MCDR INSPECTION REPORT

SN	Particulars	Details
1(a)	Name of the Mine	
. ,		Dharampur/Kajawdri Limestone Mines
1(b)	Name of inspecting officer & Designation	Shri Sanjaya Kumar Sahoo (Junior Mining Geologist, IBM)
1(c)	Accompanying Mines Representatives	Mr D.K.Singh
1 (d)	Type of Inspection	Star Rating Evaluation
1 (e)	Date of Inspection	08.08.2024
2	Total Lease Area (Ha) with	
2	breakup of Non-forest and forest land	9.31 HA. (Forest Area: Nil) (Non-forest Area: 9.31 HA)
3	Mine code	38GUJ08063
4	IBM Registration Number under rule 45 of MCDR, 1988	IBM/265/2011
5	Name of the lessee, Address, phone, email and fax number	M/s Saurashtra Chemicals, Division of Nirma Ltd. Porbandar
6	Village	Dharampur
7	Taluka/Mandal	Ranavav
8	District	Porbandar
9	Pincode	360576
10	State	Gujarat
11	Post office	Dharampur
12	Nearest police station	Udhyognagar, Porbandar
13	Nearest Railway station	Ranavav
14	Date of Grant of Mining Lease	27.11.1978
15	Date of Execution	26.12.1979
16	Date of opening of Mine	
17	Date of first Renewal, if	18.12.1998 for 20 years
17	applicable and its period & expiry	10.12.1990 for 20 years
18	Date of second Renewal, if applicable and its period & expiry	
19	Date of submission of renewal application if Mining Operations are continuing under deemed extension	Period extended as per MMDR amendment Act 201 up to 31/03/2030.
20	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Sh. Ashish K. Desai, Whole time director, Saurashtr Chemicals,Division of Nirma Ltd. Porbandar Date of appointment: 11.10.2024
21		Sri Manish D Patel, Mines Agent, Saurashtra Chemical, Division of Nirma Ltd. Porbandar Date of appointment:27.05.2020
22	Name of the Mines Manager with Address, phone, email,	Shri Shashi Bhushan Prasad, Mines Manager, Saurashtra Chemical, Division of Nirma Ltd.

fax number and date of	Porbandar
appointment in mines	

23	Name of the Mining Engineer, Qualification and total	Sri Rahul Gedia, Mining engineer Saurashtra Chemical, Division of Nirma Ltd.
	experience with Address,	Porbandar
	phone, email, fax number and	Date of Appointment: 02.02.2024
	date of appointment in mine	
24	Whether Geologist and Mining	Sri Mehul Sharma, Geologist
	Engineer appointed in mines	Saurashtra Chemical, Division of Nirma Ltd.
	satisfy the rule 42 & carrying	Porbandar
	out their duties as per rule 43	Date of Appointment:02.02.2024
	& 44.	
25	Date of Approval of Mining	Letter No. 684(4)(1)/MS-235/2019-20-GNR Udaipur
	Plan/Modified Mining Plan with	dtd. 23.07.2019 (2019-20 to 2023-24) & No. File
	five-year period and specific	no:MCDR-MPCP0CaFl/56/2023-GNR-IBM_RO-GNR MP-
	condition in approval letter, if	528 dated-06.02.2024 for the period 2024-25 to
	any.	2028-29
26	Date of Approval of Scheme of	NA
	Mining/Modified Scheme of	
	Mining with five-year period	
	and specific condition in	
	approval letter, if any.	
27	Mineral(s) granted in lease	Limestone
	and proved for mining	
28	Method of Mining(Opencast,	Opencast
	Underground)	
29	Category (Fully Mechanised,	'A'
	Others or Manual)	
30	Captive/Non Captive	Captive
Calar	tifie Minimus Consultance of sure	ocals of approved mining plan/schome of mining

Scientific Mining: Compliance of proposals of approved mining plan/scheme of mining. -

