBERG LOCAL MUNICIPALITY Magisterial District of SWELLENDAM	E +3 889,91 +3 771 510,95
 F.M. HATTINGH Professional Land Surveyor:- Registration No. PLS0252D Date: May 2025	F +4 014,03 +3 771 707,39
	G +4 120,85 +3 771 622,23
	H +4 231,72 +3 771 944,32
	J +4 507,03 +3 772 247,60
	K +4 275,55 +3 772 390,45
	L +4 176,15 +3 772 437,66
	M +4 217,70 +3 772 838,59
	R +4 357,97 +3 772 753,64
	S +4 842,84 +3 772 292,58
	T +5 080,10 +3 772 340,24
	U +5 259,74 +3 772 324,93
	V +5 578,68 +3 772 173,17
	W +5 659,20 +3 772 414,53
	X +6 488,17 +3 772 151,13
	Y +6 429,96 +3 771 427,16
	Z +5 643,60 +3 770 705,46

EXCLUDED FIGURE

1A	+4 912,33	+3 771 237,77
1B	+4 912,29	+3 771 289,94
1C	+4 957,35	+3 771 327,78
1D	+4 982,00	+3 771 327,70
1E	+4 982,23	+3 771 269,15
1F	+4 982,38	+3 771 269,23
1G	+4 982,30	+3 771 237,78

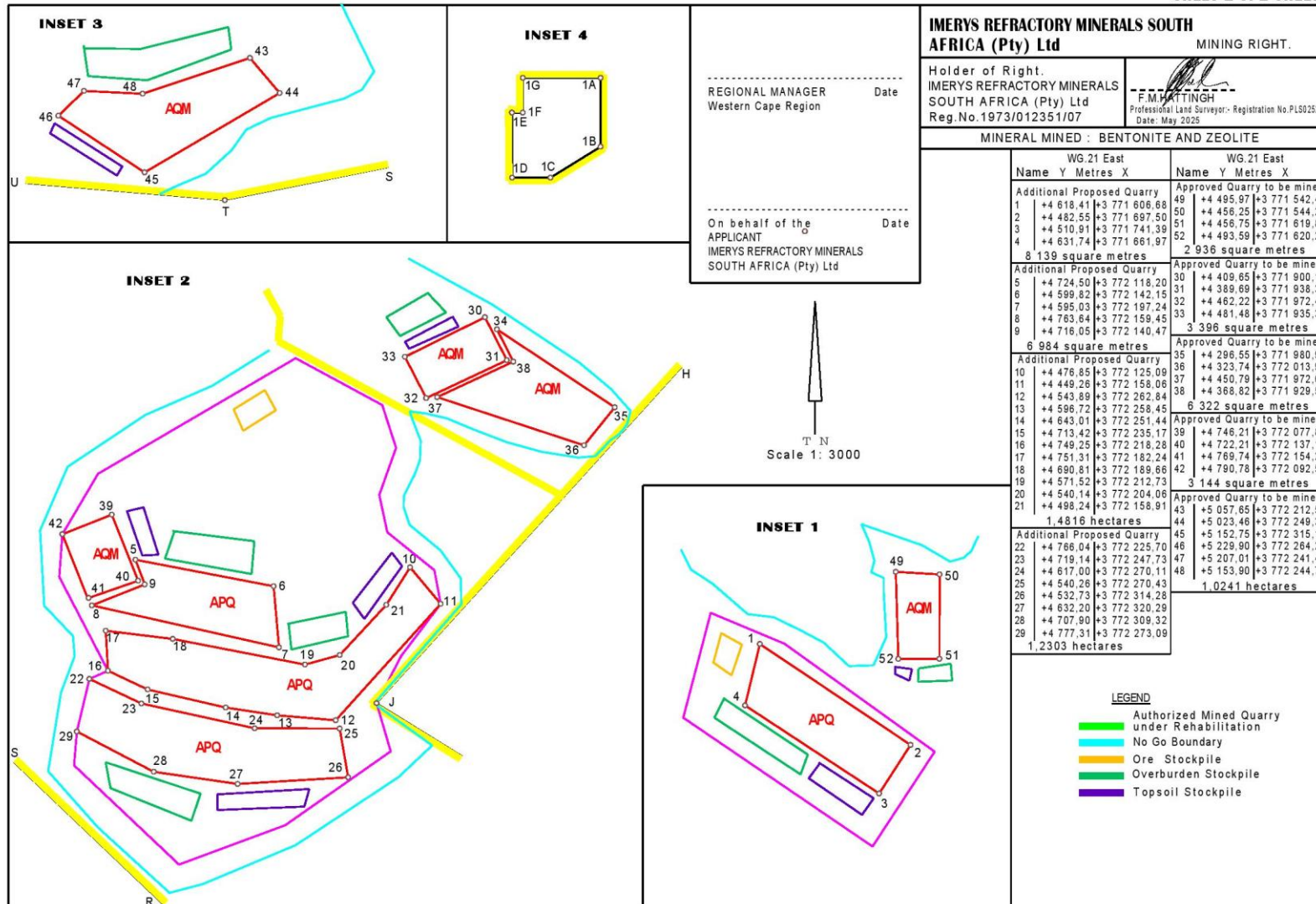
REGIONAL MANAGER Date
Western Cape Region

