

# EXECUTIVE SUMMARY

OF

**Sand Mining Project (off river-bed) on Agriculture Land  
At**

**Khasra no. [32//19/2 (3-18), 19/1 (3-10), 20 (8-0)] [31//16/1 (4-0), 25/2/1 (1-16), 25/2/1 (2-0)] [13//25 (8-0)], [14//21 (8-0)], [17//1(8-0), 2(8-0)], [18//5(8-0)] [32//22/2 (6-0), 22/1/1 (1-0), 22/1/2 (1-0), 21/1 (4-0), 21/2 (4-0)] [31//24/2/2 (2-10), 24/1(3-10), 24/2/1 (2-0), 25/1/3 (1-15), 25/2/2/2 (1-15), 25/1/1 (0-9)] [33//11/1 (2-0), 11/2 (6-0), 12 (7-8), 19/1 (4-0), 19/2 (4-0), 20(8-0)**

**Village- Chugate Wala,  
Tehsil & District- Ferozepur, Punjab.  
Area: 6.20 ha,  
Production: 54,707.2 TPA**

## Project Proponent

**Shri Harkesh Singh**

**M/s Prime Vision Industries Pvt. Ltd.**

**Add.-312, Third Floor, Vishal Chamber P-1,**

**Sector 18, Noida, Uttar Pradesh-**

**Pin Code – 201301.**

**Environment Consultant:**

**CONSULTANT**

**P&M Solution**

**C-88, Sector 65, Noida -201301 – U.P**

**A QCI –NABET Accredited Organization**



## EXECUTIVE SUMMARY

### INTRODUCTION

The project is proposed to mine sand from agricultural land (off river-bed) over an area of 6.20 hectares. The Mining site is situated at Village- Chugate Wala, Tehsil & District- Ferozepur, State -Punjab. As per MoEF&CC, New Delhi Gazette dated 14<sup>th</sup> September 2006 and its subsequent amendment thereof, the proposed mining project is categorized as **Category 'B1'** project. The project is proposed by M/s Prime Vision Industries Private Limited ( Shri Harkesh Singh). The proposed cost is Rs. 48 Lakh.

#### **Project Detail**

<b>Village</b>	<b>Area (Ha)</b>	<b>Location</b>	<b>Production</b>	<b>Land type</b>
Chugate Wala,	6.20	Village- Chugate Wala, Tehsil & District- Ferozepur, State – Punjab	54,707.2 TPA	Agricultural land

### DETAIL OF THE APPLICANT

Shri Harkesh Singh

M/s Prime Vision Industries Pvt. Ltd.

#312, Third Floor, Vishal Chamber P-1,

Sector 18, Noida, Uttar Pradesh-

Pin Code – 201301.

#### **TOR Detail**

<b>S.no</b>	<b>Block No</b>	<b>Vide Letter No</b>	<b>TOR date</b>
1	<b>Chugate Wala</b>	SEIAA/2020/1999	08.09.2020

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

<b>S.no</b>	<b>Total Cost</b>	<b>CER Cost</b>
1	Rs. 48.0 lakh	Rs. 0.96 lakh

### LOCATION

The mine lease area is located Hadbast No 139, Khasra no. [32//19/2 (3-18), 19/1 (3-10), 20 (8-0)] [31//16/1 (4-0),25/2/1 (1-16), 25/2/1 (2-0)] [13//25 (8-0)], [14//21 (8-0)], [17//1(8-0),2(8-0)], [18//5(8-0)] [32//22/2 (6-0), 22/1/1 (1-0), 22/1/2 (1-0), 21/1 (4-0), 21/2 (4-0)] [31//24/2/2 (2-10),

24/1(3- 10), 24/2/1 (2-0), 25/1/3 (1-15), 25/2/2/2 (1-15), 25/1/1 (0-9)] [33//11/1 (2-0), 11/2 (6-0), 12 (7-8), 19/1 (4-0), 19/2 (4-0), 20(8-0)] covered in the Survey of India Topo Sheet No – 44I/12, 44I/16, 44J/9, 44J/13 and is bounded between the Latitude - 31° 0'11.90"N to 31° 0'33.57"N and Longitude – 74°45'8.22"E to 74°45'32.15"E.