Exploration

		Droposale (2022-24)	Actual work	Domorka
SN	Item	Proposals (2023-24)	Actual work	Remarks
			(2023-24)	
1a	Backlog of previous year		9 No. of Bore	
		Yes	holes were	
			carried out in	
			F.Y 2023-24	
			which was	
			proposed for	
			F.Y 2019-20,	
			46 meter	
1b	Exploration over lease area	Not Proposed	G1	
	for Geological axis 1 or 2.			
1c	Exploration Agency &	Not Proposed	M.K.Soil testing	
	Expenditure in lakh Rupees		laboratory pvt	
	during the year		ltd Rs 138000/-	
	5		approx	
1d	Balance area to be explored	Not Proposed	Not Applicable	
-	to bring Geological axis in 1			
	or 2			
1e	Balance reserves as on	111- 166797.28 MT		
-	01.04.2024 in MT	121- 0		

		122- 0 331- 388046.88	
1f	General remarks of	During inspection the co-ordinates of f	ollowing Bore
	inspecting officer on geology,	holes were taken;	
	exploration etc.	PBH-03: Lat- N21° 40' 30.5", Long- E06	59° 40' 59.8"
		PBH-09- Lat- N21° 40' 27.3", Long- E06	59°40' 54.9"

2.0 Development

SN	Item	Proposals(2023-24)	Actual work(2023-24)	Remarks
2a	Location of development w.r.t. lease area	Pit-2 N2397121 to N2397192 E570799 to E570862	Pit-2	Location- N21° 40' 36.33", E69° 41' 8.95" Size- 36m x 6m x 1.2m
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	No Proposal	Not Applicable	
2c		1:0	1:0	
2d	Quantity of topsoil generation in m3	No Proposal	Not Applicable	
2e	Quantity of overburden generation in m3	No Proposal	Not Applicable	
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	There was no proposal overburden for F.Y 202 operations were not ca	3-24. During inspe	•
3.0	Exploitation			
SN	Item	Proposals (2023-24)	Actual work	Remarks
			(2023-24)	
3a	Number of pits proposed for production	1	(2023-24) 1	
		1 9525 MT		
3b	production Quantity of ROM mineral	9525 MT	1	
3b 3c	production Quantity of ROM mineral production proposed Recovery of saleable/usable mineral from ROM	9525 MT	1 24.400 MT	
3a 3b 3c 3d 3e	production Quantity of ROM mineral production proposed Recovery of saleable/usable mineral from ROM production Quantity of mineral reject	9525 MT 8191.5 MT	1 24.400 MT 24.400 MT NIL	
3b 3c 3d 3e	production Quantity of ROM mineral production proposed Recovery of saleable/usable mineral from ROM production Quantity of mineral reject generation Grade of mineral reject generation and threshold	9525 MT 8191.5 MT 952.5 MT About 10% undersize(-	1 24.400 MT 24.400 MT NIL	
3b 3c 3d 3e 3f	productionQuantity of ROM mineral production proposedRecovery of saleable/usable mineral from ROM productionQuantity of mineral reject generationGrade of mineral reject generation and threshold value declaredQuantity of sub-grade	9525 MT 8191.5 MT 952.5 MT About 10% undersize(- 25 mm)	1 24.400 MT 24.400 MT NIL NIL	
3b 3c 3d	productionQuantity of ROM mineral production proposedRecovery of saleable/usable mineral from ROM productionQuantity of mineral reject generationGrade of mineral reject generation and threshold value declaredQuantity of sub-grade mineral generationGrade of sub-grade mineral	9525 MT 8191.5 MT 952.5 MT About 10% undersize(- 25 mm) No Proposal	1 24.400 MT 24.400 MT NIL NIL NIL	

	study proposed & carried out for sub-grade mineral and reject			
Зј	Provision of drilling & blasting in mineral benches	No Proposal	Not Applicable	
3k		Shovel (Hydraulic), Dumper	Shovel (Hydraulic), Dumper	