On behalf of Date
APPLICANT
IMREYS REFRACTORY MINERALS SOUTH AFRICA (Pty) Ltd

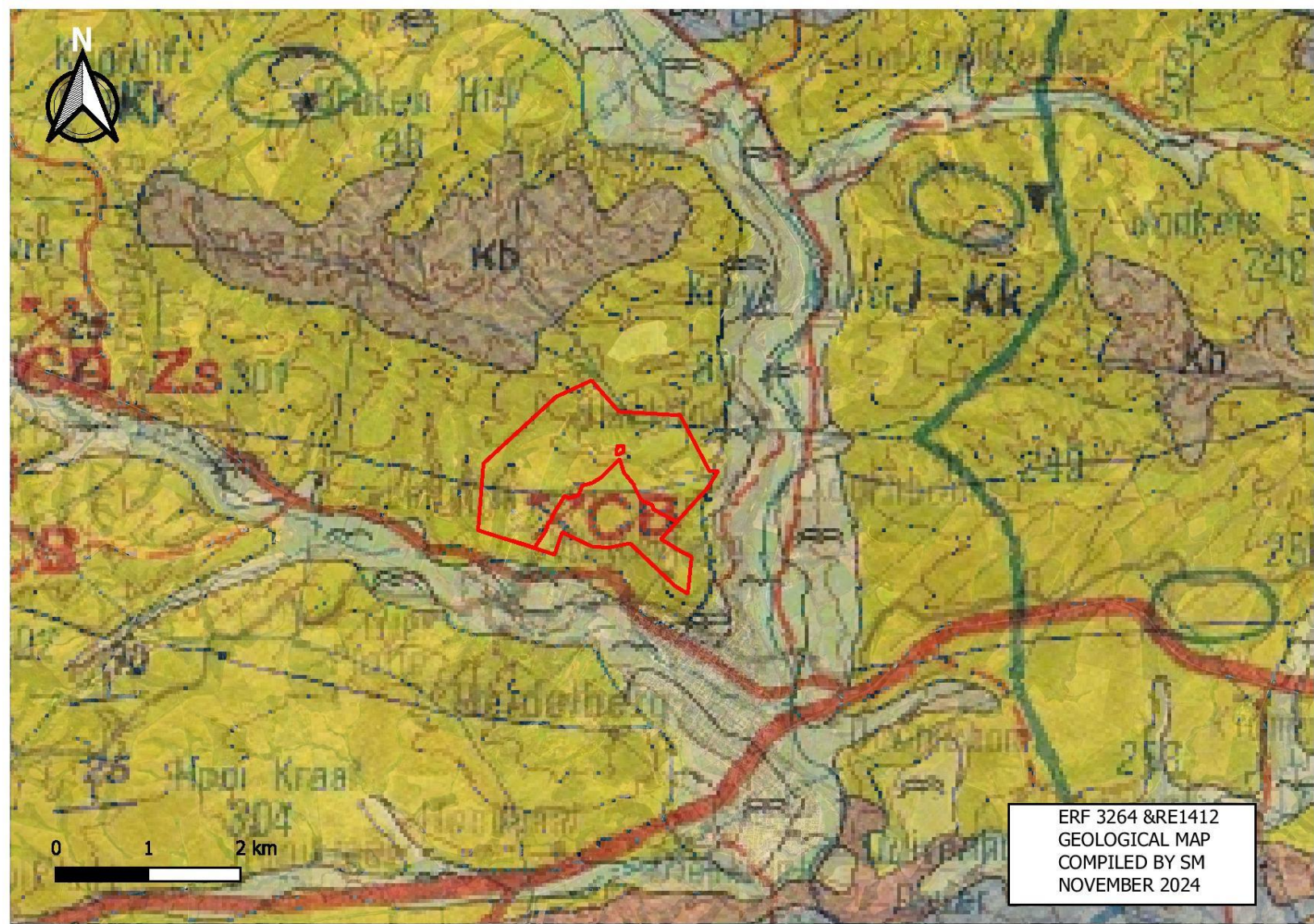
