EXECUTIVE SUMMARY

OF

ENVIRONMENTAL IMPACT ASSESSMENT AND ENVIRONMENTAL MANAGEMENT PLAN

OF

MINING OF MINOR MINERALS ON AGRICULTURE LAND

FILE NO	**SEIAA/PB/MIN/ToR/2020/11**
PROPOSAL NO	**SIA/PB/MIN/57379/2020**
KHASRA NO.	**18//6/2(4-0), 15(8-0), 16/2/1(6-0), 24//16/1(60) 25/2(6-0) 25//21(8-0), 20(8-0), 19min(4-0), 9(8-0), 8(8-0), 37//4/2/1(1-0), 7/1(6-0), 23(7-4) 9//11(4-7), 12/1(2-0), 20min(4-0), 19/2(2-0), 21min(4-0), 20min(2-0), 21min(2-0), 21min(2-0) 20min(2-0) 8//25min(4-0), 25min(2-0), 25min(2-0), 18/2/1(3-16)24//14(8-0), 15/1(5-10), 17(8-0)**
AREA	**Cluster Area 6.79 Ha.**
PRODUCTION	**53,449.78 TPA**
LOCATION	**Hadbast No 136, Village- Changali Qadim Tehsil & District-ferozepur, Punjab**

APPLICANT

M/s Prime Vision Industries Pvt. Ltd.
#312, Third Floor, Vishal Chamber P-1,
Sector 18, Noida, Uttar Pradesh-
Pin Code – 201301.

PMS
PRESERVING TOMORROW

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NABET

EXECUTIVE SUMMARY

INTRODUCTION

The project is proposed to mine sand in an area of 6.97 hectares of mines. The Mining site is situated at Khata no 18//6/2(4-0), 15(8-0), 16/2/1(6-0), 24//16/1(6-0) 25/2(6-0) 25//21(8-0), 20(8-0), 19min(4-0), 9(8-0), 8(8-0), 37//4/2/1(1-0), 7/1(6-0), 23(7-4) 9//11(4-7), 12/1(2-0), 20min(4-0), 19/2(2-0), 21min(4-0), 20min(2-0), 21min(2-0), 21min(2-0) 20min(2-0) 8//25min(4-0), 25min(2-0), 25min(2-0), 18/2/1(3-16)24//14(8-0), 15/1(5-10), 17(8-0) Changali Qadim, Hadbast No. 136 Tehsil and District-Ferozepur, Punjab. As per MoEF&CC, New Delhi Gazette dated 14th September 2006 and its subsequent amendment thereof, the proposed mining project is categorized as **Category 'B1'** project. The mine is proposed by Prime Vision Industries Private Limited.

Area detail

S. no	Block	Area (Ha)	Location	Production
1.	Hadbast No. 136	6.97	Village – Changali Qadim Tehsil and District: Ferozepur, State- Punjab	53,449.78 MTPA

Detail of the applicant:-

Shri Harkesh Singh

Prime Vision Industries Private Limited

Add.-312, Third floor Vishal Chamber P-1, Sector-18,

Noida, Uttar Pradesh

The ToR of the above lease was issued by SEIAA Punjab vide letter no.:

S.no	Block No	Vide Letter No	TOR date
1	**Hadbast No. 136**	SEIAA/2020/3580	05.11.2020.

The estimated project cost for the proposed project is given below:

S.no	Block No	Total Cost	CER Cost
1	**Hadbast No. 136**	Rs 138.97 Lakhs	Rs 2.77 Lakhs

LOCATION

The mining area is located on Agriculture Land over an area 6.97 ha. in Village- Changali Qadim, Tehsil & District- Ferozepur, State – Punjab.

Site coordinates:

Pillar No.	Latitude N	Longitude E	Pillar No.	Latitude N	Longitude E
1	30°59’18.73”	74°46’21.03”	27	30°58’59.04”	74°46’3.27”
2	30°59’18.28”	74°46’18.12”	28	30°58’59.01”	74°46’5.45”
3	30°59’15.47”	74°46’18.16”	29	30°58’57.65”	74°46’5.54”
4	30°59’15.40”	74°46’15.72”	30	30°58’57.62”	74°46’8.12”
5	30°59’13.53”	74°46’15.67”	31	30°58’56.86”	74°46’8.11”
6	30°59’13.49”	74°46’19.82”	32	30°58’56.79”	74°46’10.39”
7	30°59’15.17”	74°46’19.83”	33	30°58’55.84”	74°46’10.40”
8	30°59’15.20”	74°46’20.50”	34	30°58’55.88”	74°46’8.06”
9	30°59’17.23”	74°46’20.49”	35	30°58’53.81”	74°46’8.05”
10	30°59’17.25”	74°46’20.73”	36	30°58’53.74”	74°46’5.66”
11	30°59’14.38”	74°46’13.05”	37	30°58’57.62”	74°46’5.60”
12	30°59’14.43”	74°46’10.38”	38	30°58’57.66”	74°46’4.90”
13	30°59’13.46”	74°46’10.39”	39	30°58’53.76”	74°46’4.95”
14	30°59’13.43”	74°46’13.09”	40	30°58’53.74”	74°46’3.11”
15	30°59’10.49”	74°46’15.68”	41	30°58’53.74”	74°46’2.71”
16	30°59’10.49”	74°46’18.33”	42	30°58’51.84”	74°46’2.76”
17	30°59’5.64”	74°46’18.36”	43	30°58’51.80”	74°46’1.16”
18	30°59’5.61”	74°46’16.55”	44	30°58’49.70”	74°46’1.15”
19	30°59’7.41”	74°46’16.55”	45	30°58’51.80”	74°46’1.16”
20	30°59’7.46”	74°46’15.70”	46	30°58’49.70”	74°46’1.15”
21	30°59’1.70”	74°46’13.12”	47	30°58’49.70”	74°46’3.11”
22	30°59’1.64”	74°46’8.02”	48	30°58’45.54”	74°46’2.99”
23	30°58’59.61”	74°46’7.90”	49	30°58’45.67”	74°46’5.59”
24	30°58’56.65”	74°46’13.09”	50	30°58’43.80”	74°46’5.59”
25	30°58’59.53”	74°46’0.43”	51	30°58’43.69”	74°46’3.05”
26	30°58’59.56”	74°46’3.14”			

Connectivity:

- **Nearest Railway Station**: Mallanwala Khas Railway Station is approx 8.39 km towards NE direction.
- **Nearest Airport:** Sri Guru Ram Dass Jee International Airport, Amritsar is approx 79.3 km towards

NE direction.

- **Nearest Highway:** SH-20 is approx 3 km in S direction.
- **Protected area notified under the Wildlife (Protection) Act, 1972:** None within study area.
- **Critically Polluted areas as identified by the Central Pollution Control Board from time to time:** None within study area.
- **Eco-sensitive areas as notified under section 3 of the Environment (Protection). Act, 1986:** None within study area.
- **Inter-State boundaries and international boundaries:** None within study area.

Salient feature of the project

Name of Mine	Mining of Minor Mineral on Agriculture Land over an area 6.97 ha. in Village- Changali Qadim, Tehsil & District- Ferozepur, State – Punjab. Area 6.97 Ha
Village	Changali Qadim
Tehsil	Ferozepur
District & State	Ferozepur, Punjab
Mineral	Minor mineral
Area (ha)	6.97 Ha.

MINING

Mining will be carried out by open cast semi-mechanized method. It is proposed to produce, 53,449.78 MTPA. Considering 300 working days daily production comes to 178.16 tons/ day of sand material, for this, following consideration taken for the proposed mine layout to be carried out systematically & scientifically:

1. Mining activity will be carried out by open cast Semi-mechanized method.
2. Excavator (0.90 cum), Scrapper, Loader shall be deployed for excavation and loading of sand into Tractor/truck/Dumper.
3. Drilling and blasting will not be required.
4. Only 300 working days have been considered for the mining purpose.
5. The mining will go up to a depth of 3.0m from the surface in the respective year and thereafter excavated area shall be leveling at the 18° angle with the top soil to make it fertile and will be used in agricultural purpose.

6. 7.50 area has been left for the buffer zone although the sand will be transported from the pithead to the consumer but if needed in case of short demand in that case, the mineral will be stocked outside the mine lease in the mineral stocking yard for which permission will be granted by the district administration.
7. Adequate number of supervisors including duly qualified Foreman and Mining mate shall be appointed in each working shift to assist the manager.
8. Mineral will be transported through Trucks/ Dumpers/Tractor.
9. No sand mining shall be done within 500m distance from any irrigation dams (check dams), French walls, erosion structure and bridge on national highway. The sand is won from agriculture fields adopting mining and simultaneous reclamation method. The applicant (contractor) purchases/ (pays compensation for the land), from the farmers for short periods with the condition that the soil available as top layer of about 0.60m will be used for reclamation after sand is mined as per terms of contract.
10. No ore dressing/ handling/ processing plant shall me attached with the mine.
11. A mechanical engineer, foreman or other competent person will be appointed to look any defect in the machinery; the said machinery shall not be used until the defect has been rectified.
12. Any machinery found to be in unsafe operation condition shall be tagged at the operator's position "out of service do not use'.