31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM		3m in mineral	3m in mineral	
2	mining proposed in MP/SON	4	2 5 0 2 7 11-	2.070.11	
3m	Total area covered		3.5037 Ha	2.970 Ha	
2	under excavation/pits		1.0	1.0	
3n	Ore to OB ratio for the		1:0	1:0	
2-	pit/mine during the year			Pit- 2.970	
30	Total area put in use under different heads at the end of the sector of		Pit- 3.5037 Ha		
		JI	Road- 0.225 Ha	Waste disposal- .250 Ha	
	year		Others- 5.33 Ha	.250 на Road- 0.20 На	
				Others- 5.89 Ha	
2n	Production of ROM mineral		Yr-2019-20-9525 MT	Yr-2019-20-	
Зр	during last five-year period		Yr-2020-21-9525 MT	00 MT	
	as applicable		Yr-2021-22-9525 MT	Yr-2020-21-	
			Yr-2022-23-9525 MT	8712.280 MT	
			Yr-2023-24-9525 MT	Yr-2021-22-	
			11 2023 21 3323 111	2061.665 MT	
				Yr-2022-23-	
				3051.115 MT	
				Yr-2023-24-	
				24.400 MT	
3q	General remarks of		There was no proposa		n and 3m
3q	General remarks of inspecting officer on metho	d		l for of overburde	
-	inspecting officer on metho of mining etc.		bench height in miner found.	l for of overburde	
1.0	inspecting officer on metho of mining etc. Solid Waste Management	-D	bench height in miner found. umping	for of overburder al was proposed.	No Violation
4.0	inspecting officer on metho of mining etc. Solid Waste Management Item	- D Pr	bench height in miner found. <u>umping</u> oposals (2023-24)	Actual work (2023-24)	
<u>4.0</u> SN	inspecting officer on metho of mining etc. Solid Waste Management Item Separate dumping of	-D Pr M	bench height in miner found. umping oposals (2023-24) ineral Reject Stack-	for of overburder al was proposed. I Actual work	No Violation
<u>4.0 s</u> N	inspecting officer on metho of mining etc. Solid Waste Management Item Separate dumping of topsoil, OB & mineral	-D Pr M	bench height in miner found. <u>umping</u> oposals (2023-24)	Actual work (2023-24)	No Violation
4.0 SN 4a	inspecting officer on metho of mining etc. Solid Waste Management Item Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	-D Pr M	bench height in miner found. umping oposals (2023-24) ineral Reject Stack-	Actual work (2023-24)	No Violation
4.0 SN 4a	inspecting officer on metho of mining etc. Solid Waste Management Item Separate dumping of topsoil, OB & mineral reject (Rule 32, 33) Location of topsoil, OB &	- D Pr M 0.	bench height in miner found. <u>umping</u> oposals (2023-24) ineral Reject Stack- 253 Ha	Actual work (2023-24)	No Violation
4.0 SN 4a 4b	inspecting officer on metho of mining etc. Solid Waste Management Item Separate dumping of topsoil, OB & mineral reject (Rule 32, 33) Location of topsoil, OB & mineral reject dumps	- D Pr M 0.	bench height in miner found. umping oposals (2023-24) ineral Reject Stack- 253 Ha o Proposal	Actual work (2023-24)	No Violation
4.0 SN 4a 4b	inspecting officer on metho of mining etc. Solid Waste Management Item Separate dumping of topsoil, OB & mineral reject (Rule 32, 33) Location of topsoil, OB & mineral reject dumps Number of dumps within	- D Pr M 0.	bench height in miner found. <u>umping</u> oposals (2023-24) ineral Reject Stack- 253 Ha	Actual work (2023-24)	No Violation
4.0 SN 4a 4b	inspecting officer on metho of mining etc. Solid Waste Management Item Separate dumping of topsoil, OB & mineral reject (Rule 32, 33) Location of topsoil, OB & mineral reject dumps Number of dumps within lease area and outside	- D Pr M 0.	bench height in miner found. umping oposals (2023-24) ineral Reject Stack- 253 Ha o Proposal	Actual work (2023-24) NIL Not Applicable	No Violation
