

PART-I

**Proposal for Investigation and Survey in the National Park/Sanctuary
(Details to be provided by the Applicant)**

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1. Name of the Organization : M/s Wonder Cement Limited
2. Aims and objectives of the proposed project :

By installing the proposed grinding unit, M/s wonder cements will try to provide for increasing demands from Delhi/NCR region, Uttar Pradesh, Haryana and other border states.

The housing and real sector is the biggest demand driver of cement, accounting for about 65% of the total consumption in India.

Cement production capacity stood at 502 MTPA in 2018. Cement consumption is expected to grow by 4.5% in FY-2019 supported by pick-up in the housing segment and higher infrastructure spending.

The Government of India has been laying a massive emphasis on infrastructure development with 100 smart cities, modernization of 500 cities, affordable housing for all by 2022, cement concreting of national highways, provision of sanitation facilities etc.

These all leads to future growth of Indian cement industry.
3. Location and map (1:50000 scale) of the area duly authenticated by the competent authority to be investigated/surveyed. : Nahar Wildlife Sanctuary is situated ~6.13 Km in South Direction (crow approach distance) from the proposed project site.
Location map (1:50000 scale) is enclosed.
4. Whether investigation survey requires clearing of vegetation : Not Required
5. If yes, please specify the extent (in Ha) : Not Required
6. Opinion of the officer in-charge of the NP/WLS (Attached Signed Copy) : Attached
7. Opinion of Chief Wildlife Warden (Attached Signed Copy) : To be obtained in Part-IV
8. i. Brief history of the protected area
ii. Current status of wildlife
iii. Current status of pressures on protected areas
iv. Projected impacts of projects on wildlife, habitat management and access/use of resource by various stakeholders
v. Contiguous wildlife areas which would benefit wildlife if added to NP/WLS : Attached
vi. Other areas in the state which have been recommended by state government, WH, BNHS, SACON, IISC, IUCN or other expert body for inclusion in protected area network.

Signal

Signed

Signed

Unit Head

Officer In-charge NP/WLS

The CWLW

Name-Navin Sahrawat

Office Seal

Office Seal

Wonder Cement Limited

Opinion of officer incharge of Wild Life Sanctuary

Wild Life Sanctuary, Nahar is a reserved forest of about 211 hectare situated in Rewari district and is a part of 'National Capital Region' and the area supports a good population of Black Bucks, Jackals, Foxes, Monitor Lizards and such of other small animals. Wild Life Sanctuary, Nahar is important for its flora such as Bule bull, Jackal, Jungle Cat, Mongoose, India cobra, Russell's viper, Rat Snake, peafowl, Indian Roller, Owl, Parakeet, Ring dove etc and also is important for its flora such as Rônj, Kikar, Khairi, Gulab, Pilkhan, Mulberry, Pipal, Panwar, Jhingota, Karil, Heens, Akash bel, Kacri, Dudhi etc. Many of these are endangered species. From the above facts importance of this park cannot be ignored.

Since the project area is outside the area of Wild Life Sanctuary, Nahar and falls within Eco Sensitive Zone of Wild Life Sanctuary Nahar. The Project area is situated at a distance of 6.43 km. From Main direction of Wild Life Sanctuary, Nahar, which is inside Eco Sensitive Zone of Wild Life Sanctuary, Nahar. The proposed project area is to be and being developed as a Cement Production Plant Project in at Village-Jhanswa, Tehsil Matenhail, District-Jhajjar, Haryana. The site is proposed to be developed/being developed as a Cement Production Plant Project, over the total land area of 217800.40 Sqm., net area 145999.87 Sqm. and total built up area 111500.20 Sqm. Since the project proponent has already received EC from SEIAA Haryana, vide their letter no. SEIAA/HR/2019/460 dated 09-12-2019 for plot area of 217800.40 Sqm., built-up area of 111500.20 Sqm., for Plant 3.6 Ha, Road 1.75 ha, Railway siding 4.3 Ha, Parking 1.5 Ha (Annexure-B). Now Project Proponent has submitted proposal for seeking NOC from MWL as project area falls within Eco Sensitive Zone of Wild Life Sanctuary Nahar. The project proponent has applied properly for seeking necessary NOC (from wildlife point of view), from competent authority for the above mentioned project.

Since no direct negative impact on the Wild Life Sanctuary, Nahar is anticipated by development of the above project, the project proponent shall adhere the MoEF & CC notification dated 1st June, 2015 (Draft notification) regarding ESZ as well as WCPA, 1972, conditions mentioned in earlier EC granted by SEIAA Haryana vide their letter no. SEIAA/HR/2019/460 dated 09-12-2019 and any other act applicable from time to time. The project proponent will not violate any judicial order/pronouncement issued by Hon'ble Supreme Court/ High Court/ District Court. Since the project is for construction/expansion of Cement Production Plant Project which is meant for the people having economical limitations and it will also provide employment opportunities for the benefit of local population also. So this office recommends the project in public interest subject to adherence of above mentioned notifications, Act and conditions stated above.


INSPECTOR WILDLIFE
Distt REWARI



हरियाणा HARYANA

U 327145

AFFIDAVIT

I, Navin Sabharwal Son of Shri K. L. Sabharwal aged 48 years Unit Head of Proposed Clinker Grinding Unit of M/s Wonder Cement Limited at village-Jhanswa, Tehsil Mantanhail, Dist.-Jhajjar, Haryana do solemnly affirm and says as follows:-

1. That, We intend to develop a Clinker Grinding Unit of M/s Wonder Cement Limited at village-Jhanswa, Tehsil Mantanhail, Dist.-Jhajjar, Haryana over an area 21.78 Hect. Total plot area 217800.40 Sqm., net area 145999.87 Sqm. built up area 111500.20 Sqm.
 2. That, I will ensure sustainable environment management, solid and liquid Waste management, rain water harvesting on project site.
 3. That, I will follow the regulated or restrictive activities in the Eco-sensitive Zone as per the notification of WLS Nahar.
 4. That, In future if it is mandatory to take any permission, we will take the same from the Competent Authorities
- That, The said project area falls within the ESZ of WLS, Nahar, Rewari.

I solemnly affirm that the contents of the above affidavit are true of my knowledge. No part of it is false and nothing material has been concealed there from.

Place Jhajjar

Date

Identified before me

ATTESTED

Virender Singh Choudhary
Virender Singh Choudhary
Advocate
Notary for Distt Jhajjar



Site Inspection Report

A proposal has been received in the office of Divisional Wild Life Officer, Gurugram from M/s. Wonder Cement Limited, 17 Old Fatehpur near Seva Mandir, Udaipur, Rajasthan-315004 through Chief Conservator of Forests (W.L.) Gurugram vide their letter no. 548 dated 09-08-2019 for NOC regarding construction of an Cement Production Plant Project at Village-Jharswa, Tehsil Matanhail, District-Jhajjar, Haryana having total plot area 217800.40 Sqm., net area 145999.87 Sqmt. and total built up area 111500.20 Sqm. for NOC from competent authority. A joint inspection was carried out by Sh. Ashok Kumar-R.F.O. Matanhel (Shalawas), Sh. Devender- Inspector Wild Life, Wild Life Sanctuary Nahar and Sh. Subrat Mallick, Senior Officer on behalf of above Project Proponent on date 21-09-2020 for investigation and survey as per orders of Divisional Wild Life Officer, Gurugram vide letter no. 628 dated 07-08-2020. As the Eco Sensitive Zone of Wild Life Sanctuary Nahar is 10 Km. from the boundary of Wild Life Sanctuary Nahar on either side of the Wild Life Sanctuary Nahar. The above area falls under Eco Sensitive Zone of Wild Life Sanctuary Nahar, which is situated at a distance of 6.13 km. (Point-K) from boundary of Wild Life Sanctuary Nahar.

GPS co-ordinates of proposed site along with revenue map are as under:-

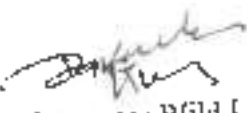
Ref. Point No.	Lat.	Long.
A	28°28'58.23"N	76°24' 35.49"E
B	28°28'48.36"N	76°24' 34.18"E
C	28°28'46.10"N	76°24' 33.59"E
D	28°28'44.27"N	76°24' 33.53"E
E	28°28'38.16"N	76°24' 30.72"E
F	28°28'29.54"N	76°24' 30.04"E
G	28°28'28.91"N	76°24' 40.75"E
H	28°28'26.62"N	76°24' 39.74"E
I	28°28'20.08"N	76°24' 32.20"E
J	28°28'20.36"N	76°24' 36.02"E
K	28°28'16.16"N	76°24' 33.57"E
L	28°28'31.28"N	76°24' 18.94"E
M	28°28'32.88"N	76°24' 19.74"E
N	28°28'34.92"N	76°24' 18.08"E
O	28°28'39.66"N	76°24' 18.80"E
P	28°28'44.15"N	76°24' 22.00"E
R	28°28'46.22"N	76°24' 25.13"E
S	28°28'50.30"N	76°24' 32.73"E
T	28°28'57.55"N	76°24' 33.59"E

While GPS co-ordinates of boundary of Wild Life Sanctuary Nahar towards southern direction and aerial distance from point K(Project Site of Wonder Cement) and different point of WLS, Nahar are as under -

Ref. Point No.	Lat.	Long.	Distance between W.L.S Nahar and Wonder Cement
1	28°24'57.33"N	76°24' 19.98"E	Nearest point 6.13 Km
2	28°24'57.94"N	76°24' 0.89"E	6.19 Km.
3	28°24'50.31"N	76°24' 35.23"E	6.20 Km
4	28°24'54.22"N	76°24' 55.52"E	6.26 Km

In this regard the authorised person on behalf of project proponent, Sh. Subrat Mallick, Senior Officer of M/s. Wonder Cement Limited, 17 Old Fatehpur near Seva Mandir, Udaipur, Rajasthan-313004 has submitted the detail of area within Khasia No. 77/125, 78/121/1, 97/15/1, 5/2, 6, 7, 14, 15, 16, 17, 25, 96/1, 2/2, 9, 10, 11, 12, 13, 18, 19, 20, 21, 22, 23, 102/4/2, 5, 6/1, 6/2, 15, 103/1, 2/1, 2/2, 3, 8/1, 9, 10, 11, 12, 16/1, 16/2, 17, 18/1, 18/2, 19, 20, 22, 23, 24, 104/19, 20/1, 20/2, 21/1, 116/3, 4, 7/1, 7/2, 14 in revenue estate of Village Jhaswa, District, Jhajjar. The above project area falls in Eco Sensitive Zone for Nahar Wild Life Sanctuary, which is 6.13 Km. North direction of Nahar Wild Life Sanctuary. In this regard the authorised person of behalf of project proponent, Sh. Subrat Mallick, Senior Officer of M/s. Wonder Cement Limited has submitted an affidavit that they will obtain the NBWL Clearance for the project area within Eco Sensitive Zone of Nahar Wild Life Sanctuary. During the inspection it was noticed that construction work was in process at site, though no direct negative impact on flora and fauna of Wild Life Sanctuary Nahar is anticipated by development of the above Project subject to the condition that the project proponent shall adhere to the MoEF & CC notification dated 1st June, 2015 (Draft notification) regarding ESZ as well as WLPA, 1972 and will not start the work till necessary permission is obtained from the competent authority


Senior Officer
of Wonder Cement
Village Jhaswa, Jhajjar

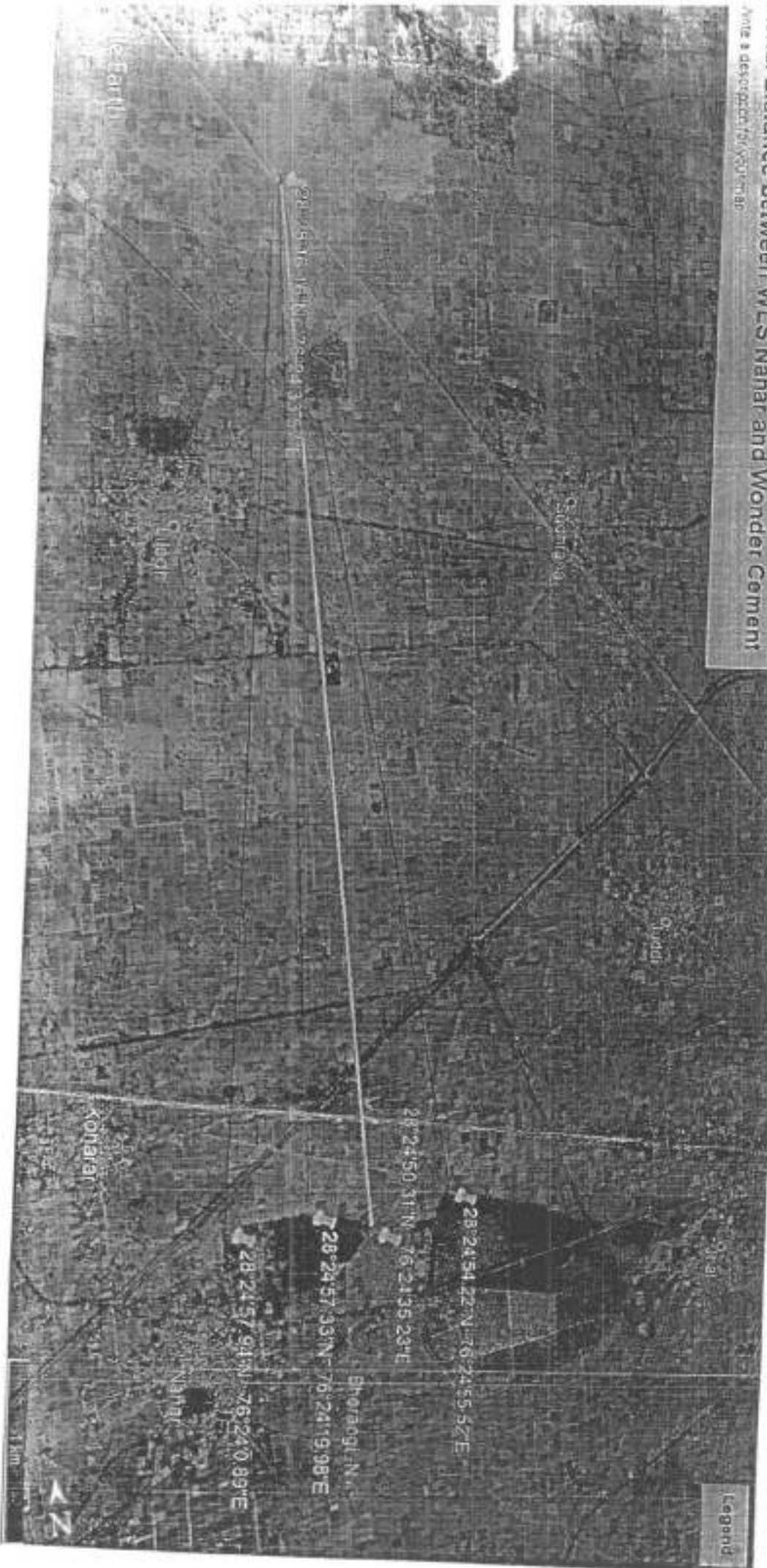

Inspector Wild Life,
Wild Life Sanctuary, Nahar
Rewari


Range Forest Officer,
Matanhel (Shalawas)
Jhajjar

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Aerial Distance between WLS Nahar and Wonder Cement

Write a description for your map



CHS

NO. SEIAA/HR/2019/460

Dated: 01.12.2019

1.