**Site coordinates:**

<b>Pillar No.</b>	<b>Latitude N</b>	<b>Longitude E</b>
A	31° 0'11.90"N	74°45'8.22"E
B	31° 0'13.95"N	74°45'8.12"E
C	31° 0'13.99"N	74°45'13.44"E
D	31° 0'16.00"N	74°45'13.40"E
E	31° 0'16.00"N	74°45'19.50"E
F	31° 0'12.04"N	74°45'19.68"E
G	31° 0'17.86"N	74°45'27.11"E
H	31° 0'17.98"N	74°45'32.23"E
I	31° 0'14.02"N	74°45'32.26"E
J	31° 0'14.06"N	74°45'27.22"E
K	31° 0'29.70"N	74°45'24.70"E
L	31° 0'33.60"N	74°45'24.70"E
M	31° 0'33.57"N	74°45'29.57"E
N	31° 0'31.63"N	74°45'29.59"E
O	31° 0'31.66"N	74°45'32.16"E
P	31° 0'29.73"N	74°45'32.15"E

**SITE CONNECTIVITY:**

**Nearest Railway Station:** Mallanwala Khas Railway Station, approx. 7.0 km in NE.

**Nearest Airport:** Amritsar Airport, approx 79.0 km towards NW direction.

**Nearest Highway:** SH-20, approx 5.6 km in South direction.

**Salient feature of the project**

Name of Mine	Mining of sand on Agriculture Land
Village	Chugate Wala

Tehsil	Ferozpur
District & State	Ferozpur & Punjab
Area (ha)	6.20 Ha

## **MINING**

The sand will be excavated by open cast semi mechanized method and by manual method also. Since the depth of sand deposit is 3m, excavator, handpicks, spade, hand shovel will be used by laborers for extracting & loading of sand. Keeping in view of the market demand and resource availability in respect of reserves.

3m area has been left for 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.

## **PRODUCTION DETAIL**

Year	Depth (m)	Volume (cu.m)	Bulk Density (Mt/m <sup>3</sup> )	Quantity of Mineable Reserve (Tonne)
1 <sup>st</sup> Year	2.5	34192	1.64	54707.2
2 <sup>nd</sup> Year		34192	1.64	54707.2
3 <sup>rd</sup> Year		34192	1.64	54707.2
<b>Total</b>		<b>102576</b>		<b>164121.6</b>

## **WATER REQUIREMENT**

The number of working people is 25 in total so the water requirement for workers for drinking purpose will be around 1.0 KLD & the total water requirement will be around 9.5 KLD. This water will be supplied from the nearby area.

### **Water Requirement**

S no.	Particular	Water Requirement
1	Domestic Purpose	1.1 or 1.0 KLD
2	Dust suppression	5.0 KLD
3	Green belt development	3.3 KLD
<b>Daily Water Demand</b>		<b>9.3 KLD ~ 9.5 KLD</b>

### 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 the workers.

### BASELINE ENVIRONMENTAL STATUS

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

**Table Baseline Environmental Status**

<b>Attribute</b>	<b>Baseline status</b>
<b>Ambient Air Quality</b>	<p>Ambient Air Quality Monitoring reveals that the minimum &amp; maximum concentrations of PM<sub>10</sub> for all the 8 AQ monitoring stations were found to be 90.42 µg/m<sup>3</sup> at AQ4 and 56.55µg/m<sup>3</sup> at AQ2, respectively. The minimum &amp; maximum concentrations of PM<sub>2.5</sub> for all the 8 AQ monitoring stations were found to be 20.77 µg/m<sup>3</sup> at AQ2 and 49.2 µg/m<sup>3</sup> at AQ4, respectively.</p> <p>As far as the gaseous pollutants SO<sub>2</sub> and NO<sub>x</sub> are concerned, the prescribed CPCB limit of 80µg/m<sup>3</sup> for residential and rural areas has never surpassed at any station. The maximum &amp; minimum &amp; maximum concentrations of SO<sub>2</sub> were found to be 5.4 µg/m<sup>3</sup> at AQ2 &amp; 15.64µg/m<sup>3</sup> at AQ7, respectively. The minimum &amp; maximum &amp; concentrations of NO<sub>x</sub> were found to be 7.46µg/m<sup>3</sup> at A8 &amp; 23.64 µg/m<sup>3</sup> at AQ1, respectively.</p>
<b>Noise Levels</b>	<p>Noise monitoring was carried out at 8 locations. The results of the monitoring program indicated that both the daytime and night time levels of noise were well within the prescribed limits of NAAQS, at all the six locations monitored.</p>