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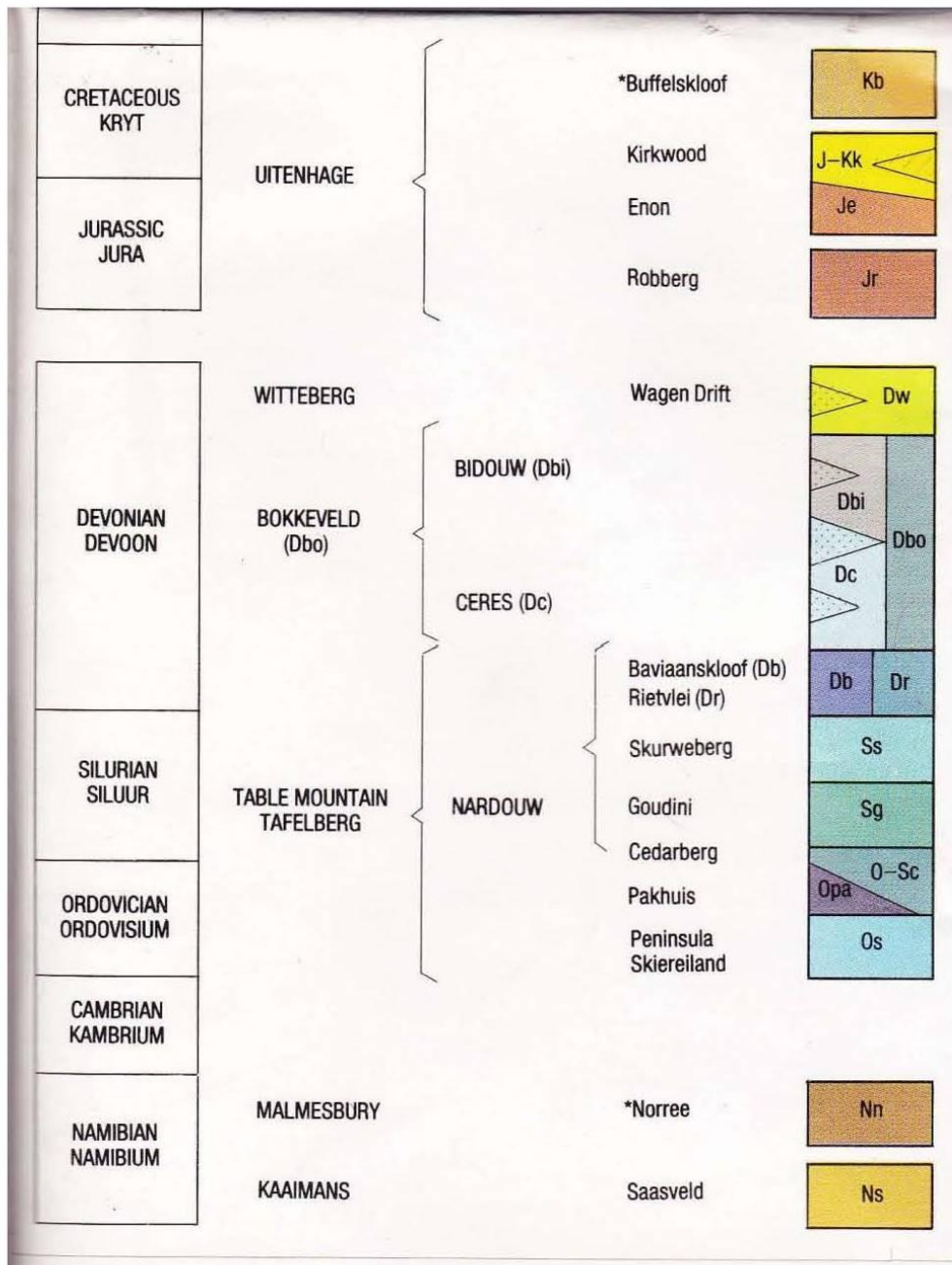
Appendix D2: Regulation 42 Mine Layout Map