M/s Wonder Cement Limited,
 R.K. Nagar, Tehsil-Nimbanohra,
 Dist-Chittorgarh (Rajasthan)

Subject: Environment Clearance for Proposed Clinker Grinding Unit with Cement Production Capacity of 5.0 MTPA (2.5 MTPA-Phase I & 2.5 MTPA Phase II) at Village Jhauswa, Tehsil Matanhail, District Jhajjar (Haryana).

[1] This letter is in reference to your application addressed to M.S. SEIAA, Haryana received on 11.04.2019 and subsequent letter dated 16.09.2019 seeking prior Environmental Clearance for the above project under the EIA Notification, 2006. The proposal has been appraised as per prescribed procedure in the light of provisions under the EIA Notification, 2006 on the basis of the mandatory documents enclosed with the application viz., Form-I, Form-A, Conceptual Plan, EIA/EMP on the basis of approved ToR and additional clarifications furnished in response to the observations of the State Expert Appraisal Committee (SEAC) in its meetings held on 30.04.2019, 16.05.2019 and 11.10.2019 recommended for environment clearance to the project.

[2] It is inter-alia, noted that the project involves the Proposed Clinker Grinding Unit with Cement Production Capacity of 5.0 MTPA (2.5 MTPA-Phase I & 2.5 MTPA Phase II) at Village Jhauswa, Tehsil Matanhail, District Jhajjar (Haryana). The details of the project as given below

Sr. No.	Particulars	Details
1.	Plot Area	21.72 ha
2.	Total Built Up area	Plant area: 3.6 ha; Roads: 1.75 ha; Railway siding: 4.3 ha, Parking: 1.5 ha
3.	Total Green Area with Percentage	7.21 ha (33 % of the total project area)
4.	Rain Water Harvesting Pits	54
5.	STP Capacity	25 KLD
6.	Total Parking	2.0 ha
7.	Power Requirement	25 MW (Phase-I: 13 MW & Phase - II: 12 MW)
8.	Power Backup	6.5 MW DG Set
9.	Total Water Requirement	550 KLD (300 KLD for Phase - I and 250 KLD for Phase - II)
10.	Domestic Water Requirement	30 KLD
11.	Fresh Water Requirement	550 KLD
12.	Treated Water	10 KLD
13.	Waste Water Generated	12 KLD
14.	Solid Waste Generated	27.6 kg/day
15.	Biodegradable Waste	41.4 kg/day
16.	Sludge from Sewage Treatment Plant	2 KLD
17.	Disposal tank	25 KL

18.	Railway siding	One number	
19.	Total Cost of the project.	i) Land Cost	Rs 25 Crore
		ii) Construction Cost	Rs 455 Crore
		Total cost (Phase 1)	Rs 480 Crore
		Total Cost (Phase 2)	Rs 350 Crore
20.	CER	Rs 7.2 Crores (Phase - I) and Rs 5.73 Crores (Phase -2)	
21.	Incremental Load in respect of i) PM	0.10 micro gram per Nm ³	

Raw Material

Sr. No.	Material	Quantity			
		Phase-I		Phase-II	
		PPC	OPC	PPC	OPC
1.	Clinker	1.5	2.375	1.5	2.375
2.	Fly Ash	0.875	0	0.875	0
3.	a) Mineral Gypsum b) Chemical Gypsum	0.125	0.125	0.125	0.125

Fuel Requirement

S. No.	Name	Quantity	Calorific value (Kcal/kg)	% Ash	% Sulphur
1.	Diesel (HSD)	300 Ltr/Hr	18000	-	0.05%

List of Machinery

Sr. No.	Description	Unit	Capacity (Phase-I)	Capacity (Phase-II)
1.	Gypsum crusher	TPH	1 X 150	-
2.	Clinker Grinding Circuit	TPH	1X350	1X350
3.	Packing plant			
4 (a)	Packer	TPH	1 X 240	1 X 240
4 (b)	Truck Loaders	No.	9	4
5.	Truck Tipplers for Clinker unloading (2)	TPH	2 X 100	-
6.	Sector Gates under Truck Tipplers	No.	4	-
7.	Belt conveyors, Elevators, system for material transport	Lot	1	1

Storage Facility Details

Type of Material	Type of Storage	Capacity (Tonnes)	
Cement	RCC Silo	1 X 7500	-
Clinker	RCC Silo	40000	-
Fly ash	RCC Silo	3000	3000
Gypsum	Covered Yard	4500	-

by State Expert Appraisal Committee. They have after due consideration of the relevant documents submitted by the project proponent and additional clarification furnished in response to its observations, have recommended the grant of environmental clearance for the project mentioned above, subject to compliance with the stipulated conditions. Accordingly, the State Environment Impact Assessment Authority in its 121st meeting held on 25.11.2019 decided to agree with the recommendations of SLAC to accord necessary environmental clearance for the project under Category 3(b) of EIA Notification 2006 subject to the strict compliance with the with the following stipulations mentioned below:-

A. Specific Conditions

- i) The PP shall provide captive Railway siding for transportation of raw material/finished products.
- ii) ~~The PP shall submit the approved Wildlife Conservation Plan before the commencement~~
of the operation of the project.
- iii) ~~The PP shall take the approval for storage of diesel if above the threshold level from the~~
Competent Authority.
- iv) Sewage shall be treated in the STP based on latest Technology with tertiary treatment i.e. Ultra Filtration. The Treated effluent from STP shall be recycled /reused for Gardening etc.
- v) The Project Proponent would devise a monitoring plan to the satisfaction of the State Pollution Control Board so as to monitor the treated waste water being used for flushing in terms of faecal coli forms and other pathogenic bacteria.
- vi) The Project Proponent would commission a third party study on the implementation of conditions related to quality and quantity of recycle and reuse of treated water, efficiency of treatment systems, quality of treated water being supplied for flushing (especially the bacterial count), comparative bacteriological studies from toilet seats using recycled treated waters and fresh waters for flushing, and quality of water being supplied through spray faucets attached to toilet seats.
- vii) Separate wet and dry bins must be provided for facilitating segregation of waste. Solid Waste shall be segregated into wet garbage and inert materials. Wet Garbage shall be composted in Organic waste converter. Adequate area shall be provided for solid waste management within the premises which will include area for segregation, composting. The inert waste from the project will be sent to dumping site.
- viii) Traffic management plan as submitted shall be implemented in letter and spirit. Apart, a detailed traffic management and traffic decongestion plan shall be ensured.
- ix) 21 tree cutting has been proposed in the project. A minimum of 1 tree for every 80sqm of land should be planted and maintained. The Existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping. As proposed 721 ha (33 % of the total project area) shall be provided for Green Area development. 11016 trees shall be planted in the project area.
- x) The Project Proponent shall obtain all necessary clearance/permission from all relevant agencies before commencement of operation. All the construction shall be done in accordance with the local building byelaws.
- xi) Consent to establish / operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of pollution) Act, 1986 and the Water (Prevention and control of pollution) Act, 1974.
- xii) The Approval of the Competent Authority shall be obtained for structural safety of building code due to earthquakes, adequacy of firefighting equipments etc. as per National Building Code including protection measures from lightning etc.
- xiii) The project proponent shall comply with the provisions contained in Ministry's OM vide F.No. 23-65/2017-LA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
- xiv) The PP shall obtain the permission regarding withdrawal of ground water from CGWA before the commencement of the project and also obtained the CTO from HSPCB after the approval from CGWA.

- xviii) The PP shall not carry any construction or work within the Revenue Kasta.
- xix) The PP shall carry out the quarterly maintenance programs for the staff.
- xx) 54 Rain water harvesting pits shall be provided for ground water recharging as per the GWH norms.
- xxi) The PP shall install Digital water level recorder for monitoring the water recharge and carry out quarterly maintenance and cleaning of 54 RWH pits.
- xxii) The PP shall take all preventive measures including water sprinkles to control dust during construction and operational phase.
- xxiii) Any change in stipulations of EC will lead to Environment Clearance void-ab-initio and PP will have to seek fresh Environment Clearance.

B. Statutory Compliance

- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for wildlife, if applicable.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan/ Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (in case of the presence of schedule-I species in the study area)
- iv. The project proponent shall obtain Consent to Establish/ Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee. The project proponent shall obtain the necessary permission from the concerned Ground Water Authority, in case of drawl of ground water/ from the competent authority concerned in case of drawl of surface water required for the project.
- vi. The project proponent shall obtain authorization under the hazardous and other Waste Management Rules, 2016 as amended from time to time.

1. Air Quality Monitoring and Preservation

- i. The project proponent shall install 24*7 continuous emissions monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 (G.S.R. No. 612 (E) dated 25th August 2014; (Cement) and subsequent amendment dated 09th May, 2016 (Cement) and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognized under Environment (Protection) Act, 1986.
- iii. The project proponent shall install system carryout to Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5 in reference to PM emissions, and SO2 and NOx in reference to SO2 and NOx emissions) within and outside the plant area at least four locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions. (case to case basis: small plants: Manual; large plants: Continuous)
- iv. The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality/fugitive emissions to Regional Office of MoEF&OC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- v. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
- vi. The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.
- vii. Pollution control system in the cement plant shall be provided as per the CREP guidelines of CPCB.

- xvi. Sufficient number of mobile or stationary vacuum cleaners shall be provided to clean plant roads, shop floors, roads regularly.
- xvii. Ensure covered transpirations and covering of raw material to prevent spillage and dust generation; use closed bulkers for carrying fly ash.
- xviii. Provide wind shelter fence and chemical spraying on the raw material stock piles; and have separate truck parking area and monitor vehicular emissions at regular interval.
- xix. Efforts shall be made to reduce impact of the transport of the raw materials and end products on the surrounding environment including agricultural land by the use of covered conveyor belts/railways as mode of transport.
- xx. Ventilation system shall be designed for adequate air changes as per ACCGH document for all tunnels, motor houses, cement bagging plants.

II. Water Quality Monitoring and Preservation

- i. The project proponent shall install effluent monitoring system with respect to standard prescribed in Environment (Protection) Rules 1986 vide G.S.R. No. 612 (E) dated 25th August, 2014 (Cement) and subsequent amendment dated 9th May, 2016 (Cement) and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories. (case to case basis small plants: Manual; Large plants: Continuous)
- ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.
- iii. The project proponent shall submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and annual monitoring of ground water quality to Regional Office of MoEF & CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- iv. adhere to 'Zero Liquid Discharge'.
- v. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
- vi. Gullies and drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.
- vii. The project proponent shall practice rainwater harvesting to maximum possible extent.
- viii. Water meters shall be provided at the inlet to all unit processes in the cement plant.
- ix. The project proponent shall make efforts to minimize water consumption in the cement plant complex by segregation of used water, prioritizing cascade use and by recycling treated water.

III. Noise Monitoring and Prevention

- i. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Office of the Ministry as a part of six-monthly compliance report.
- ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

IV. Energy Conservation Measures

- i. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly.
- ii. Provide the project proponent for LED lights in their offices and residential areas.
- iii. Maximize utilization of fly ash, slag and sweetener in cement blend as per BIS standards.

V. Waste Management

- i. The waste oil, grease and other hazardous shall be disposed of as per the Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016.

- i. Kitchen waste shall be composted or converted to biogas for further use to be decided on case to case basis depending on type and size of plant).

Green Belt

- i. Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant.
- ii. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration including plantation.

VII Public Hearing and Human Health Issues

- i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- ii. The PP shall provide Personal Protection Equipment (PPE) as per the norms of Factory Act.
- iii. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile SLP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- iv. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.

VIII Corporate Environment Responsibility.