4.0 SN 4a 4b 4c	inspecting officer on metho of mining etc. Solid Waste Management Item Separate dumping of topsoil, OB & mineral reject (Rule 32, 33) Location of topsoil, OB & mineral reject dumps Number of dumps within lease area and outside lease area	- D Pr M 0.	bench height in miner found. umping oposals (2023-24) ineral Reject Stack- 253 Ha o Proposal	Actual work (2023-24) NIL Not Applicable	No Violation
4.0 SN 4a 4b 4c	inspecting officer on metho of mining etc. Solid Waste Management Item Separate dumping of topsoil, OB & mineral reject (Rule 32, 33) Location of topsoil, OB & mineral reject dumps Number of dumps within lease area and outside lease area Location of dumps w.r.t.	- D Pr 0.	bench height in miner found. <u>umping</u> oposals (2023-24) ineral Reject Stack- 253 Ha o Proposal o Proposal	Actual work (2023-24) NIL Not Applicable	No Violation
4.0 SN 4a 4b 4c	inspecting officer on metho of mining etc. Solid Waste Management Item Separate dumping of topsoil, OB & mineral reject (Rule 32, 33) Location of topsoil, OB & mineral reject dumps Number of dumps within lease area and outside lease area Location of dumps w.r.t. ultimate pit limit (Rule 16)	-D Pr M 0.	bench height in miner found. umping oposals (2023-24) ineral Reject Stack- 253 Ha o Proposal o Proposal	Actual work (2023-24) NIL Not Applicable Not Applicable	No Violation
4.0 SN 4a 4b 4c	inspecting officer on metho of mining etc. Solid Waste Management Item Separate dumping of topsoil, OB & mineral reject (Rule 32, 33) Location of topsoil, OB & mineral reject dumps Number of dumps within lease area and outside lease area Location of dumps w.r.t. ultimate pit limit (Rule 16) Number of active & alive	-D Pr M 0.	bench height in miner found. <u>umping</u> oposals (2023-24) ineral Reject Stack- 253 Ha o Proposal o Proposal	Actual work (2023-24) NIL Not Applicable	No Violation
4.0 SN 4a 4b 4c 4d 4e	inspecting officer on metho of mining etc. Solid Waste Management Item Separate dumping of topsoil, OB & mineral reject (Rule 32, 33) Location of topsoil, OB & mineral reject dumps Number of dumps within lease area and outside lease area Location of dumps w.r.t. ultimate pit limit (Rule 16) Number of active & alive dumps	- D Pr 0.	bench height in miner found. umping oposals (2023-24) ineral Reject Stack- 253 Ha o Proposal o Proposal o Proposal	Actual work (2023-24) NIL Not Applicable Not Applicable Not Applicable	No Violation
3q 4.0 SN 4a 4b 4c 4d 4e 4f	inspecting officer on metho of mining etc. Solid Waste Management Item Separate dumping of topsoil, OB & mineral reject (Rule 32, 33) Location of topsoil, OB & mineral reject dumps Number of dumps within lease area and outside lease area Location of dumps w.r.t. ultimate pit limit (Rule 16) Number of active & alive dumps Number of dead dumps	- D Pr 0.	bench height in miner found. umping oposals (2023-24) ineral Reject Stack- 253 Ha o Proposal o Proposal	Actual work (2023-24) NIL Not Applicable Not Applicable	No Violation
4.0 SN 4a 4b 4c 4d 4e	inspecting officer on metho of mining etc. Solid Waste Management Item Separate dumping of topsoil, OB & mineral reject (Rule 32, 33) Location of topsoil, OB & mineral reject dumps Number of dumps within lease area and outside lease area Location of dumps w.r.t. ultimate pit limit (Rule 16) Number of active & alive dumps	-D Pr 0. No No No	bench height in miner found. umping oposals (2023-24) ineral Reject Stack- 253 Ha o Proposal o Proposal o Proposal	Actual work (2023-24) NIL Not Applicable Not Applicable Not Applicable	No Violation