SHEET 2 of 2 SHEETS

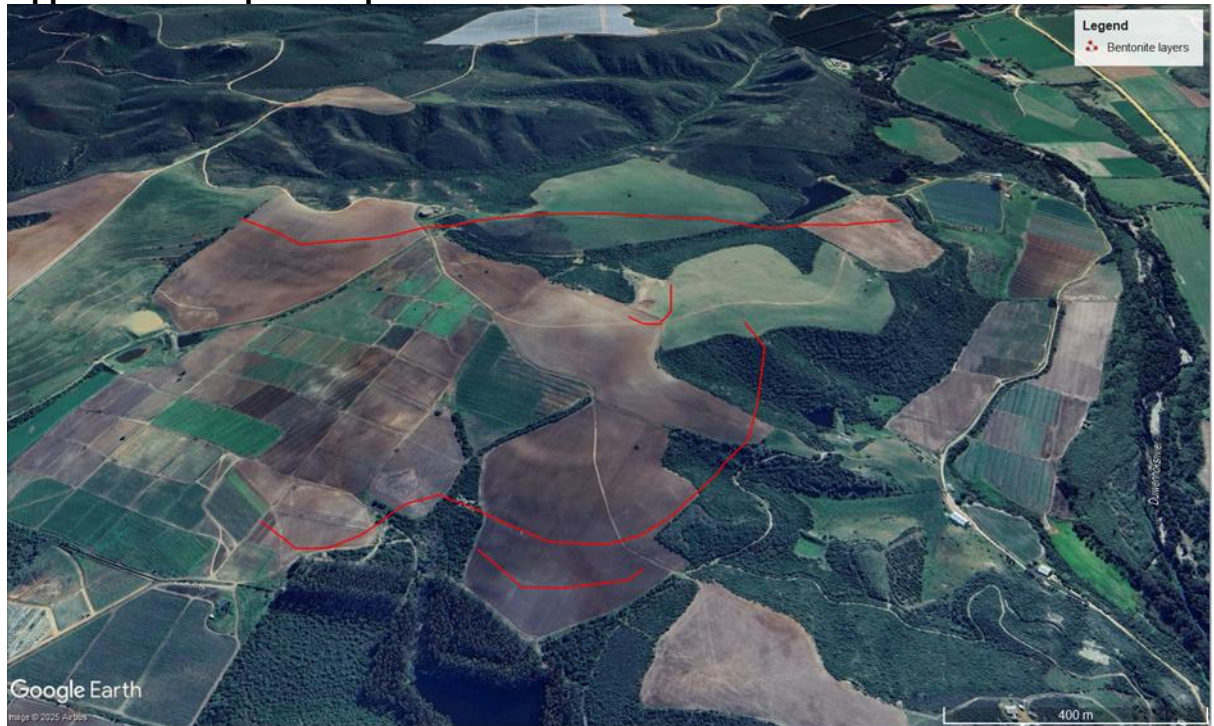


Appendix D3: Local Geology Map

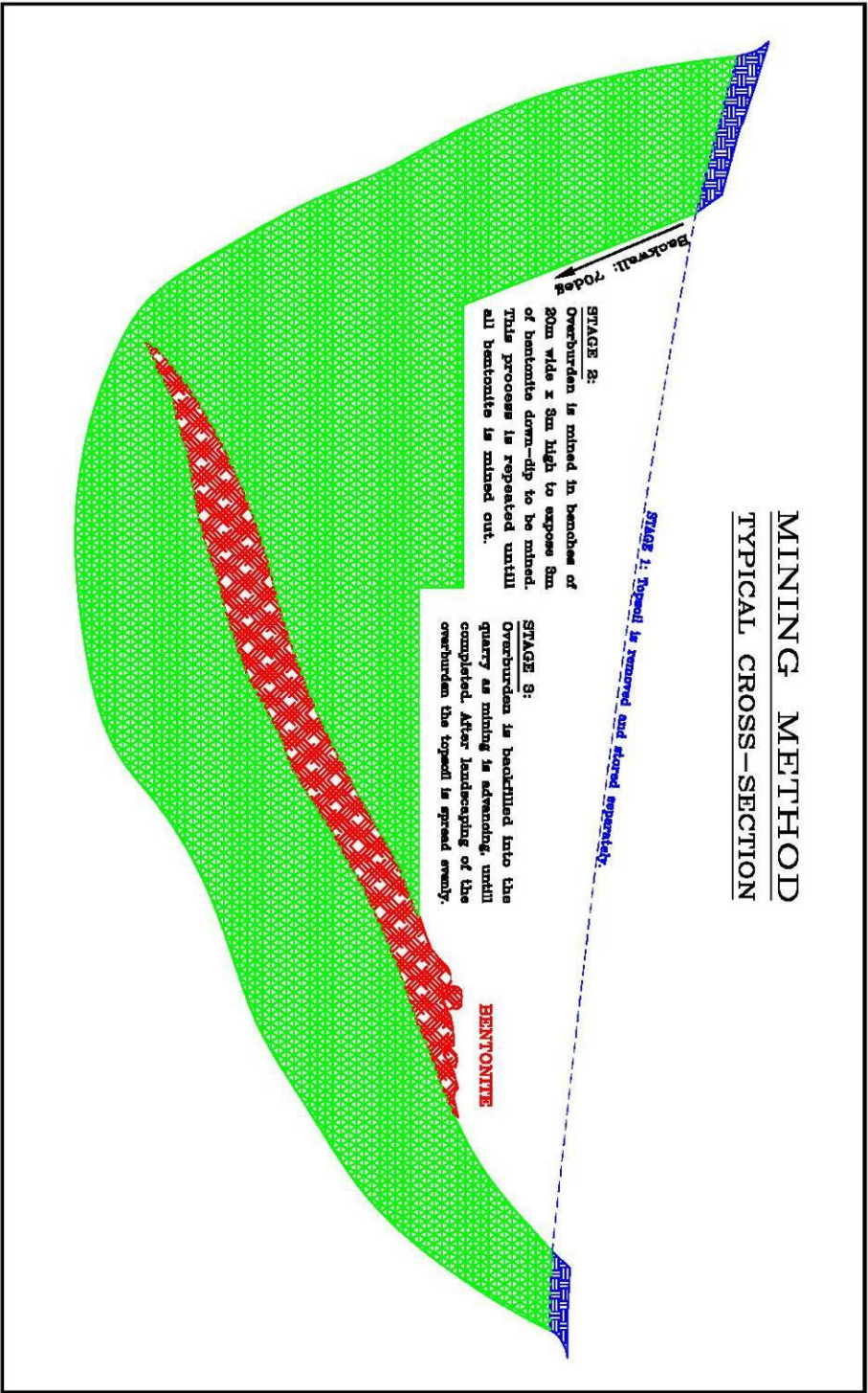




Appendix D4: Deposit Map



Appendix D5: Typical Cross Section of Mining Method





mineral resources

Department:
Mineral Resources
REPUBLIC OF SOUTH AFRICA

NAME OF APPLICANT: Imerys Refractory Minerals South Africa

FINANCIAL AND TECHNICAL COMPETENCE REPORT

**SUBMITTED FOR A MINING PERMIT APPLICATION
ON ERF RE/1412 AND ERF 3264 (PREVIOUSLY ERF 1412)
HEIDERLBERG, WC**

**AS REQUIRED IN TERMS OF ITEM B OF FORM F, ANNEXURE I OF THE REGULATIONS
FOR THE MINERAL AND PETROLEUM RESOURCES DEVELOPMENT ACT (ACT 28 of
2002), AND IN ACCORDANCE WITH THE STANDARD DIRECTIVE FOR THE
COMPILATION THEREOF AS PUBLISHED ON THE OFFICIAL WEBSITE OF THE
DEPARTMENT OF MINERAL RESOURCES.**

STANDARD DIRECTIVE