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-JA.III dated 1st May, 2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environment policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental/forest/wildlife norms/conditions. The company shall have defined system of reporting infringements/deviation/violation of the environmental/forest/wildlife norms/conditions and / or shareholders/ stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head-quarter level, with qualified personnel shall be set up under the control of Senior Executive, who will directly to the head of the organization.
- iv. Action Plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
- vi. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the cement plants shall be implemented.

IX Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this

- shall also be displayed in the project proponent's website permanently.
- The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- The project proponent shall upload the status of compliance of the stipulated environmental clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall monitor the criteria pollutants level namely, PM₁₀, SO₂, NO_x (ambient levels as well as Stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for the disclosure to the public and put on the website of the company.
- v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC)/SEIAA, Haryana.
- xi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xii. The Ministry/SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiii. The Ministry/SEIAA reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xvi. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
- xvii. The Project Proponent shall ensure the commitments made in Form-1, Form-1A, EIA/EMP and other documents submitted to the SEIAA for the protection of environment and proposed environmental safeguards are complied with in letter and spirit. In case of contradiction between two or more documents on any point, the most environmentally friendly commitment on the point shall be taken as commitment by project proponent.
- xviii. The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (soft copies) to the northern Regional Office of MoEF, HSPCB and SEIAA Haryana.
- xix. STP outlet after stabilization and stack emission shall be monitored monthly. Other environmental parameters and green belt shall be monitored on quarterly basis. After

- xxv. Within three months, the project proponent shall conduct environmental audit and shall take corrective measures, if required, without delay.
- xxvi. The project proponent shall not violate any judicial orders/proclamations issued by any Court/Tribunal.
- xxvii. Under the provisions of Environment (Protection) Act, 1986, legal action shall be initiated against the Project Proponent if it was found that construction of the project has been started before obtaining prior Environmental Clearance.
- xxviii. The project proponent shall maintain the distance between STP and water supply line.
- xxix. For disinfection of the treated wastewater ultra-violet radiation or ozonization process should be used.
- xxx. The project proponent shall strive to minimize water in irrigation of landscape by minimizing grass area, using native variety, xeriscaping and mulching, utilizing efficient irrigation system, scheduling irrigation only after checking evapotranspiration data.
- xxxi. The Project Proponent shall use zero ozone depleting potential material in insulation, refrigeration, air-conditioning and adhesive. Project Proponent shall also provide Halon free fire suppression system.
- xxxii. Standards for discharge of environmental pollutants as enshrined in various schedules of rule 3 of Environment Protection Rule 1986 shall be strictly complied with.
- xxxiii. All electric supply exceeding 100 amp, 3 phase shall maintain the power factor between 0.98 lag to 1 at the point of connection.
- xxxiv. The project proponent shall not use fresh water for HVAC and DG cooling. Air based HVAC system should be adopted and only treated water shall be used by project proponent for cooling, if it is at all needed. The Project Proponent shall also use evaporative cooling technology and double stage cooling system for HVAC in order to reduce water consumption. Further temperature, relative humidity during summer and winter seasons should be kept at optimal level. Variable speed drive, best Co-efficient of Performance (COP), as well as optimal Integrated Point Load Value and adjustment outside fresh air supply may be resorted for conservation of power and water. Oil type cooling DG Sets shall be used for saving cooling water consumption for water cooled DG Sets.
- xxxv. The project proponent shall ensure that the transformer is constructed with high quality grain oriented, low loss silicon steel and virgin electrolytic grade copper. The project proponent shall obtain manufacturer's certificate also for that.
- xxxvi. The validity of this environment clearance letter is valid up to 7 years from the date of issuance of EC letter.
- xxxvii. If project is not completed within the validity period then the project proponent shall submit the application for extension of validity within one month before the lapse of validity period of Environment Clearance i.e. 7 years.
- xxxviii. The project proponent should intimate to the Authority well before shifting their address of communication.


Chairman

State Level Environment Impact
Assessment Authority, Haryana, Panchkula

India, No. SE/AA/HR/2019

Dated:

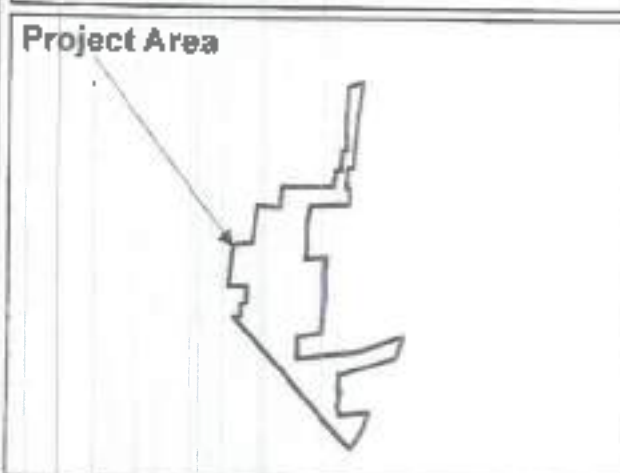
- A copy of the above is forwarded to the following:
1. The Additional Director (IA Division), MoEF&CC, G-1, Indra Paryavaran Bhavan, Zor Bagh Road-New Delhi.
 2. The Regional office, Ministry of Environment, Forests & Climate Change, Govt. of India, Ray's no. 24-25, Sector 31-A, Dakshin Marg, Chandigarh.
 3. The Chairman, Haryana State Pollution Control Board, C-11, Sector-6, Ptl.

- 2d -
Chairman,

State Level Environment Impact
Assessment Authority, Haryana, Panchkula

TOPOGRAPHICAL MAP OF 10KM BUFFER AREA

Toposheet No:
H43W6, H43W7, H43W10 & H43W11



Legend

- Project Site
- 10km Buffer
- Nahar WLS
- Settlements
- Stream
- Road
- Forest
- Waterbody
- Vegetation
- Contours
- Locations
- Railway

Project:
Proposed Clinker Grinding Unit with Cement
Production Capacity of 5.0 MTPA and
D.G. Set (6.5 MW)
Village: Jhanawa, Tehsil: Matanhall, District: Jhajjar (Haryana)

Project Proponent:
Wonder Cement Ltd.

Environment Consultant:
Vardan Environet
QC-NABET Accredited Environment Consultant
Certificate No. NA-ET/25A/1879/5A077



Prepared By: *[Signature]* **Approved By:** *[Signature]*



PART-II
(To be filled by the Applicant)

13

Project details	M/s Wonder Cement Ltd. is proposing a clinker grinding unit with cement production capacity of 5.0 MTPA(2.5 MTPA-Phase I and 2.5 MTPA-Phase-II) over an area of 21.78 ha at village-Jhanswa, Tehsil- Matanhail, District-Jhajjar, Haryana.
(i) Copy of the Investigation and survey report	Attached
(ii) Self contained and factual project report for which NP/WLS area is required	Attached
(iii) Map on a scale of 1:50000 showing the boundaries of the NP/WLS	Attached
(iv) Self contained and factual report of at least two alternatives considered by the project authorities along with the technical and financial justification for opting NP/WLS area	The proposed project is about 6.13 km away from the Nahar wildlife sanctuary and 4.0 km from Jharkh railway Station, 8.0 km from State Highway.
(v) Copy of the biodiversity Impact Assessment report in case the proposal involves diversion more than 50 ha. NP/WLS area	Not applicable
2 Location of the project/scheme	21.78 Ha at village-Jhanswa, Tehsil- Matanhail, District-Jhajjar, Haryana.
(i) State/Union Territory	Haryana
(ii) District	Jhajjar
(iii) Name of NP/WLS	Nahar Wildlife Sanctuary
3 Details of the area required (Ha)	21.78 ha private/agriculture land for clinker grinding unit with cement production capacity of 5.0 MTPA(2.5 MTPA- Phase I and 2.5 MTPA- Phase-II)
4 Details of displacement of people, if any, due to the project	Nil
(i) Total number of families involved in displacement	Nil
(ii) Number of SC/ST families involved in displacement	Nil
(iii) Detailed rehabilitation plan	Not Applicable
5 Any other information relevant to the proposal not covered in any of the columns above.	Total Project area is 21.78 ha. Out of which; 7.18 ha (i.e. 33% of total project area) will be developed under greenbelt/plantation - The project area falls within the Eco Sensitive Zone of 10 km of WLS, Nahar - It is located at a distance of 6.13 km from the boundary of WLS, Nahar. - No area of WLS Nahar is required to be acquired or transfer for the development of the project. Land ownership document is enclosed herewith for your ready reference.

Signed by

Unit Head

Name- Navin Sabharwal
Wonder Cement Limited

Date of submission to the head of the NP/WLS

Dated: - 03/11/2020

Subject:- Self-contained and factual report of at least two alternatives considered by the project authorities along with technical and financial justification for opting national park/sanctuary area.

Since no area of Wildlife Sanctuary is to be diverted, as the project area falls in ESZ only. So as per Govt. of India, MoEF & CC only permission is required.

Since the project area is situated far from the boundary of the Wildlife Sanctuary (i.e. 6.13 km approx...) while the restriction in the construction of plant in ESZ is up to 100 mtr only. This project is located far from this limit.

As per notification No. 49/43/2015-4181 dated 06/01/2017 by Industries and Commerce Department, Government of Haryana, Village Jhanswa, Dist-Jhajjar is falls in Category D Blocks and Government is encouraging Industries to set up their plant in such areas in order to develop the livelihood of this area w.r.t Road development, Employment generation, social development.

As this project is a Clinker Grinding Unit project, meant for the people having economical limitations and we have also generation of employment opportunity for general public.

In addition to that, as per MoEF&CC guideline for Fly Ash Utilization, site is suitable because major Power plants are located near to the project site.

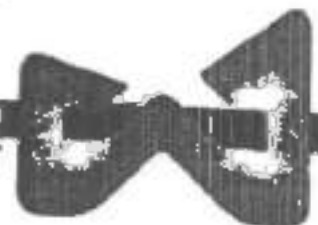
So after going all through this it was only area found where the project with these much limitations.



WONDER CEMENT LIMITED

Plant Office: A. K. Nagar, Jaisi - Nimoshani - 812 601, District - Chhatarpur, Rajasthan (India.)
Tel: +91-1477-307010, Fax: +91-1477-307333, E-mail: plant.nbti@wondercement.com

Registered Office: Mahara Road, Madanpuri, Kithangari - 305 601, District - Ajmer, Rajasthan (India)
Tel: +91-1462-305500, E-mail: corporate@wondercement.com, Website: www.wondercement.com



PART III

(To be completed by the officer-in-charge of the National Park/ Sanctuary completed and submitted to the Chief Wild Life Warden or officer authorized by him in this behalf within 30 days of the receipt of PART-II).

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Before completing this part it is made clear that:

Inspector Wildlife is the in-charge of Wild Life Sanctuary, Nahar & Divisional Wild Life Officer, Gurgaon has administrative control of Wild Life Sanctuary. Divisional Forest Officer (Territorial) Jhajjar is the competent authority for taking action against any violation under various provision of the Eco Sensitive Zone.

Based on the above fact recommendation/information provided in the part is divided into two part where required.

- It contains information/recommendation of incharge Wild Life Sanctuary & Divisional Wild Life Officer, Gurugram & these recommendation confined to the limits of Wild Life Sanctuary.
- This part contains information/recommendation as provided by Divisional Forest Officer (Territorial) Jhajjar to office of Divisional Wild Life Officer vide his letter no. 1276 dated 19-10-2020 (copy attached).

1. Date of receipt of the PART-II.	27-10-2020
2. Total Area (Ha.) of National Park/ Sanctuary.	211 Ha.
3. Total Area (Ha.) diverted from the NP/ WLS so far for development purposes.	NIL
4. For the past projects and the area (Ha.) diverted.	NIL
Name of Project Area Diverted Year of Diversion	
5. Positive impact (S) due to the diversion of area for the projects referred to in column 4 above. Not applicable.	NIL
Name of the Project(s) Positive Impact Scientific Basis of Assessment (Attach separate sheet, if required)	
6. Negative impact/ s due to the diversion of area for the projects referred to in column 4 above.	NIL
Name of the Project(s) Negative Impact Scientific Basis of Assessment (Attach separate sheet, if required)	
7. Management plan period. Attach copy of management plan/ management scheme/ recommendation of Chief Wildlife Warden	NIL
8. List Management actions taken/ proposed to be taken in the whole block/ Zone in which the proposed area is located.	Since the proposed area doesn't involved any area of Wild Life Sanctuary Nahar, however it falls under its eco sensitive zone only
9. Type of forest in which the proposed area falls	B. - Tropical Dry Deciduous
10. Location of the proposed area w.r.t. the critical/ intensive Wildlife Management area/ wildlife habitats (Attach Map to scale).	The whole proposed project falls in the eco sensitive zone of Wild Life Sanctuary Nahar which is 6.13 km. far from boundary of Wild Life Sanctuary Nahar
11. List the likely POSITIVE AND NEGATIVE impacts of the proposed project giving scientific and technical justification for each	Positive impact (a) Since this project is an Clinker Grinding Unit project meant for the people having economical limitations.