Production detail

Block	Proposed Production(TPA)
Hadgast No. 136	53,449.78 MTPA

SITE FACILITIES AND UTILITIES

Water Supply

The number of working people is 25 so the water requirement for workers for domestic purpose will be around 1.12 KLD, water used for dust suppression will be 2.43 KLD and for greenbelt will be 7.2KLD. The total water requirement will be around 10.5 KLD for the block. This water will be supplied from the nearby village through private tankers.

Temporary Rest Shelter

A temporary rest shelter will be provided for the workers near to the site for rest. In addition, First aid box will be made available at the site for emergency workers. Sanitation facility i.e. septic tank or community toilet facility will be provided for the workers. Mask and gloves will be distributed to theworkers.

BASELINE ENVIRONMENTAL STATUS

Environmental data has been collected in relation to proposed mining for Air, Noise, Water, Soil, Flora and Fauna. The baseline environment study was carried out over an area with radial distance of 10 km around the mining lease area during winter season from October 2020 to December,2020.

Table Baseline Environmental Status

Attribute	Baseline status
Ambient Air Quality	Ambient Air Quality Monitoring reveals that the minimum & maximum concentrations of PM_{10} for all the 7 AQ monitoring stations were found to be 57.44µg/m^3 at AQ6 and 88.25 µg/m^3 at AQ1, respectively. The maximum & minimum concentrations of $PM_{2.5}$ for all the 7 AQ monitoring stations were found to be 46.60µg/m^3 at AQ1 and 21.41µg/m^3 at AQ3, respectively. As far as the gaseous pollutants SO_2 and NOx are concerned, the prescribed CPCB limit of 80µg/m^3 for residential and rural areas has never surpassed at any station. The maximum & minimum concentrations of SO_2 were found to be 15.96µg/m^3 at AQ7 & 5.51µg/m^3 at AQ3, respectively. The maximum & minimum concentrations of NO_X were found to be 25.42µg/m^3 at AQ1 & 8.86 µg/m^3 at AQ5, respectively.
Noise Levels	Noise monitoring was carried out at 7 locations. The results of the monitoring program indicated that both the day time and night time levels of noise were well within the prescribed limits of NAAQS, at all the six locations monitored.

Water Quality	6 Groundwater samples were analyzed and concluded that: The ground water from all sources remains suitable for drinking purposes as all the constituents are within the limits prescribed by drinking water standards promulgated by Indian Standards IS: 10500.
Soil Quality	Samples collected from identified locations indicate the soil is sandy type and the pH value ranging from 7.39 to 7.92, which shows that the soil is alkaline in nature. Potassium is found to be from 234.16 mg/kg to 251.19 mg/kg. The water holding capacity is found in between 26.89 % to 32.12%.
Ecology and Biodiversity	There are no ecologically sensitive areas present in the study area.

ANTICIPATED ENVIRONMENTAL IMPACTS

Impact on Air Environment

The proposed mining activities, loading and movement of other transport vehicles used in mining will generate dust (SPM/RSPM). Proper water sprinkling shall be carried out at the mine site. The mineral will be transported by road through covered tarpaulin trucks/tippers to reduce the fugitive emission caused by the wind.

Impact on Water Environment

Impact on surface water bodies- The main drainage of the area is through seasonal water courses situated nearby lease area. There will be no change & no diversion will be required. There is no toxic element in and around the applied area.. Hence contamination of any nature is not expected for surface water source.

Impact on ground water table-

The lease area is flat and working proposed much above ground water table. The water will be clear devoid of and toxic contamination. The total solids may be on higher side due to suspended as well as dissolved solids.

No dewatering is proposed in view of working proposed much above ground water table and hilly terrain of the ML area.

Impact on Land Environment

The proposed activity shall take place in the gata (s) there will be no change in land useas after completion of mining top soil 59593.5 Tonne shall be spread it on completed gatas to restore the fertility of land of site.

Impact on Noise Environment

The proposed mining activity is semi-mechanized in nature. No drilling & blasting is envisaged for the mining activity. Hence, the only impact is anticipated is due to movement of vehicles deployed for transportation of minerals. The vehicles will be maintained in good running condition so that noise will be reduced to minimum possible level.

Impact on Biological Environment

Mining which leads to the removal of channel substrate, re-suspension of streambed sediment and stockpiling on the streambed, will have ecological impacts. These impacts may have an effect on the direct loss of stream reserve habitat, disturbances of species attached to streambed deposits, reduced light penetration, reduced primary production, and reduced feeding opportunities. Sand mining generates additional traffic, which negatively impairs the environment.

Impact on Socio Economic Environment

The impact of mining activity in the area is positive on the socio-economic environment of the region. Sand mining will be providing employment to local people whenever there is requirement of manpower.