All applicants for mining permits are herewith, in terms of the provisions of Section 29 (a) of the Mineral and Petroleum Resources Development Act, directed to submit a report strictly in accordance with the following format, and as informed by the guideline posted on the Departments Official Website, together with an application for a mining permit.

1. TECHNICAL COMPETENCE

1.1 Complete the table below regarding the technical competence forecast.

TABLE 1

TECHNICAL COMPETENCE COST FORECAST											
SKILLS CATEGORY			STATE THE ESTIMATED QUARTERLY EXPENDITURE ON EACH EMPLOYMENT CATEGORY, SUBCONTRACTOR, OR SERVICE PROVIDER AS SHOWN BELOW								
List all the job categories that will be employed on the mine, from the mine manager to the unskilled labourers, including those of subcontractors and service providers.	State the qualifications required for each job category	State Part time or Full time	Qtr1 (R'000)	Qtr2 (R'000)	Qtr3 (R'000)	Qtr4 (R'000)	Qtr5 (R'000)	Qtr6 (R'000)	Qtr7 (R'000)	Qtr8 (R'000)	TOTAL FOR TWO YEARS
MINE MANAGER	Diploma in production/ operations	Full time									
SITE ADMINISTRATOR	Diploma	Full time									
PRODUCTION GEOLOGIST	Degree	Full time									
PRODUCTION MANAGER	Degree	Full time									
ELECTRICIAN	Relevant Electrical Qualification	Full time									
DIESEL MECHANIC	Diesel mechanic qualification	Full time									
PROCESS CONTROLLER	Matric	Full time									
PROCESS ATTENDANT	Matric	Full time									
PLANT OPERATOR	Matric	Full time									
TOTAL ESTIMATED EXPENDITURE	KZAR		6895	7423	8185	7530	7309	7868	8676	7982	61868

NOTE ! If any person (including the applicant) provides services in any job or skills category at a reduced rate or free of charge, then such person's Curriculum Vitae (CV) must be attached as documentary proof of the technical ability available to the applicant.