impact.	(b) Generation of employment opportunity for general public. (c) Improvement in working condition of people of surrounding area. (d) Increase in the percapita income and decrease in crime rate. Negative Impact (Wild Life) Since the project area falls in eco sensitive zone of Wild Life Sanctuary Nahar only. Even no direct interference is expected, but agriculture area inside ESZ get reduced which is to be used for non forestry purpose and other than agriculture also.
12. Provide COMPREHENSIVE details of the impact of the proposal in terms of sections 29 and/or section 35 (6) of the Wild Life (Protection) Act, 1972 as the case may be.	NA
13. Whether the project authorities have ever committed violation of the Wild Life (Protection) Act, 1972 or Forest Conservation Act, 1980. If yes, provide the EXHAUSTIVE details of the offence and the present status of the case. (Concealing or misrepresenting the facts will lead to rejection of the case in addition to any to her penalty as prescribed under Law).	A. - User agency has not violated the Wild Life (P) Act, 1972 except construction work and user agency has submitted an undertaking that they have not carried out any further construction activities (in the project area to be expanded for which revised environmental clearance is required) and neither they intend to do so without getting NOC/permission/environmental clearance from the competent authorities. B. - The above said land is not a part of notified/Close area under Section 4&5 of PLPA 1900/ Reserve Forest/Protected Forest/Closed under Section 38 of IFA.
14. Have you examined the Project Appraisal document and the alternatives as provided in PAR-IP?	Yes
15. Have you examined the Bio diversity Impact Assessment Report?	Not Applicable.
16. If yes, please give your comments on the recommendations given in the report?	Not Applicable.
17. Dates and duration of your field visits to the proposed site.	Joint inspection by Forest, Wildlife department and authorised person of user agency on 21-09-2020
18. Do you agree that the present proposal of diversion of NP/ WLS are the best or the only option and viable	Since no area of Wildlife Sanctuary Nahar is to be diverted and the project area falls within the limits of eco sensitive zone of Wildlife Sanctuary Nahar only.
19. Any other information that you would like to bring to the notice of the state board for Wild life, National Board for Wild Life or its standing committee that may be relevant and assist in decision making.	(A) On part of Incharge National Park/Divisional Wild Life Officer-Since no area of Wildlife Sanctuary Nahar is to be diverted and the project area falls within the limits of eco sensitive zone of Wildlife Sanctuary Nahar only. (at a distance of 6.13 km from boundary of Wildlife Sanctuary Nahar) (B) Divisional Forest Officer (Territorial) Diversion does not include NP/WLS but falls within eco sensitive zone and objective of the project is in public interest and viable option.
20. Do you recommend the project	(A) Project is being recommended on following condition:- 1. Project Authority will not violate any provision of MoEF&CC notification dated 1 June, 2015 (Draft Notification) regarding Eco Sensitive zone of Wildlife Sanctuary Nahar & WLP Act, 1972. 2. Project Authority will not extract any ground

- water with in the limit of Eco Sensitive Zone
3. Noise limit of all the construction equipment etc. should be fixed as guided by any expert deputed by the Forest/Wildlife department.
 4. All the activities to be undertaken inside Eco Sensitive Zone, will be in consultation with Divisional Wildlife Officer, Gurugram
 5. Project authority will not violate by any means the WLP 1972 and conditions laid in earlier environmental clearance granted by SEIAA, Haryana vide their letter no. SEIAA/IR/2019/460 dated 09-12-2019 and any other act applicable from time to time. The project proponent will not violate any judicial order/ pronouncement issued by Hon'ble Supreme Court/ High Court/ District Court
- (B) Divisional Forest Officer (Territorial) Jhajjar- Proposal is recommended subjected to the condition that project proponent shall adhere the MoEF & CC notification dated 1st June, 2015 (Draft notification) regarding ESZ as well as WLP, 1972, conditions mentioned in earlier EC granted by SEIAA Haryana vide their letter no. SEIAA/HR/2019/460 dated 09-12-2019 and any other act applicable from time to time. The project proponent will not violate any judicial order/ pronouncement issued by Hon'ble Supreme Court/ High Court/ District Court.

(Please provide full justification to support your recommendations)
Signed by

The Officer In Charge of the NP/ WLS
Official Seal

Date of Submission to the Chief Conservator of Forest (WL) Gurugram or any other officer authorized by him in this regard.

Divisional Forest Officer (T) Jhajjar

Near Bag Jalandra Stadium, Forest Complex, Jhajjar
Phone No. 0251-257258 e-mail.- dfoajjar@rediffmail.com dfoajjar@gmail.com

No. 1276

Dated. 19-10-2019

To

Divisional Wild Life Officer,
Gurgaon.

Subject:-

NOC for online proposal No. FP/HR/Others/4300/2019 for the approval of NBWL, clearance of proposed Clinker Grinding Unit with Cement production Capacity of 5.0 MTPA of M/s Wonder Cement Ltd. within an area of 21.78 ha at village Jhanswa, Tehsil Matnhad, District Jhajjar

Ref:-

Your Office Letter No. 631 dated 07.08.2020

In reference to the letter received from your office the information regarding point no 9, 13, 19 & 20 of enclosed Part-III is as under:-

9(i) Type of forest in which the proposed area falls	Tropical Dry Deciduous
9(ii) Whether the project authorities have ever committed violation of the Wild Life (Protection) Act, 1972 or Forest Conservation Act, 1980. If yes, provide the EXHAUSTIVE details of the offence and the present status of the case. (Concealing or misrepresenting the facts will lead to rejection of the case in addition to any to be penalty as prescribed under law).	The above said land is not a part of notified/Closed area under Section 4&5 of PLPA 1900/ Reserve Forest/Protected Forest/ Closed under Section 38 of IFA.
9(iii) Do you agree that the present proposal of diversion of NP/WLS are the best or the only option and viable.	Diversion doesn't include NP/WLS but falls in ESZ and objective of project is in Public interest and viable option
9(iv) Do you recommend the project	Proposal is recommended subjected to the condition that project proponent shall adhere the MoEF & CC notification dated 1 st June, 2015 (Draft notification) regarding ESZ as well as WLPA, 1972. conditions mentioned in earlier EC granted by SEIAA Haryana vide their letter no. SEIAA/HR/2019/460 dated 09-12-2019 and any other act applicable from time to time. The project proponent will not violate any judicial order/ pronouncement issued by Hon'ble Supreme Court/ High Court/ District Court.

1123

20/10/2019

20/10/2019

C. Gupta

Divisional Forest Officer,
Jhajjar

CERTIFIED TRUE COPY OF THE RESOLUTION PASSED IN THE MEETING OF BOARD OF DIRECTORS OF WONDER CEMENT LIMITED, HELD ON MONDAY THE 03RD DAY OF JUNE, 2019, AT 08:00 A.M. AT COMPANYS' HEAD OFFICE SITUATED AT 17, OLD FATEHPURA, SEVA MANDIR ROAD, UDAIPUR, RAJASTHAN.

"RESOLVED THAT Mr. Nabin Kumar Singh (Assistant Vice President - Land & Legal) of the Company be and is hereby authorized to appear and present the writ petitions, applications, appeals, revision etc. in Supreme Court, Tribunal(s), High Court(s) and District & Session Court(s) and also to file appeals, applications for and on behalf of the Company against any order passed by the Hon'ble Court.

RESOLVED FURTHER THAT he is also authorized for making of application(s), presentation(s), modification(s), signing of vakalatnama(s), filing of reply(ies) and affidavit(s) and other relevant document(s) to be submitted in Hon'ble Court and to do all such acts, deeds and things as may be deemed to be expedient and necessary to give effect to this resolution.

RESOLVED FURTHER THAT the aforesaid power entrusted to the said official shall be valid and effective unless revoked earlier by the Board or shall be exercisable by him so long as he is in the employment with the Company.

RESOLVED FURTHER THAT any of the Director(s) of the Company and the Company Secretary be and are hereby authorized severally to sign and furnish to the Hon'ble Court certified true copy of this resolution and the Hon'ble Court is hereby requested to act upon the same."

Date: 04.07.2019

Place: Udaipur

Certified true copy
For Wonder Cement Limited


Tahush Joshi

Company Secretary

Membership No.: FCS - 9698

Address:

Wonder Cement Limited,
17, Old Fatehpura, Udaipur,
District- Udaipur-313004, Rajasthan

WONDER CEMENT LIMITED

Corporate Office: 17, Old Fatehpura, Near Seva Mandir, Udaipur - 313 004, Rajasthan (India).
Tel: +91-294 3083133 Fax: +91-294-310533, E-mail: corp.office@wondercement.com

Registered Office: Mervana Road, Madangari, Kenanganli - 305 801, District - Ajmer, Rajasthan (India).
Tel: +91 1433-260111 E-mail: regd.office@wondercement.com, Website: www.wondercement.com

N: 026843P, 02605P, 0021205

WONDER
CEMENT

Jharli Railway Station
~4.0 km in NNW Direction

District Boundary
Jhajjar & Bhiwani (Haryana)
~8.0 km in NW Direction

Jawahar Lal Nehru
Feeder (Canal)
~8.0 km in East Direction

TOPOSHEET NO. 53 D-6, 53 D-7 & 3 D-10



INDEX

Project Boundary

Buffer Zone Boundary

- Roads, metalled according to motor vehicle classification
- Roads, unmetalled do. Do. bridge
- Canals, Pack-track and post. Foot-path with fence
- Bridges with park, without Causeway Ford or Ferry
- Streams with bank in bed, undefined Canal
- Canal, masonry or rock-lined, with/without Weir
- River bank: the way, steep, 3 to 5 metres, over 5 metres
- River dry with water channel, with island & rock, Tidal river
- Submerged rocks, Shoal, Swamp, Reeds
- Wells, hand-dug, Tubewell, Spring, Tanks, potential, dry
- Entrenchments, road in rail tank, Broken ground
- Railways, broad gauge, double single, not set on, under constn.
- Railways, other gauges, no. 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950, 1000
- Mineral line or railway, telegraph, no. 100, 150, 200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950, 1000
- Contours with sub-contours, Rock, sand, Cuts
- Sand features, 1' to 12' and 12' to 24' and 24' to 36' and 36' to 48' and 48' to 60' and 60' to 72' and 72' to 84' and 84' to 96' and 96' to 108' and 108' to 120' and 120' to 132' and 132' to 144' and 144' to 156' and 156' to 168' and 168' to 180' and 180' to 192' and 192' to 204' and 204' to 216' and 216' to 228' and 228' to 240' and 240' to 252' and 252' to 264' and 264' to 276' and 276' to 288' and 288' to 300'
- Towns or Villages, existing, proposed, for
- Huts, permanent, temporary, Tower, Antiquities
- Boundary information
- Boundary state, demarcated, undemarcated
- Boundary district, Sub-district, Tehsil or Taluk, Block



Environmental Setting Map

**Proposed Clinker Grinding Unit with
Cement Production Capacity of 5.0 MTPA
(Phase-I: 2.5 MTPA & Phase-II: 2.5 MTPA)
and D.G. Set (6.5 MTPA)**

M/s. Wonder Cement Ltd.

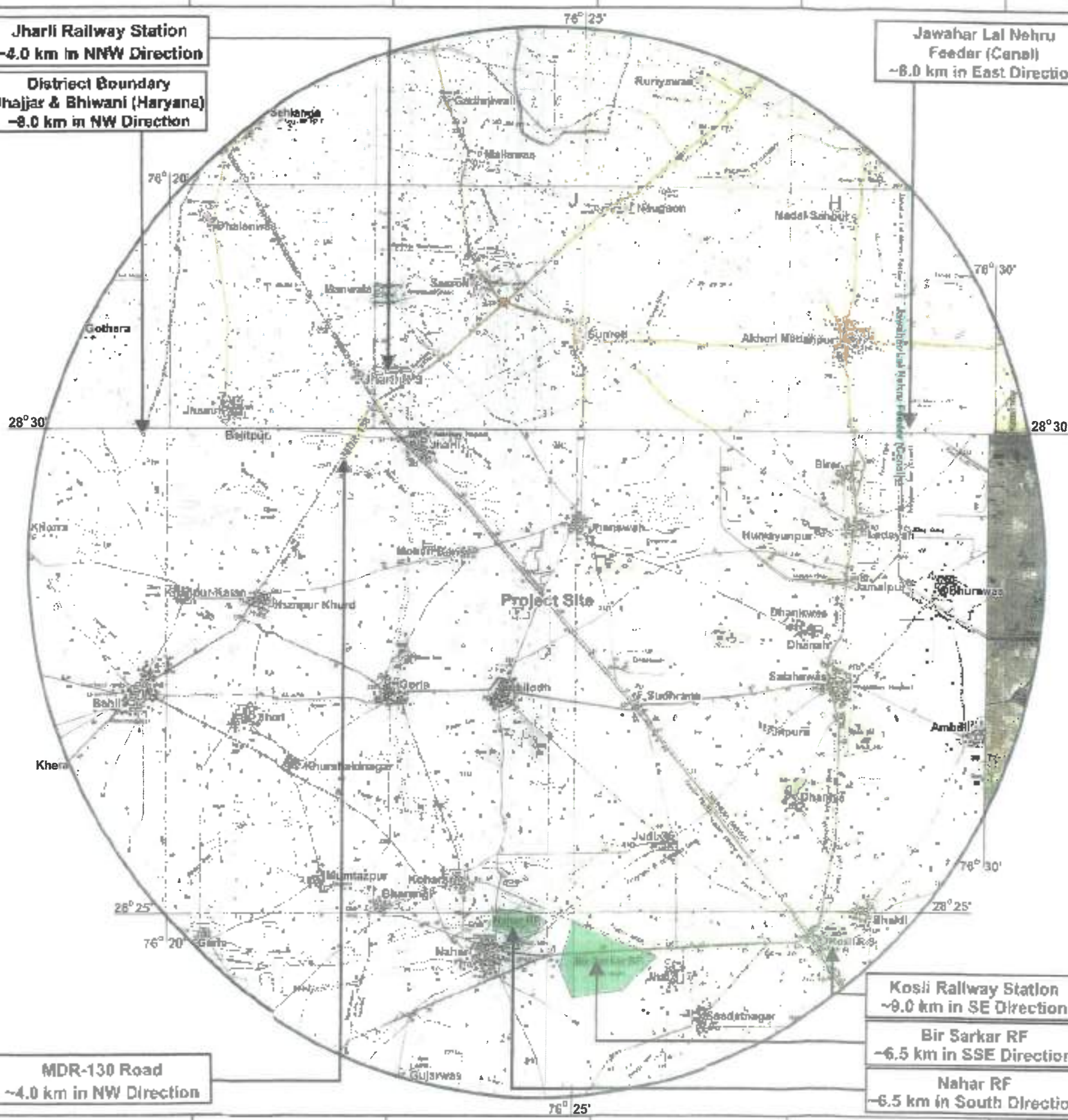
At
Village: Jhanswa, Sub Tehsil: Sahalwas,
Tehsil: Matanhail, District: Jhajjar (Haryana)