POST PROJECT ENVIRONMENTAL MONITORING

S.No.	Description of Parameters	Schedule of Monitoring
1	Air Quality	24 hourly samples twice a week for one month in each season except monsoon
2	Water Quality (Surface & Groundwater)	Once a season for 4 seasons in a year
3	Soil Quality	Once in a year in project area
4	Noise Level	Twice a year for first two years & then once a Year

5	Socio-economic Condition	Once in 3 years
6	Plantation Monitoring	Once in a season

ADDITIONAL STUDIES

Public Hearing

This is a draft EIA report; Public hearing is yet to be conducted.

Risk Assessment

The complete mining operation will be carried out under the management control and direction of a qualified mine manager holding. The DGMS have been regularly issuing standing orders, model standing orders and circulars to be followed by the mine management in case of disaster, if any. Moreover, mining staff will be sent to refresher courses from time to time to keep them alert.

Disaster Management Plan

Emergency preparedness is an important aspect in the planning of Disaster Management. Personnel would be trained suitably and prepared mentally and physically in emergency response through carefully planned, simulated procedures. Similarly, the key personnel and essential personnel shall be trained in the operations.

PROJECT BENEFITS

Physical Benefits: Road Transport, Market, Enhancement of green cover & Creation of community assets.

Social Benefits: Increase in Employment Potential, Contribution to the Exchequer, Increased Health related activities, Educational attainments & Strengthening of existing community facilities.

Environmental Benefits:

- Reducing submergence of adjoining agricultural lands due toflooding.
- A check on illegal miningactivity.

CORPORATE SOCIAL RESPONSIBILITY

A percentage of the project cost will be allotted for the Corporate Social Responsibility for

activities related to education, social causes, healthcare & environmental.

Budget for Corporate Environmental Responsibility (CER)

S. No	Activities	Fund in Lakhs/ year
1	Health care faculties to the locals of village Changali qadim	0.83
2	Distribution of Sanitizer, gloves and Mask to the nearby village and panchayat.	1.95
TOTAL		**Rs 2.78**

ENVIRONMENTAL MANAGEMENT PLAN (EMP)

- Extraction will be done from the bed leaving safety zone from bank.
- The maximum working depth will remain above ground water table of the area.
- Provide health facilities to the workers & surrounding people in the impact area to reduce the health impacts.
- Ensuring wildlife protection & arranging awareness campaigns for the same.
- Effective mitigation measures will be adopted to minimize disturbance during transportation & handling ofminerals
- Establishment of reclamation program with plantation of local/native & fast growing species
- Establishment of restoration plan during the closure of mine at the onset of monsoon season.
- Establishment of effective Disaster Management Plan to take timely precautionary measures to avoid effects of impending disasters. Establishment of effective Monitoring Program monitored by Environment Management Cell.

BUDGET ALLOCATION FOR EMP IMPLEMENTATION

Budget of EMP

SI. No.	Measures	Capital Cost (In Lakh) 1st Year	Recurring Cost (In Lakh) 2nd Year	Recurring Cost (In Lakh) 3rd Year	Recurring Cost (In Lakh) 4th Year	Recurring Cost (In Lakh) 5th Year
1.	Pollution Control Dust Suppression /Water Sprinkling	Nil	1.0	1.0	1.0	1.0

2.	Pollution Monitoring i) Air pollution ii) Water pollution iii) Soil Pollution iv) Noise Pollution	--	0.40 0.30 0.20 0.20	0.40 0.30 0.20 0.20	0.40 0.30 0.20 0.20	0.40 0.30 0.20 0.20
3.	Green belt development	27.50	2.40 (Gardener)	2.40 (Gardener)	2.40 (Gardener)	2.40 (Gardener)
4.	Maintenance of haul road	2.07	1.8 (Labor Charge)	1.8 (Labor Charge)	1.8 (Labor Charge)	1.8 (Labor Charge)
Total		**29.57**	**6.3**	**6.3**	**6.3**	**6.3**

Note: *5500plants *500 Rs (for each plants) = 27.5 Lakhs

Salary of Labour for haul road maintenance 2 labor*300=600 per day600* 300 =1,80,000/-

**** 2.5 lakh per kilometer 250000 * 0.83km haul road =207,500 /-***

CONCLUSION

Based on the EIA study it is observed that there will be an increase in the dust pollution, which will be controlled by sprinkling of water and plantation. There will be an insignificant impact on ambient environment and ecology due to the mining activities moreover the mining operation will lead to direct and indirect employment generation in the area. Green belt development around the area will also be taken up as an effective pollution mitigative technique, as well as to control the pollutants released from the premises of the Mine. Monitoring program will be followed till the mining operations continue. Hence, it can be summarized that the development of the mine will have a positive impact on the socio-economic environment of the area and lead to sustainable development of the region.

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