2. ABILITY TO MANAGE AND REHABILITATE RELEVANT ENVIRONMENTAL IMPACTS

TABLE 2 Environmental cost estimate.

ACTIVITY Mark with X which activities are applicable		POTENTIAL IMPACT	MITIGATION MEASURE	STATE QUARTERLY COST OF MITIGATION MEASURES IN THE AVAILABLE SPACE BELOW, IN RANDS	STATE THE ESTIMATED REHABILITATION COST RELATED TO THE ACTIVITY IN THE AVAILABLE SPACE BELOW, IN RANDS
Excavating	X	Surface disturbance	Rehabilitation	R457 750	R1 831 000 (this correspond to the rehabilitation cost for the whole Operation not for the area we are applying for now)
		Dust	Dust control measures	NA	
		Noise	Noise control measures	NA	
		Contaminated Drainage	Storm water system	NA	
Blasting		Fly Rock	Access control measures	NA	NA
Stockpiles	X	Surface disturbance	Rehabilitation	NA	NA
		Dust	Dust Control Measures	NA	NA
		Contaminated Drainage	Storm water system	NA	NA
Discard dumps or dams		Surface Disturbance	Rehabilitation	NA	NA
		Dust	Dust control Measures	NA	NA
		Contaminated Drainage	Storm water system	NA	NA
Loading, hauling and transport	X	Noise	Noise control measures	NA	NA
		Dust	Dust control Measures	NA	NA
Water supply dams and boreholes.		Surface disturbance	Rehabilitation	NA	NA
Accommodation, offices, ablution, stores, workshops etc.		Surface disturbance	Rehabilitation	NA	NA
Processing Plant		Noise	Noise control measures	NA	NA
		Dust	Dust control Measures	NA	NA
		Contaminated Drainage	Storm water system	NA	NA
		Surface disturbance	Rehabilitation	NA	NA
			TOTAL	R457 750	R1 831 000

3. FINANCIAL COMPETENCE

TABLE 3.1 : Financial implications of the project

CASH FLOW FORECAST									
(Complete the quarterly information and totals as specified by the "ITEM" column below)									
ITEM	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Quarter 5	Quarter 6	Quarter 7	Quarter 8	TOTAL
PRODUCTION The mass or volume of the product to be produced in each quarter, either in tons, m ³ , grams, carats, etc., whichever is applicable.	10 825	9 711	12 326	12 828	11 475	10 294	13 066	13 598	94 121
ITEM	Quarter	Quarter	Quarter	Quarter	Quarter	Quarter	Quarter	Quarter	TOTAL
	1	2	3	4	5	6	7	8	
	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000
PRICE The expected price that will be received for the abovementioned product	3 421 R/t	3 421 R/t	3 421 R/t	3 421 R/t	3 421 R/t	3 421 R/t	3 421 R/t	3 421 R/t	3 421 R/t
REVENUE The mass or volume of production multiplied by the price ('000)	35 644	32 174	42 049	46 482	37 783	34 104	44 572	49 271	322 079
OPERATING COST Estimated quarterly operating cost (as shown in table 4.2 herein) of stores, materials, electricity, water, fuel and other (Excluding labour and environmental cost)	-26 006	-31 631	-39 443	-42 492	-27 566	-33 528	-41 809	-45 041	-287 516
TECHNICAL COMPETENCE COST TO BE PROVIDED FOR	-6 895	-7 423	-8 185	-7 530	-7 309	-7 868	-8 676	-7 982	-61 868