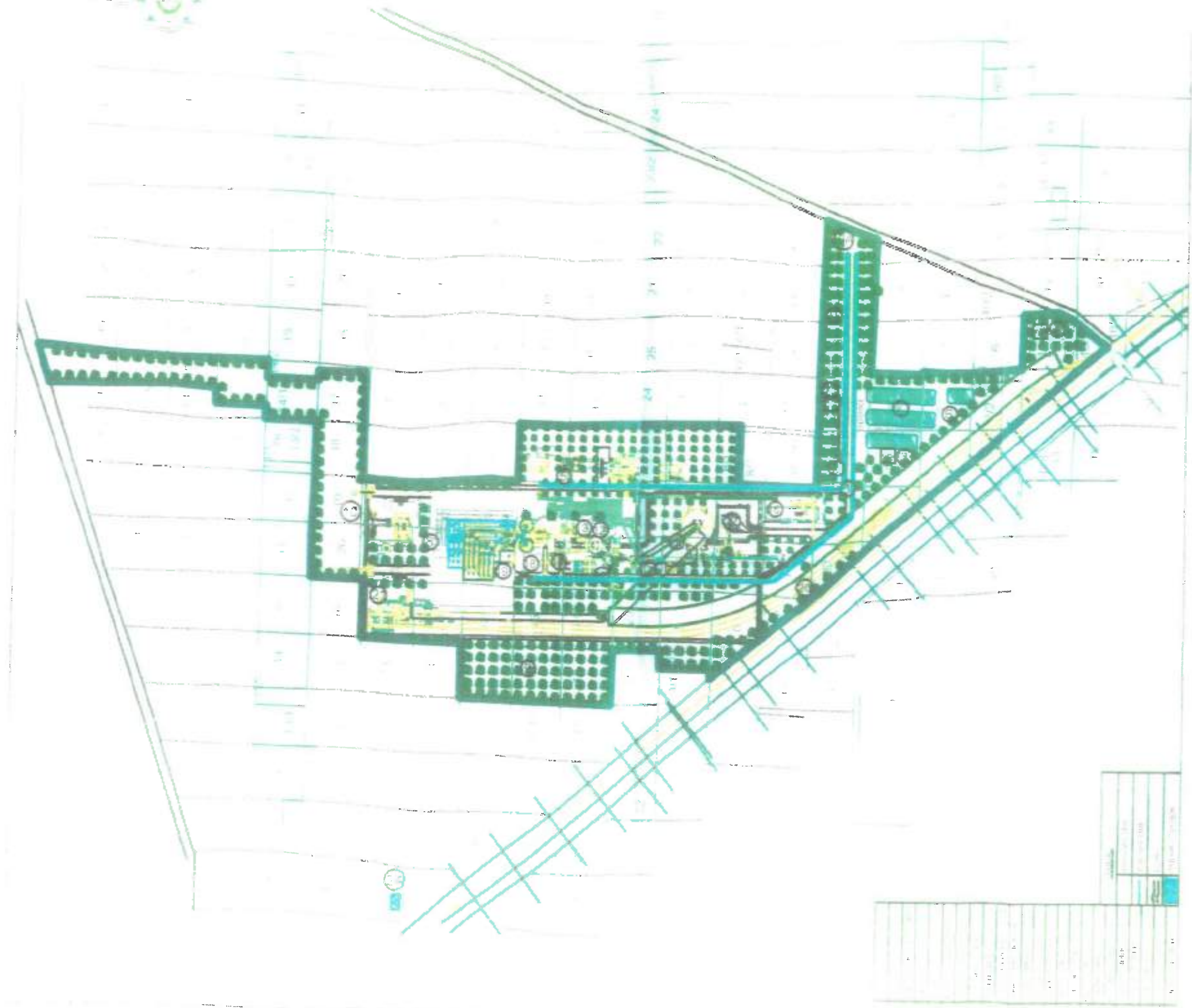
Kosli Railway Station
~9.0 km in SE Direction

Bir Sarkar RF
~6.5 km in SSE Direction

Nahar RF
~6.5 km in South Direction

MDR-130 Road
~4.0 km in NW Direction





Wildlife Conservation Plan

For

Proposed Clinker Grinding Unit with Cement Production
capacity of 5.0 MTPA (2.5 MTPA: Phase-I & 2.5 MTPA: Phase-II)

At

Village-Jhanswa, Sub-Tehsil - Salhawas, Tehsil-Matanhail,
Dist.-Jhajjar, Haryana

By

M/s. Wonder Cement Ltd.



Prepared By

ENVIRONMENT CONSULTANT

VARDAN ENVIRONET

(QC/NABET ACCREDITED NO. NABET/EIA/1619/RAB037)

D-142, Sector-17, Phase-III SEC-57 GURGAON HARYANA

E-MAIL: vardanenviro165@gmail.com

CONTACT: 0124-4291036, 09899651342

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CHAPTER-1: INTRODUCTION

1.1 INTRODUCTION:

Biodiversity management is considered as a difficult task as it refers to diversity at all levels like genetic, species and community. The formulation of a biodiversity management and wildlife conservation plan for a developmental Project is one of the steps towards the environment conservation. Human activities like agricultural expansion, road construction, urbanization, and other mining activities are supposed to be major threats to biodiversity and wildlife, therefore, the most effective and efficient mechanisms for conserving biodiversity is to prevent further destruction or degradation of habitats. Four strategies required for the biodiversity management are in Situ strategy, ex Situ Strategy, reduction of anthropogenic pressure and rehabilitation of endangered species.

The prior required clearances have been taken from the competent authority to run the project smoothly. The proposed project of 5 MTPA clinker grinding unit near village Jhanswa, Sub Tehsil Salhawas, Tehsil Matanhait, District Jhajjar in Haryana is source of revenue for the state government Haryana.

M/s Wonder Cement Ltd. will generate a fair amount of direct and indirect employment in the study region. The local economy will receive a boost due to employee spending and services generated by the company. The overall effect will improve the buying power of employees and locals, thus a higher standard of living viz. better education, improved health and sanitation facilities, housing etc. This will be envisaged as a major positive benefit, which will ultimately lead to the sustainable development of the region.

During biological environment study it has been found that through the local villagers and by direct evidence that some wildlife are harboring the area occasionally for their food, water and crossing from one place to another places. During the survey total 85 plants species and 54 faunal species were recorded by primary field observations and information of local villages. Total five schedules-I species were documented as per Wildlife Protection Act, 1972. Hence, conservation Plan is to be prepared for the conservation of these scheduled species.

1.2 PROJECT DETAILS

M/s Wonder Cement Ltd. is a unit of M/s R.K. Marble Group. Wonder cement ltd. is a

cutting edge cement manufacturing company with total cement production capacity of 8.0 MTPA (Line 1 and Line 2). Line 3 with 4.0 MTPA cement production is under implementation. M/s Wonder Cement Ltd. is proposing a clinker grinding unit with cement production capacity of 5.0 MTPA (Phase-1: 2.5 and Phase-2: 2.5) and DG set (6.5 MW) at village-Jhanswa, Tehsil-Matanhail, District-Jhajjar (Haryana).

Table: 0.1: Brief Description of the Project

S N	PARTICULARS	DETAILS			
A.	Nature of the Project	clinker grinding unit with cement production capacity of 5.0 MTPA (Phase-1: 2.5 and Phase-2: 2.5) and DG set (6.5 MW)			
B.	Size of the Project	Units		Proposed Capacity	
		Cement (MTPA)		5.0 (Phase-1: 2.5 and Phase-2: 2.5)	
		D.G. Set (MW)		6.5	
C.	Category of the project				
D.	Location				
E.	Village	Jhanswa			
	Tehsil	Matanhail			
	District	Jhajjar			
	State	Haryana			
	Latitude & Longitude		Pillar	Latitude	Longitude
			A	28°28'15.90"N	76°24'7.35" E
			B	28°28'55.16"N	76°24'48.81"E
	Toposheet No.	53D/6, 53D/7 & 53D/10			
	Area Details				
Total Project area	21.78 Ha.				
Greenbelt Area	7.21 ha (33% of the total project area)				
F.	Cost Details				
	Cost of the project	Rs. 830 Crores (Phase-1- Rs. 480 Cr. & Phase-2: Rs. 350 Cr.)			
	Cost for EMP	Capital Cost-Rs. 14 Crores (For each phase) Recurring Cost-Rs. 2 Crore/annum (For each phase)			
G.	Details of Environmental Setting				
	Nearest Village & Town	- Jhanswa (0.5 km in NE direction) - Matanhail (12.0 km in NNE direction)			
	Nearest NH/SH	SH-22 (8.0 km in NW direction)			
	Nearest Railway Station	Jharli Railway Station (4.0 km in NW direction)			
	Nearest Airport	Indira Gandhi International Airport, New Delhi, 65.0 Km, ENE direction			
	National Park/ WLS / Biosphere reserve etc	Nahar Wildlife Sanctuary (6.0 km in South direction)			
	RF/PP	Bir Sarkar RF (6.5 km in SSE direction) Nahar RF (6.5 km in South direction)			
	Water bodies	Lawahar Lal Nehru Feeder (Canal) 8.0 km in East direction			

H.	Basic requirement of Project	
	Water requirement	550 KLD (Phase-1: 300KLD. & Phase-2: 250 KLD.)
	Power requirement	25 MW
	Manpower	230 persons (Phase-1: 170 & Phase-2: 52)

1.3 TYPE OF THE PROJECT

This is a clinker grinding project with 5.0 MTPA cement production project over an area of 21.78 ha at village-Jhanswa, Tehsil- Matanhail, District-Jhajjar, Haryana by M/s Wonder Cement Ltd.

1.3.1 Location of Project:

The general location is given in Figure-2.1 of proposed project having total 21.78 ha area.

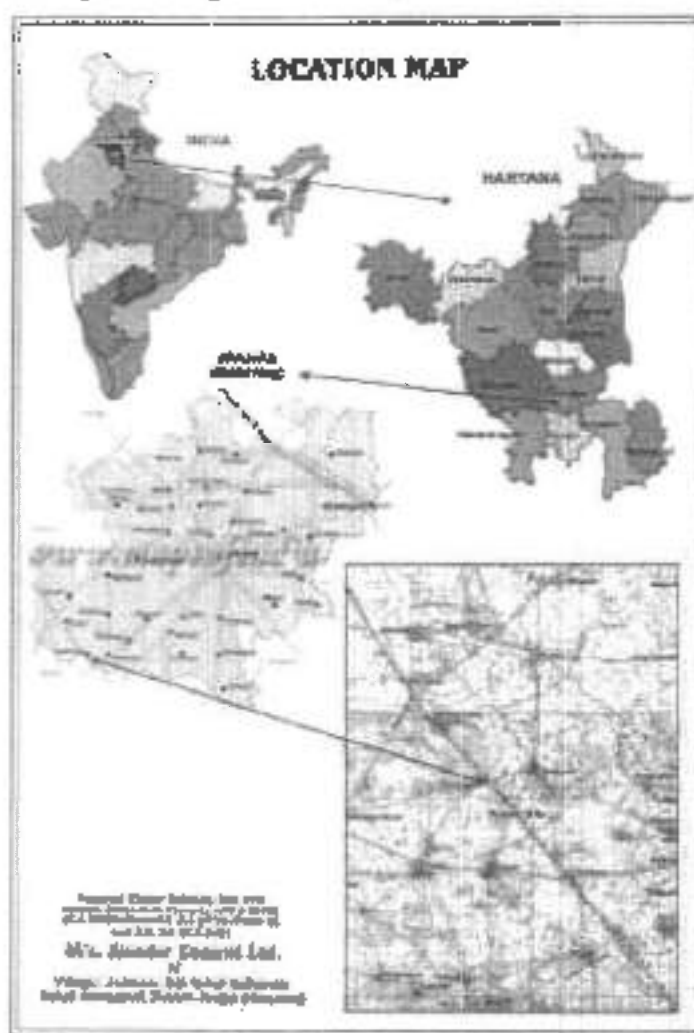


Fig 1.1 Location Map of the Project Site

1.3.2 Site Location

Jhanswa village is located in Tehsil- Matanhail, District- Jhajjar (Haryana). All corners-coordinates of the MI. area are superimposed on Toposheet (OSM No) 53D/6, 53D/7 & 53D/10 of survey of India.