<b>Water Quality</b>	<p>6 Groundwater samples were analyzed and concluded that:</p> <ul style="list-style-type: none"> <li>• pH varies from 7.27 to 7.71 during study period.</li> <li>• Total hardness varies from 198.84 mg/l to 288.41mg/l.</li> <li>• Total dissolved solids vary from 879 mg/l at 1018 mg/l.</li> </ul> <p>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.</p>
<b>Soil Quality</b>	<p>Samples collected from identified locations indicate the soil is sandy type and the pH value ranging from 7.37 to 7.84, which shows that the soil is alkaline in nature. Potassium is found to be from 235.36 mg/kg to 264.61 mg/kg. The water holding capacity is found in between 26.89 % to 32.32%.</p>
<b>Ecology and Biodiversity</b>	<p>There are no ecologically sensitive areas present in the study area.</p>

## **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-** 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.

### **Impact on Land Environment**

The proposed activity shall take place in the gata (s) there will be no change in land use as after completion of mining top soil 41850 Tonne shall be spread it on completed gata to restore the fertility

of land in Village Chugate wala.

### **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**

<b>S.No.</b>	<b>Description of Parameters</b>	<b>Schedule of Monitoring</b>
<b>1</b>	Air Quality	24 hourly samples twice a week for one month in each season except monsoon
<b>2</b>	Water Quality (Surface & Groundwater)	Once a season for 4 seasons in a year
<b>3</b>	Soil Quality	Once in a year in project area
<b>4</b>	Noise Level	Twice a year for first two years & then once a year
<b>5</b>	Socio-economic Condition	Once in 3 years
<b>6</b>	Plantation Monitoring	Once in a season

## **ADDITIONAL STUDIES**

### **Public Hearing**

This is draft EIA report, Public hearing yet to conduct.

### **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 to flooding.
- A check on illegal mining activity.
- The mining of sand will lead to increase in fertility of land for agricultural purposes.

## **CORPORATE ENVIRONMENTAL RESPONSIBILITY**

2% of the project cost will be allotted for the Corporate Environmental Responsibility for activities related to education, social causes, healthcare & environmental.



## **Budget for Corporate Environmental Responsibility (CER)**

S. No	Activities	Fund in Rs/ year (Capital Cost in Lakh)
1	Distribution of Sanitizer, gloves and Mask to the nearby village and panchayat.	0.56
2	Construction of one toilet at public place of village Chugate Wala	0.40
<b>TOTAL</b>		<b>Rs. 0.96 Lakh</b>

### **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 of minerals
- 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) 1 <sup>st</sup> Year	Recurring Cost (In Lakh) 2 <sup>nd</sup> Year	Recurring Cost (In Lakh) 3 <sup>rd</sup> Year
1.	Pollution Control Dust Suppression /Water Sprinkling	Nil	1.0	1.0

2.	Pollution Monitoring i) Air pollution ii) Water pollution iii) Soil Pollution iv) Noise Pollution	--	1.0	1.0
3.	Green belt development	12.0	4.0	4.0
4.	Maintenance of haul road	2.50	1.8 ( Labor Charge)	1.8 ( Labor Charge)
<b>Total</b>		<b>14.50</b>	<b>7.80</b>	<b>7.80</b>

*Note: @ \* 1000 Rs./plant = Rs. 12,00,000*

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

*\* 2.5 lakh per kilometer 250000 \*1 km haul road =250000 /-*

### **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 theregion.

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