Estimated quarterly cost <u>shown in table 1 above</u> , i.e. salaries, wages, labour, service providers, subcontractors, etc.									
ENVIRONMENTAL COST Estimated quarterly cost <u>shown in table 2 above</u> and divide the total rehabilitation cost among the quarters. The total of the environmental cost must equal all the quarterly environmental costs and the total rehabilitation cost combined.	-689	-572	-19	-551	-730	-606	-20	-584	-3 772
CAPITAL AND OTHER The cost (as shown in table 4.1 herein) of land, machinery, the plant, buildings and infrastructure and any other costs. <i>Cape Bentonite is already producing for more than 50 years. It is financed on working cost.</i>	NA	NA	NA	NA	NA	NA	NA	NA	NA
WORKING PROFIT / LOSS The revenue minus all the costs listed above	9 638	544	2 607	3 990	10 216	576	2 763	4 230	34 563

NOTE! If the total is a working loss, then it means that the applicant cannot provide for the technical ability or mine the mineral optimally in a period of two years.

TABLE 3.2– FINANCING THE PROJECT

CATEGORY	AMOUNT	SUPPORTING INFORMATION
State the amount required to fund the project	NA	Cape Bentonite is already producing for more than 50 years. It is financed on working cost.
State the amount the applicant has available to fund the project	NA	Cape Bentonite is already producing for more than 50 years. It is financed on working cost.
State the outstanding amount required to fund the project	NA	Cape Bentonite is already producing for more than 50 years. It is financed on working cost.

CATEGORY	DESCRIPTION	SUPPORTING INFORMATION
State how the outstanding amount will be financed, e.g. Loan, investor, etc.	NA	

NOTE ! If the applicant does not have sufficient financial resources readily available (or cannot provide) for the working losses, and for the operating, technical competence and working cost of the first quarter stated in the cash flow forecast above, it cannot be concluded that the applicant has or can provide for the necessary financial resources to carry out the mining activities and to mitigate and rehabilitate relevant environmental impacts.

4. SUPPORTING INFORMATION

TABLE 4.1- CAPITAL COST ESTIMATE: Complete the information required in the table below

COST CATEGORY	QUARTERLY RENTAL WHERE APPLICABLE R'000	OUTRIGHT PURCHASE AMOUNT
Land	Cape Bentonite is already producing for more than 50 years. It is financed on working cost.	
Buildings and infrastructure		
Processing plant		
Machinery		
Other (specify)		
TOTAL (to be reflected in the cash flow forecast in table 3.1 above)	NA	NA

TABLE 4.2- OPERATING COSTS: Complete the information below:-

COST CATEGORY	Quarterly cost R'000
Fuel (average over 2 years period)	-1 532
Electricity (average over 2 years period)	-1 921
Water	0
Stores and materials (average over 2 years period)	-32 487
Other (specify) Average over 2 years period	0
TOTAL QUARTERLY COST (must be reflected in the cash flow forecast in table 3.1 above) <i>This is an average over the 2 years period</i>	-35 940

TABLE 4.3- BACKGROUND TO OPERATING COSTS: Complete the information below:-

CATEGORY	REQUIREMENT	COMPLETE THIS COLUMN
MINERAL	State the mineral to be mined	Bentonite
FUEL	State volume or tonnage of earth to be excavated per quarter This is an average over the 2 years period	160 000t
	State number of excavators to be used	2
	State number of loaders to be used	2
	State number of trucks to be used	5
ELECTRICITY	State volume or tonnage of material to be processed in the plant This is an average over the 2 years period	20 000t

	List plant or equipment that requires electricity	-2 Mills; -1 Pan Mill; -10 conveyors; -1 Noodler; -1 Cutter;
WATER	State volume of water to be used	0
	Where will the water be obtained?	NA
OTHER	Describe other operating costs to be incurred, if applicable	-Soda Ash (Additive required in Bentonite process) -Coal (To run drier)

5. IDENTIFICATION OF THE REPORT

Herewith I, the person whose name and identity number is stated below, confirm that I am the person authorised to act as representative of the applicant in terms of the resolution submitted with the application, and confirm that the above report and appendices comprise the details and documentary proof of the Financial and Technical ability required to be submitted with this application in terms of form F, annexure I of the MPRDA Regulations.

Full Names and Surname	
Identity Number	

.....END.....