Table-1.1: Boundary point GPS Location of Clinker Grinding project

Point No.	Latitude	Longitude
1	3151481.582	637937.328
3	3151204.839	637939.147
4	3151204.772	637920.606
5	3151089.055	637920.825
8	3151088.629	637738.112
12	3151083.97	637804.908
13	3150902.491	637805.43
14	3150902.793	637872.409
15B	3150721.898	637873.162
15A	3150721.84	637867.909
15	3150643.11	637868.231
16	3150643.149	637805.965
17	3150540.148	637806.054
18	3150541.307	638129.911
19	3150471.675	638099.225
20	3150468.981	638007.756
20A	3150480.739	638007.695
21	3150480.573	637940.905
22	3150235.576	637941.23
25	3150660.66	637571.512
26	3150660.725	637583.245
27	3150721.033	637583.095
28	3150721.217	637604.928
29	3150781.725	637604.814
30	3150781.346	637537.694
31	3150962.284	637537.424
32	3150962.58	637604.374
33	3151083.267	637604.055
34	3151144.019	637738.209
35	3151144.238	637872.062
37	3151265.023	637872.093
38	3151264.94	637905.321
39	3151470.307	637904.989



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CHAPTER-2: BIOLOGICAL ENVIRONMENT

2.1 INTRODUCTION

The term biological environment covers the prevalence of all living forms (plants and animals) both terrestrial and aquatic in study areas. Living forms range over a very wide spectrum of specie. Even a small area may have thousands of species including bacteria, protozoa, worms, insects, plants, animals and birds. In the present study, Flora (trees, small trees, shrubs, under shrubs, climbers and grasses) and Fauna (mammals, birds and reptiles) are considered. It is needless to emphasize that living system is extremely complicated. They are directly affected by changes in the physical environment but may often either adapt or avoid the adverse environmental conditions.

Generally, biological communities are the best indicators of climatic and edaphic factors. Studies on biological aspects of ecosystems are important in Environmental Impact Assessment for safety of natural flora and fauna. Information on the impact of environmental stress on the community structure serves as an inexpensive and efficient early warning system to check the damage to a particular ecosystem. The biological environment includes mainly terrestrial and aquatic ecosystems.

The animal and plant communities exist in their natural habitats in a well-organized manner. Their natural settings can be disturbed by externally induced anthropological activities or by naturally induced calamities or disaster. So, once this setting is disturbed, it becomes practically impossible or takes a long time to come back to its original state. Plants and animals are more susceptible to environmental stress. A change in the composition of biotic communities is reflected by a change in the distribution pattern of natural species of flora and fauna existing in the ecosystem. The sensitivity of animal and plant species to the changes occurring in their existing ecosystem can, therefore, be used for monitoring Environmental Impact Assessment studies of any project.

2.2 BRIEF DESCRIPTION OF STUDY AREA

Jhajjar is one of the 21 districts of Haryana state, India. Jhajjar district, Haryana was carved out of Rohtak district on July 15, 1997. The district headquarter is situated in its namesake, Jhajjar town at a distance of about 65 kms from Delhi. The city is situated on the road connecting Rewari to Rohtak(NH-71). Charkhi Dadri to Delhi and Gurgaon to Bhiwani.

Jhajjar district with a geographical area of 1834 Sq. Km. (1911 Sq. Km. according to village papers) is situated in the Middle Eastern part of the Haryana State. It is surrounded by Rohtak and Sonapat districts in the North, Rewari and Gurgaon districts in the South, national capital Delhi in the East and Bhiwani district in the West. It comprises of 3 tehsils, 1 sub-tehsil, 5 blocks, 5 towns and 247 inhabited villages/ towns. Agro-climatically, Jhajjar district falls under sub-humid and semi-arid zone. The economy is purely agrarian and is supported by other economic activities like dairying, horticulture, service, trade and business.

2.3 OBJECTIVES OF BIOLOGICAL STUDY

- To collect the baseline data for the study along with a description of the existing terrestrial, wetland and aquatic biodiversity.
- To assess the scheduled species in the proposed site (rare, endangered, critically endangered, endemic and vulnerable).
- To identify the locations and features of ecological significance.
- To identify the impacts of a proposed project before, after and during the development phases.

2.4 METHODOLOGY

The present study on the floral assessment for the project activity is based on field survey of the area. By the following forest inventory methodology, the survey of biological parameters has been conducted within the buffer zone (10 km radial distance from the project site) in accordance with the guidelines issued by the Ministry of Environment, Forests and Climate Change, CPCB, and SPCB during the study period.

A preliminary survey of the study area has been performed to get a general picture of the landscapes and vegetation. Different zones of the study area have been traversed to note major vegetation patterns and plant communities including their growth form and constituent species.

2.5 FLORISTIC STUDY

The present study on the floral assessment for the project activity is based on field survey of the area. Floral study survey was made to assess the existing plant species in all accessible areas within the 10 km radius by the crisscross method of field exploration. The

local flora was identified by their morphological observation, such as size and shape of the leaf, flowers, fruits and bark features of stem and also by documenting their habit viz. Trees, Shrubs, Herbs, Grasses and Climbers etc.

2.6 FAUNA:

The baseline status of different faunal classes was assessed by following techniques.

Mammals: Presence of mammals was documented by using both direct and indirect evidences. Opportunistic sightings were also included. Transect line was used to search indirect evidence, i.e. animal burrows / holes; scat, pellets, feeding signs, and tracks. Photographic (colored pictorial guide) field guides were used for interviews with local residents (Burnham *et al.*, 1980; Rodgers 1991; Sale and Berkmuller, 1988 & Daniel, 1992).

Avifauna: The point count method was used for the avifaunal baseline data collection. Opportunistic survey was also carried out with respect to avifaunal checklist. Identification by calls was also made for species, especially for those which were not directly encountered or were hidden in the vegetation or canopy (Sridharan, 1989; Bhupathy, 1991; Bibby *et al.*, 1992 and Hutto *et al.*, 1986).

Herpetofauna: The 10 meter circular plot (radial) was used for the investigation of reptiles and amphibians. In an area, investigation also involves turning cover objects like logs, boulders, etc (Wetsh, 1987) within the plot area. A sampling of these species involved looking through binoculars and aural surveys.

Aquatic diversity: The samples for qualitative and quantitative analysis of planktons were collected from the subsurface layer at knee depth. Water samples were filtered through plankton net of 20µ mesh size (APHA, 1974). The filtered samples were concentrated by using the centrifuge. By using Lackey's drop method and light microscope (Lackey, 1938), the qualitative analysis was carried out for phytoplankton and zooplankton. The standard flora and other literature were followed for the qualitative evaluation of Plankton.

2.7 ASSESSMENT OF RARE, ENDANGERED AND THREATENED FLORA AND FAUNA

As per the Wildlife Protection Act, 1972 and their subsequent amendments, scheduled category of wild plant and animals were also considered in assessing the sensitive species. The scheduled species are listed for the assessment of any available sensitive species. This Act is enacted for protection of plants and animal species. It has six schedules which give

varying degrees of protection. Schedule-I and part B of Schedule-II provide absolute protection - offences under these are prescribed the highest penalties. Species listed in Schedule-III and Schedule-IV is also protected, but the penalties are much lower. Schedule-V includes the animals which may be hunted. The plants in Schedule-VI are prohibited from cultivation and planting. The enforcement authorities have the power to compound offences under this Schedule (i.e. they impose fines on the offenders).

2.8 ASSESSMENT OF SENSITIVE HABITAT

The riparian patches, protected areas (wildlife sanctuary & national park) and other specific habitat condition are some of those places which are sensitive to any small change due to the developmental activity. During the baseline study we did not observe such habitat within the study area. The land use pattern of this region was dominated by agriculture land. The Nahar Wildlife Sanctuary is located within the 10 km radius of the study area.

2.9 FOREST AND FOREST TYPES:

The state Haryana lies at the meeting point of three vegetative zones: the western Himalayas to the north, the upper Gangetic Plains to the east, and West Indian Desert or Arid Zone which encompasses most of the State (Singh *et al.*, 1994). The planned project falls in the Jhajjar district. In accordance to the India State of Forest Report, 2017 (Forest Survey of India), the state of Haryana, having an area of 44,212 km², constitutes 1.34% of the geographical area of the country. Haryana physiographically falls in the Indo-Gangetic plain although some of the area falls in Shiwalik hills as well. The total forest cover of the state is 1,588 km² which is 3.59% of the state's geographical area. In terms of forest canopy density classes, the state has 28 km² under very dense forest, 452 km² under moderately dense forest and 1,108 km² under open forest. According to Champion and Sethi's classification, the state has two forest type groups, viz. Tropical Dry Deciduous and Subtropical Pine. The forest vegetation of the Jhajjar district comes under Tropical Dry Deciduous Forests and all the forest areas are categorized in Open and Scrub categories. The district has practically no forest except growth keekar, jandi, maskets and thorny shrubs on the waste lands and farms. The forest department has drawn up a scheme names Aravelli project which act as a natural barrier checking the advance of the deserts towards

eastern Haryana and indo genetic plain. The objective is to provide environmental protection through restoration of green cover of village, common lands in Aravalli hills and to improve the income and living conditions of people by meeting their requirements of fuel, fodder and timber in ecological manner.

2.10 STUDY AREA

The biological environment study of the Clinker grinding Unit at Village- Jhanswa, Sub-Tehsil - Sahawas, Tehsil- Maranhail, District- Jhajjar, Haryana has been done during 13th - 14th June, 2019 in following monitoring locations of 10 km radius study area.

The study area is divided into three parts i.e.:

- a) **Core Zone:** Project Site
- b) **Buffer Zone:** Area within 10 Km radius from the project site.
- c) **Nahar Wildlife Sanctuary**

2.11 OBSERVATION AND RESULTS

The survey was conducted in the 10 km radius from the project location and its surroundings. Plants and animal diversity was noted. Apart from agriculture, the villagers are also engaged in livestock keeping. The vegetation observed within the study area mainly comprises of sub-tropical flora. The list was made for the natural vegetation and their diversity was documented.

The study area is inadequately wooded and some parts are practically bare of trees. Tree species viz. khairi, Jand, pahari kikar, kikar, babool, beri, barh, pipal, lasura, shisham, siris, neem, papri, gular, Indokh, tut, gulmohar, simbal or samul, kandu, bakain and safeda are commonly found in the area. Kikar or pahari kikar is found all over the district. Shrub species commonly found in the study area are panwar, karia, khip, Aak, phog and Nagphani. Amarbel is a common parasite climber. Nagphani forms thick hedge round many villages in tehsil. The important grasses found in the district are anjan, dhaman, dub, kana, dabh, palwa and chhya. The palatable grasses like anjan, dhaman and dub have dwindled due to excessive grazing in village common land. Jand, neem, bakain, khairi, mesquite or pahari kikar, guggal and eucalyptus have been planted to increase the forest wealth.

Core Zone: A total of around 250 trees of *Acacia nilotica*, *Azadirachta indica* and *Prosopis cineraria* have been recorded during survey in the core zone of the study area.

Buffer Zone: The selection of terrestrial and aquatic ecological sampling location was based on land use pattern, topography and habitat patterns of the study area. Ecological survey was carried out in forest and non-forest areas (agricultural fields, roadsides, urban & semi-urban wastelands, etc.) and the aquatic ecological survey was carried out in the study area. Total 85 plant species were enlisted within the study area and details are incorporated in Table-2.3.

Table-2.3: List of existing floristic composition within Buffer zone with Nahar WLS

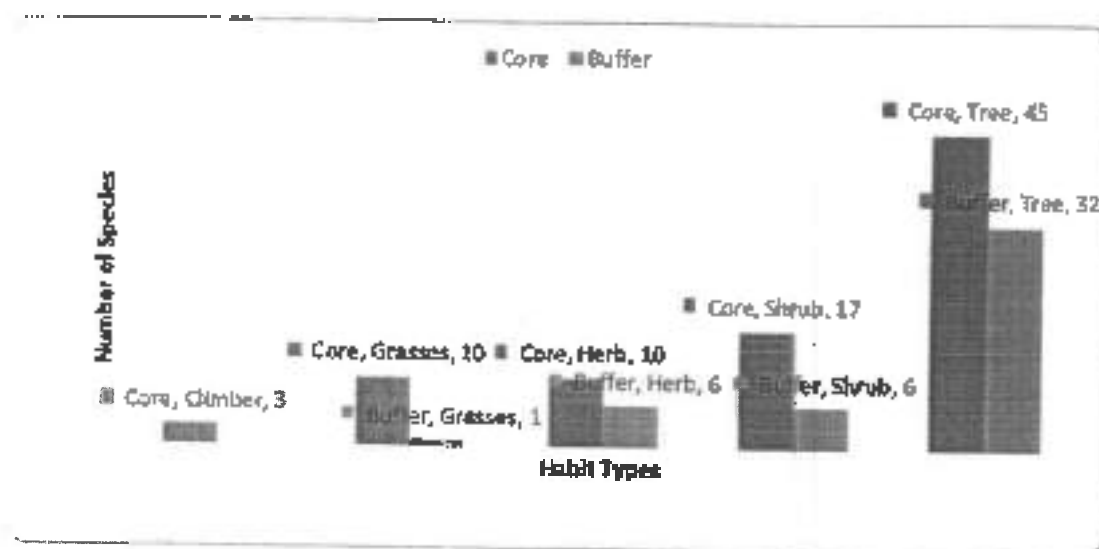
S. No	Botanical Name	Local Name	Family	Habit	IUCN Status
1	<i>Acacia leucophloea</i>	Ronjh	Mimosaceae	T	NA
2	<i>Acacia nilotica</i>	Babool	Mimosaceae	T	NA
3	<i>Acacia senegal</i>	Kumtha	Mimosaceae	T	NA
4	<i>Acacia tortilis</i>	Kikar	Mimosaceae	T	NA
5	<i>Achyranthes aspera</i>	Chirchuta	Amaranthaceae	H	NA
6	<i>Adhatoda vasica</i>	Arusa	Acanthaceae	S	NA
7	<i>Aegle marmelos</i>	Bael	Rutaceae	T	NA
8	<i>Ailanthus excelsa</i>	Mahanimb	Simarubaceae	T	NA
9	<i>Albizia lebbekii</i>	Siris	Mimosaceae	T	NA
10	<i>Albizia procera</i>	Safed Siris	Mimosaceae	T	NA
11	<i>Alstonia scholaris</i>	Chatwan	Simarubaceae	T	NA
12	<i>Argemone mexicana</i>	Satyansi	Papaveraceae	H	NA
13	<i>Aristida adscensionis</i>	Lapla	Poaceae	G	NA
14	<i>Artocarpus heterophyllus</i>	Kachal	Moraceae	T	NA
15	<i>Azadirachta indica</i>	Neem	Meliaceae	T	NA
16	<i>Balanites aegyptiaca</i>	Hingot	Sinaroubaceae	S	NA
17	<i>Calligonum polygonoides</i>	Phog	Polygonaceae	S	NA
18	<i>Callistemon</i> sp.	Buttlebrush	Myrtaceae	T	NA
19	<i>Cafotroplis procera</i>	Aak	Asclepiadaceae	S	NA
20	<i>Capparis decidua</i>	Kair	Capparaceae	S	NA
21	<i>Cascabela thevetia</i>	Peeli Kaner	Apocynaceae	T	NA
22	<i>Cassia fistula</i>	Amaltas	Caesalpinaceae	T	NA
23	<i>Cassia tora</i>	Panwar	Caesalpinaceae	H	NA
24	<i>Catharanthus roseus</i>	Sadabahar	Apocynaceae	S	NA
25	<i>Cenchrus setigerus</i>	Dhaman	Poaceae	G	NA
26	<i>Chukrasia tabularis</i>	Chakrasla	Cedreloideae	T	LC