4h	Whether Retaining wall or garland drain all along dumps are there	No Proposal	Not Applicable	
4i	Length of Retaining wall or garland drain all along dump	No Proposal	Not Applicable	
4j	Number of settling ponds	No Proposal	Not Applicable	
4k	-	There was no proposal fo top soil for F.Y 2023-24.	or generation of ove	erburden and

5.0 Solid Waste Management-Backfilling

SN	ltem	Proposals (2023-24)	Actual work (2023- 24)	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	No Proposal	Not Applicable	
5b	Area under backfilling of mined out area	No Proposal	Not Applicable	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	No Proposal	Not Applicable	
5d	Total area fully reclaimed & rehabilitated	No Proposal	Not Applicable	
5e	General remarks of inspecting officer on backfilling, reclamation etc.	There was no proposal found.	for backfilling. No V	olation was
<u>6.0</u>	Progressive Mine Closure	<u>Plan</u>		
SN	Item	Proposals (2023-24)	Actual work (2023- 24)	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly - Rule 23E (2). Details should be given in the format as given in Annexure-20.	YES	YES on dated 13.06.2024 along with Annual Return.	
6b	worked/mined out benches i) Area available for	i)No Proposal ii) 0.3 ha iii) 300 plants	i) Not Applicable ii) 0.3 Ha iii) 455 plants iv) 545 plants	
6c	Compliance on reclamation and rehabilitation by backfilling i) Voids available for	No Proposal	Not Applicable	

backfilling (L X B X D)		
ii) Void filled by		
waste/tailings		
iii) Afforestation on the		
backfilled area		
iv) Rehabilitation by		
making water reservoir		
v) Any other specific		
means		

6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	No Proposal	Not applicable	
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Ambient Air Monitoring, Water quality monitoring and Noise monitoring	Ambient Air Monitoring, Water quality monitoring and Noise monitoring is being done on half yearly basis and soil monitoring on yearly basis.	
6f	General remarks of inspecting officer on PMCP compliance & progressive	PMCP work has been dor Fencing has been found Violation was found.	- · ·	

7.0 Mineral Conservation

SN	ltem	Proposals (2023-24	Actual work (2023- 24)	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	9525 MT	24.400 MT	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	No Proposal	Not Applicable	
7c	Different grade of mineral sorted out at mines	No Proposal	Not Applicable	
7d	Any beneficiation process at mines	No Proposal	Not Applicable	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	Beneficiation was not proposed for F.Y 2023-24.		
B.O	Environment	1		
		1		

SN	Item	Proposals ((2023-24)	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal	Not Applicable	
8b	Concurrent use or storage of topsoil	No Proposal	Not Applicable	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	No Proposal	Not Applicable	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No Proposal	Not Applicable	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc.)	No Proposal	Not Applicable	
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	Additional- 300 plants	Additional- 455 plants Cumulative- 545 plants	
8g	Survival rate	80 %	50 %	
8h	Water sprinkling on roads to control airborne dust	Water sprinkling on road will be done through water tanker	Water sprinkling on road has been done through water tanker	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines are	No Violation was found.	L	I
	Compliance of Rule 45			•
S.N	Item	COMMENTS		Remarks
I.	Status of submission of	M.R. Submitted up to De	ecember-2024 on	

5.N	item		Remarks
	Status of submission of	M.R. Submitted up to December-2024 on	
	Online Monthly and Annual	dated 07-01-2025	
	returns	A.R. submitted up to till date- up to 2023-	
		24 -13.06.2024	

S.N	Item	Details GIVEN in A.R.(Observation of	Remarks
		(2023-24)	I/Officer /Actual	
			reported in Returns	
9b	Scrutiny of Annual	Shri Rahul Gedia (Mining	Shri Rahul Gedia	Violation
	return for information	Engg)	(Mining Engg)	observed
	on Mining Engineer,	Shri Mehul Sharma(Shri Mehul Sharma(under Rule
	Geologist and Manager	Geologist)	Geologist)	45(5)(c)
		Shri Shashi Bhusan	Shri Shashi Bhusan	read with
		Prasad (Mine manager)	Prasad (Mine	45(7)
	I	l -	1	l