27	<i>Citrus medica</i>	Nimbu	Rutaceae	T	NA
28	<i>Cocculus hirsutus</i>	Bajarhel	Menispermaceae	C	NA
29	<i>Commiphora wightii</i>	Gugal	Burseraceae	S	A2cd
30	<i>Cordia dichotoma</i>	Lasoda	Boraginaceae	F	NA
31	<i>Cryptostegia grandiflora</i>	Dudhi	Periplocaceae	C	NA
32	<i>Cynodon dactylon</i>	Durva	Poaceae	G	NA
33	<i>Dactyloctenium aegyptium</i>	Makada	Poaceae	G	NA
34	<i>Dalbergia latifolia</i>	Shisham	Fabaceae	T	NA
35	<i>Datura innoxia</i>	Dhatura	Solanaceae	H	NA
36	<i>Delonix regia</i>	Gulmohar	Caesalpiniaceae	T	NA
37	<i>Desmostachya bipinnata</i>	Dab	Poaceae	G	NA
38	<i>Dichanthium annulatum</i>	Karad	Poaceae	G	NA
39	<i>Dodonaea viscosa</i>	Reliya	Sapindaceae	H	NA
40	<i>Echinops echinatus</i>	Unkateli	Asteraceae	H	NA
41	<i>Ficus benghalensis</i>	Bargad	Moraceae	T	NA
42	<i>Ficus benjamina</i>	Pukar	Moraceae	T	NA
43	<i>Ficus glomerata</i>	Goolar	Moraceae	T	NA
44	<i>Ficus religiosa</i>	Peepal	Moraceae	T	NA
45	<i>Ficus virens</i>	Pilkan	Moraceae	T	NA
46	<i>Grevillea robusta</i>	Silver oak	Proteaceae	T	NA
47	<i>Heteropogon contortus</i>	Sukhala	Poaceae	G	NA
48	<i>Imperata cylindrica</i>	Dabh	Poaceae	G	NA
49	<i>Mangifera indica</i>	Aam	Anacardiaceae	T	NA
50	<i>Manilkara zapota</i>	Chiku	Sapotaceae	T	NA
51	<i>Melia azedarach</i>	Bakain	Meliaceae	T	NA
52	<i>Mimusops elengi</i>	Maulsari	Sapotaceae	T	NA
53	<i>Morus alba</i>	Saitut	Moraceae	T	NA
54	<i>Neulmarckia cadamba</i>	Kadam	Rubiaceae	T	NA
55	<i>Opuntia dilenii</i>	Nag Phani	Cactaceae	S	NA
56	<i>Parthenium hysterophorus</i>	Gajar Ghas	Asteraceae	H	NA
57	<i>Phyllanthus amarus</i>	Bhui Aonla	Euphorbiaceae	T	NA
58	<i>Phyllanthus emblica</i>	Aonla	Euphorbiaceae	T	NA
59	<i>Plumeria alba</i>	Champa	Apocynaceae	T	NA
60	<i>Polyalthia longifolia</i>	Ashok	Anonaceae	T	NA
61	<i>Portulaca pinnata</i>	Karanj	Fabaceae	T	NA
62	<i>Prosopis cineraria</i>	Khejri	Mimosaceae	T	NA
63	<i>Prosopis juliflora</i>	Vilayti Bahool	Mimosaceae	S	NA
64	<i>Psidium guajava</i>	Amrud	Myrtaceae	T	NA
65	<i>Pterocarpus marsupium</i>	Bija	Fabaceae	T	NT

66	<i>Punica granatum</i>	Anar	Lythraceae	T	NA
67	<i>Rosa</i> sp.	Gulab	Rosaceae	S	NA
68	<i>Saccharum munja</i>	Munj	Poaceae	G	NA
69	<i>Saccharum spontaneum</i>	Kaans	Poaceae	G	NA
70	<i>Salvadora oleoides</i>	Bada Peelu	Salvadoraceae	S	NA
71	<i>Salvadora persica</i>	Meswak	Salvadoraceae	S	NA
72	<i>Sida cordifolia</i>	Kharounti	Malvaceae	S	NA
73	<i>Solanum nigrum</i>	Mokoi	Solanaceae	J	NA
74	<i>Syzygium cumini</i>	Jamun	Myrtaceae	T	NA
75	<i>Tephrosia purpurea</i>	Dhamasa	Combretaceae	S	NA
76	<i>Terminalia arjuna</i>	Arjun	Combretaceae	T	NA
77	<i>Thespesia populnea</i>	Pakur	Malvaceae	T	NA
78	<i>Thuja occidentalis</i>	Vidhya	Cupressaceae	T	NA
79	<i>Tinnspora cordifolia</i>	Giloy	Menispermaceae	C	NA
80	<i>Tribulus terrestris</i>	Gokhru	Zygophyllaceae	H	NA
81	<i>Withania somnifera</i>	Asgandh	Solanaceae	H	NA
82	<i>Wrightia tinctoria</i>	Kapar Dudhi	Apocynaceae	T	NA
83	<i>Xanthium strumarium</i>	Chirchita	Asteraceae	S	NA
84	<i>Ziziphus mauritiana</i>	Ber	Rhamnaceae	S	NA
85	<i>Ziziphus nummularia</i>	Jhar Beri	Rhamnaceae	S	NA

(Source: Primary Survey conducted by Vardan Team)

Note: - NA= Not yet assessed, LC= Least Concerned, DD= Data deficient, VU= Vulnerable, A2cd= Critically Endangered, NT= Near Threatened.



2.12 FAUNAL DIVERSITY

The study of fauna takes substantial amount of time to understand the specific faunal characteristics of area. The assessment of fauna has been done by extensive field survey of the area. During survey, the presence of wildlife was assessed on the basis of the concerned animal sightings and the frequency of their visits in the project area which was later confirmed from forest department, Wildlife Department etc.

Total 12 faunal species have been encountered in the core zone of the study area out of which 3 mammal species, 1 herpetofauna species 7 Aves species and 2 species of butterflies have been noted (Table-2.4).

Table 2.4: Faunal diversity in the core zone

Mammals

S.No	Species Name	Common Name	Family	IWPA/IUCN Status
1.	<i>Funambulus pennanti</i>	Five Striped Palm Squirrel	Sciuridae	Schedule IV
2.	<i>Rattus rattus</i>	House Rat	Muridae	Schedule V

(Source: Primary Survey conducted by Vardan Team)

Aves

S.No	Species Name	Common Name	Family	IWPA/IUCN Status
1.	<i>Acridotheres tristis</i>	Common Myna	Sturnidae	Schedule IV
2.	<i>Nectarinia asiatica</i>	Purple sunbird	Nectariniidae	Schedule IV
3.	<i>Pycnonotus cafer</i>	Redvented Bulbul	Pycnonotidae	Schedule IV
4.	<i>Psittacula krameri</i>	Rose ringed Parakeet	Psittacidae	Schedule IV
5.	<i>Passer domesticus</i>	House Sparrow	Passeridae	LC
6.	<i>Streptopelia decaocto</i>	Eurasian Collared Dove	Columbidae	Schedule IV
7.	<i>Ploceus philippinus</i>	Baya weaver	Ploceidae	NA

(Source: Primary Survey conducted by Vardan Team)

Note: - NA= Not yet assessed, LC= Least Concerned.

Herpetofauna

S.No	Species Name	Common Name	Family	Status (IWPA/IUCN)
1.	<i>Calotes versicolor</i>	Oriental Garden Lizard	Agamidae	NA

(Source: Primary Survey conducted by Vardan Team)

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Note: - NA= Not yet assessed, LC= Least Concerned,

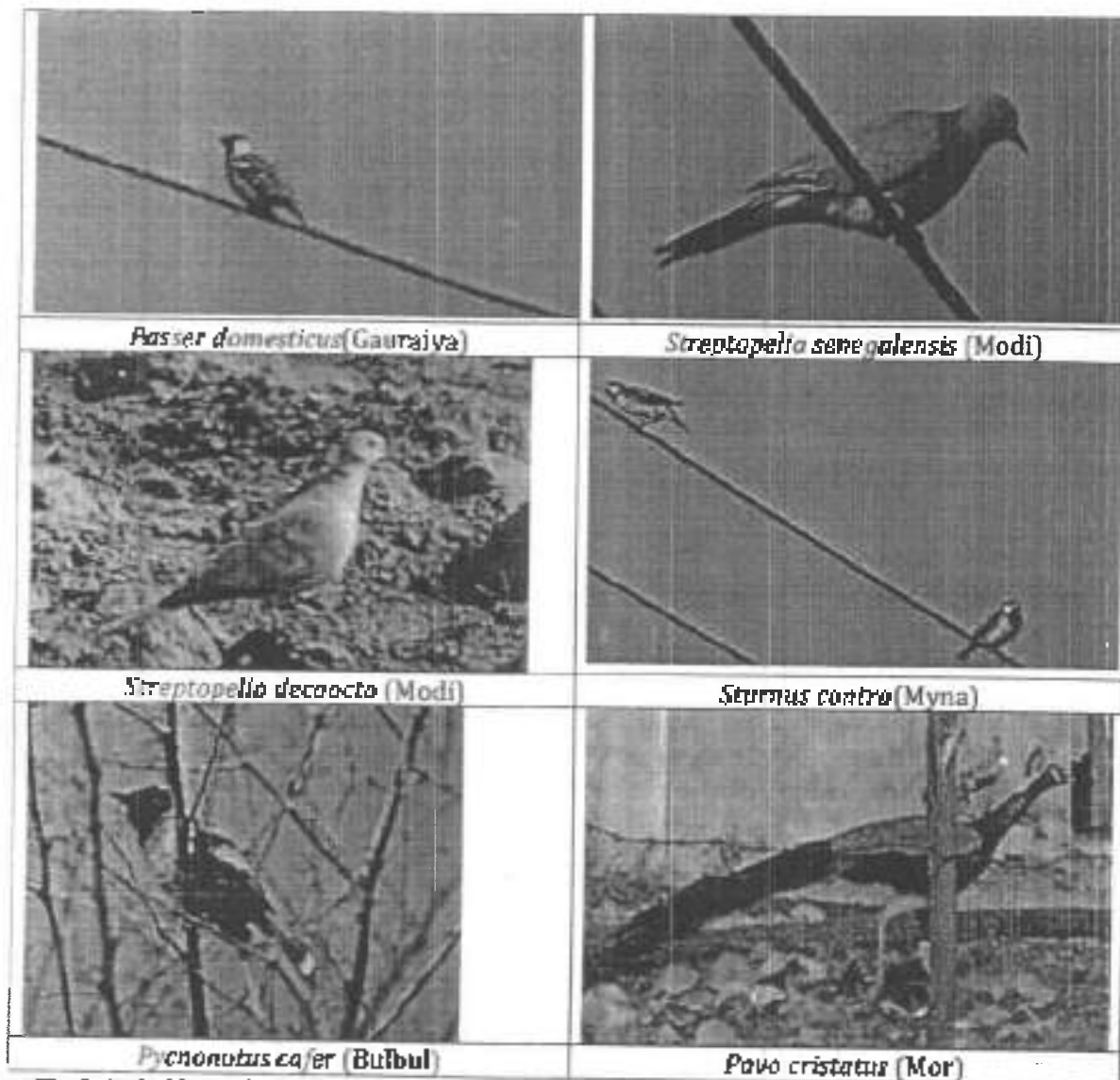


Fig 2.4: Avifaunal Species encountered during Field Survey; Source: Primary Survey by Vardan Team

Butterflies

S.No	Species Name	Common Name	Family
1.	<i>Danatus chrysippus</i>	Plain Tiger	Nymphalidae
2.	<i>Eurema hecabe</i>	Common Grass Yellow	Pieridae

(Source: Primary Survey conducted by Vardan Team)

Note: - NA= Not yet assessed, LC= Least Concerned.