Perform on anorestationNil9eScrutiny of Annual return on mineral reject generation (Grade & quantity)NILNIL9fScrutiny of Annual return on ROM stock and/or graded ore24.40 MT24.400 MT9gScrutiny of Annual return on sale value, Ex. Mine price & production costSale value- 0Sale value- 09gScrutiny of Annual return on sale value, Ex. Mine price & production costSale value- 0Ex. Mine Price- 413.60/- per tonne9iScrutiny of Annual return on fixed assetsNilNil9kScrutiny of Annual return on mining machineriesShovel (Hydraulic)- 01 Dumper- 01Shovel (Hydraulic)- 01	9d	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc. Scrutiny of Annual return on afforestation	Covered Under Current (O-C) working- 2.970 Ha Reclamation- NIL Dump- NIL Afforestation -0.30 Ha	manager) Covered Under Current (O-C) working- 2.970 Ha Reclamation- NIL Dump- NIL Afforestation-0.30 Ha
return on ROM stock and/or graded oreSale value- 0Sale value- 09gScrutiny of Annual return on sale value, Ex. Mine price & production costSale value- 0Ex. Mine Price- 413.60/- per tonneSale value- 0Ex. Mine price & production costEx. Mine Price- 413.60/- per tonneFree value- 0Ex. Mine Price- 413.60/- per tonne9iScrutiny of Annual return on fixed assetsNilNil9kScrutiny of Annual return on mining machineriesShovel (Hydraulic)- 01 Dumper- 01Shovel (Hydraulic)- 01	9e	Scrutiny of Annual return on mineral reject generation	NIL	
return on sale value, Ex. Mine price & production costEx. Mine Price- 413.60/- per tonneEx. Mine Price- 413.60/- per tonne9iScrutiny of Annual return on fixed assetsNilNil9kScrutiny of Annual return on mining machineriesShovel (Hydraulic)- 01 Dumper- 01Shovel (Hydraulic)- 01		Scrutiny of Annual return on ROM stock	24.40 MT	24.400 MT
Preturn on fixed assets Preturn on fixed assets 9k Scrutiny of Annual return on mining Shovel (Hydraulic)- 01 Shovel (Hydraulic)- 01 01 Dumper- 01 Dumper- 01	•	return on sale value, Ex. Mine price &	Ex. Mine Price- 413.60/- per tonne Production cost-	Ex. Mine Price- 413.60/- per tonne Production cost-
return on mining Dumper- 01 01		-	Nil	Nil
		return on mining	-	01

10- Details of violations observed during current inspection and compliance position of earlier violation pointed out:-

- i. During previous year inspection, Violation had been given on Rules; 11(1), 45(5) (c) and 45(7) on 28-03-2024 and the same has been complied on 31-05-2024.
- ii. Drone data has been submitted by the Lessee on 28-06-2024. It was found not as per SOP and referred back.
- iii. Self-assessment date of Star Rating is 29-06-2024 and the Rating given by the Lessee is 3. It has been evaluated and given 3 Star.
- iV. Violation is found under Rule 45(5)(c) read with 45(7) for current year inspection.

Rule No.	Nature of Violation observed			
	The holder of a mining lease shall submit online Annual returns in respect of each mine to the Regional Controller or any other authorized officer of the Indian Bureau of Mines which shall be submitted before 1st day of July each year for the preceding financial year in electronic form, which shall be complete, correct and true in all aspects.			
	However, in your case, it is found that;			
45(5)(c) read with 45(7)	a. You have submitted following incomplete/ wrong/ false information in the Annual Return for the year 2023-24:-			
	i. In PART-VI (PRODUCTION, DESPATCHES AND STOCKS) (LIMESTONE) at			

point 2: Production and Stocks of ROM ore at Mine-head ; ROM Opening stock,
Production and Closing stock, all are reported as Nil, however Chemical grade
production of 24.4 MT has been reported at 3(ii) Grade-wise Production,
Dispatches, Stocks and Ex-mine prices.

Shri. Sanjaya Kumar Sahoo Junior Mining Geologist Indian Bureau of Mines