Total 60 faunal species have been encountered in the buffer zone of the study area out of which 16 are mammals, 11 are herpetofauna, 28 are Aves and 5 are species of butterflies that have been recorded from the buffer zone (Table-2.5).

Table 2.5: Faunal Diversity in the buffer zone of the Study Area

Mammals

S.No	Species Name	Common Name	Family	IWPA/IUCN Status
1.	<i>Funambulus pennanti</i>	Five Striped Palm Squirrel	Sciuridae	Schedule IV
2.	<i>Mus booduga</i>	Little Indian Field Mouse	Muridae	Schedule V
3.	<i>Rattus rattus</i>	House Rat	Muridae	Schedule V
4.	<i>Antelope cervicapra</i>	Blackbuck	bovidae	Schedule-I
5.	<i>Canis aureus</i>	Jackal	Canidae	Schedule-II, part-II
6.	<i>Vulpus bengalensis</i>	Indian Fox	Canidae	Schedule-II, part-II
7.	<i>Felis chaus</i>	Jungle cat	Felidae	Schedule-II, part-II
8.	<i>Herpestes edwardsii</i>	Common mongoose	Herpestidae	Schedule-II, part-II
9.	<i>Macaca mulatta</i>	Monkey	Cercopithecidae	Schedule-II, part-I
10.	<i>Presbytis entellus</i>	Langur	Cercopithecidae	Schedule-II, part-I
11.	<i>Megaderma lyra</i>	Bat	Megadermatidae	LC
12.	<i>Gazella bennettii</i>	Chinkara	bovidae	Schedule-I
13.	<i>Boselaphus tragocamelus</i>	Nilgai	Bovidae	Schedule-II
14.	<i>Hystrix indica</i>	Porcupine	Hystriidae	Schedule-IV
15.	<i>Lepus nigricollis</i>	Hare	Leporidae	Schedule-IV
16.	<i>Hedgehog</i>	Hedgehog	Erinaceidae	Schedule-III

(Source: Primary Survey conducted by Vardan Team and secondary data from forest dept.)

Note: - NA= Not yet assessed, LC= Least Concerned.

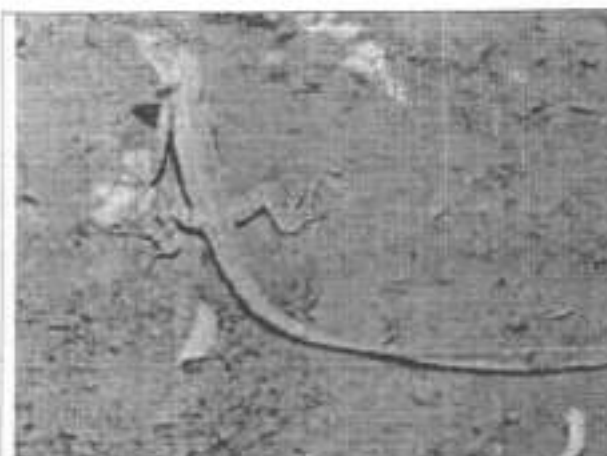
Aves

S.No.	Species Name	Common Name	Family	IWPA/IUCN Status
1.	<i>Acridotheres fuscus</i>	Jungle Myna	Sturnidae	Schedule IV
2.	<i>Acridotheres ginginianus</i>	Bank Myna	Sturnidae	Schedule IV
3.	<i>Acridotheres tristis</i>	Common Myna	Sturnidae	Schedule IV

S.No.	Species Name	Common Name	Family	IWPA/IUCN Status
4.	<i>Centropus sinensis</i>	Crow Pheasant	Cuculidae	Schedule IV
5.	<i>Charadrius bubius</i>	Little Ringed Plover	Charadriidae	LC
6.	<i>Columba livia</i>	Blue Rock Pigeon	Columbidae	Schedule IV
7.	<i>Coracias benghalensis</i>	Roller or Blue Jay	Coraciidae	LC
8.	<i>Corvus splendens</i>	Common crow	Corvidae	Schedule V
9.	<i>Coturnix coturnix</i>	Common Quail	Pheasianidae	Schedule IV
10.	<i>Dicurus macrocerus</i>	Black Drongo	Corvidae	Schedule IV
11.	<i>Francolinus francolinus</i>	Black partridge	Pheasianidae	Schedule IV
12.	<i>Francolinus pondicerianus</i>	Grey partridge	Pheasianidae	Schedule IV
13.	<i>Halcyon smyrnensis</i>	White Throated Kingfisher	Alcedinidae	Schedule IV
14.	<i>Melanoperdix niger</i>	Black Partridge	Pheasianidae	Schedule-I
15.	<i>Nectarinia asiatica</i>	Purple sunbird	Nectariniidae	Schedule IV
16.	<i>Passer domesticus</i>	House sparrow	Passeridae	LC
17.	<i>Pavo cristatus</i>	Indian Peafowl	Pheasianidae	Schedule I
18.	<i>Ploceus benghalensis</i>	Black breasted weaver bird	Ploceidae	NA
19.	<i>Ploceus philippinus</i>	Baya weaver	Ploceidae	NA
20.	<i>Psittacula krameri</i>	Rose ringed Parakeet	Psittacidae	Schedule IV
21.	<i>Pycnonotus cafer</i>	Redvented Bulbul	Pycnonotidae	Schedule IV
22.	<i>Streptopelia decaocto</i>	Ring Dove.	Columbidae	Schedule IV
23.	<i>Streptopelia chinensis</i>	Spotted Dove	Columbidae	Schedule IV
24.	<i>Streptopelia decaocto</i>	Eurasian Collared Dove	Columbidae	Schedule IV
25.	<i>Streptopelia senegalensis</i>	Little Brown Dove.	Columbidae	Schedule IV
26.	<i>Streptopelia traquebarica</i>	Red turtle Dove.	Columbidae	Schedule IV
27.	<i>Sturnus contra</i>	Pied Myna	Sturnidae	Schedule IV
28.	<i>Threskiornis sp.</i>	White Ibis	Threskiornithidae	LC

(Source: Primary Survey conducted by Vardan Team)

Note: - NA= Not yet assessed, LC= Least Concerned.



Calotes versicolor (Oriental Garden Lizard)



Boselaphus tragocamelus (Nilgai)

Fig-2.5: Faunal species observed during field survey; Source: Primary Survey by Vardan Team

Herpetofauna

S.No	Species Name	Common Name	Family	IWPA/IUCN Status
1.	<i>Ancistrodon himalayensis</i>	Pit viper	Viperidae	LC
2.	<i>Bufo melanostictus</i>	Common Indian Toad	Bufoinae	LC
3.	<i>Bungarus caeruleus</i>	Common Indian krait	Elapidae	Schedule IV
4.	<i>Bungarus fasciatus</i>	Banded Krait	Elapidae	LC
5.	<i>Calotes versicolor</i>	Common garden lizard	Agamidae	NA
6.	<i>Eublepharis macularius</i>	Common leopard gecko	Eublepharidae	NA
7.	<i>Naja naja</i>	Indian cobra	Elapidae	Schedule II
8.	<i>Ptyas mucosus</i>	Common rat snake	Colubridae	Schedule II
9.	<i>Sauro hardwickii</i>	Spiny tailed lizard	Agamidae	Schedule II
10.	<i>Varanus bengalensis</i>	Common Indian monitor	Varanidae	Schedule I
11.	<i>Vipera rapelli</i>	Russell's viper	Viperidae	Schedule II

(Source: Primary Survey conducted by Vardan Team)

Butterflies

S.No	Scientific Name	Common Name	Family
1.	<i>Danais chrysippus</i>	Plain Tiger	Nymphalidae
2.	<i>Eurema hecabe</i>	Common Grass Yellow	Pieridae
3.	<i>Junonia lemonias</i>	Lemon Pansy	Nymphalidae
4.	<i>Lixus pyrene</i>	Yellow Orange Tip	Pieridae
5.	<i>Pachliopta hector</i>	Crimson Rose	Papilionidae

(Source: Primary Survey conducted by Vardan Team)

Note: - NA= Not yet assessed, LC= Least Concerned, * Presence of species.

2.13 AGRICULTURAL CROPS

The major crops produced in the state include Bajra, Guar, Gehu, Rai etc. Soils of Haryana are mainly sandy and sandy loam type. The soils are often dry, nutrient deficient and fast draining. The Agro Ecological Sub Region includes the Western Plain, Kachchh and a part of the Kathiawar Peninsula and the Agro Climatic Zone falls within the Western Dry Region.

The main crops of Jhajjar district are bajra, gehu, guar, rai etc. Bajra and guar are kharif crops whereas gehu and rai are rabi crops. Irrigation is carried out mainly through open wells and bore wells. The following table provides a detailed list of agricultural and horticultural crops cultivated in Jhajjar that were documented during field survey.

Table 2.6: List of major Agricultural Crops

S.No	Botanical Name	Vernacular Name	Family
1.	<i>Allium cepa</i>	Pyaz	Amaryllidaceae
2.	<i>Allium sativum</i>	Lehsun	Amaryllidaceae
3.	<i>Brassica campestris</i>	Rai	Brassicaceae
4.	<i>Hordeum vulgare</i>	Jau	Poaceae
5.	<i>Pennisetum glaucum</i>	Bajra	Poaceae
6.	<i>Punica granatum</i>	Anar	Lythraceae
7.	<i>Sorghum bicolor</i>	Jwar	Poaceae
8.	<i>Triticum aestivum</i>	Gehu	Poaceae
9.	<i>Zea mays</i>	Makka	Poaceae
10.	<i>Ziziphus nummularis</i>	Ber	Rhamnaceae

(Source: Primary Survey conducted by Vardan Team)

Table 2.7: List of Domesticated Animals

S. No	Scientific Name	Vernacular Name	Family
1.	<i>Bos taurus</i>	Gai	Bovidae
2.	<i>Bubalus bubalis</i>	Bhains	Bovidae
3.	<i>Camelus bactrianus</i>	Uth	Camelidae
4.	<i>Capra aegagrus hircus</i>	Bakhri	Bovidae
5.	<i>Gallus gallus domesticus</i>	Murga	Phasianidae
6.	<i>Ovis aries</i>	Bher	Bovidae
7.	<i>Sus sp.</i>	Swar	Suidae

(Source: Primary Survey conducted by Vardan Team)

2.14 MEDICINAL PLANTS

During the primary survey and the site visit within 10 km radius from the project boundary and by discussion with local villagers and forest department staff regarding the availability of medicinally important plant within the area. The following is a potential list of medicinal plants that have been identified.

Table 2.8: List of Medicinal Plants found in the Study Area

S. No	Vernacular Name	Scientific Name	Family
1.	Aak	<i>Calotropis procera</i>	Asclepiadaceae
2.	Babool	<i>Acacia nilotica</i>	Mimosaceae
3.	Durva	<i>Cynodon dactylon</i>	Poaceae
4.	Cheekumari	<i>Aloe vera</i>	Liliaceae
5.	Neem	<i>Azadirachta indica</i>	Meliaceae
6.	Safeda	<i>Eucalyptus globulus</i>	Myrtaceae
7.	Asagandh	<i>Withania somnifera</i>	Solanaceae
8.	Gokhru	<i>Tribulus terrestris</i>	Zygophyllaceae
9.	Dhatura	<i>Datura metel</i>	Solanaceae
10.	Bhatkataiya	<i>Solanum xanthocarpum</i>	Solanaceae
11.	Makoy	<i>Solanum nigrum</i>	Solanaceae
12.	Giloy	<i>Tinospora cordifolia</i>	Menispermaceae
13.	Sarphonka	<i>Tephrosia purpuria</i>	Fabaceae
14.	Bala	<i>Sida cordifolia</i>	Malvaceae
15.	Chirchita	<i>Achyranthus aspera</i>	Amaranthaceae
16.	Gum acacia	<i>Acacia senegal</i>	Fabaceae
17.	Aonla	<i>Phyllanthus emblica</i>	Phyllanthaceae

(Source: Primary Survey conducted by Vardan Team)

2.15 ENDANGERED FLORA

No endangered or endemic flora was recorded from harmful vegetation in core and buffer zone of the project area.

2.16 ENDANGERED FAUNA

60 species of animals could be seen in the vicinity of the stone quarry project. *Pavo cristatus* (Mor), *Meianoperdix niger*, *Varanus bengalensis*, *Gazella bennettii* (Indian gazelle) and *Antelope cervicapra* from schedule-I and four species from part-II of Schedule-II are commonly seen in the buffer zone near forest edges and they are protected under wildlife protection act 1972.

2.17 LOCATION OF NATIONAL PARK AND WILDLIFE SANCTUARY

The nearest protected area from project boundary is Nahar Wildlife Sanctuary (~6.0 Km from project site). There are wide ranges of wildlife habitats in the district that includes a sanctuary in Nahar, forests and vegetations in Aravalli hills, community and private lands, marshy lands and water bodies such as ponds, canals and others. These habitats are the home for a variety of wildlife as mentioned above. There is gradual shrinkage in wildlife habitat both in quantity and quality of vegetations used as food by wild animals and birds. Prolonged dry season and lack of water during these periods pose major problems for wildlife in the area.

Fruit bearing plant species such as beri, neem, bar, papal etc are planted as routine forestry operation. In few places, there are waterholes such as small pond or water harvesting structures such as in Aravalli areas of Manethi, Nandha and others that act as source of drinking water for wild animals and birds.

CHAPTER-3: WILDLIFE CONSERVATION PLAN

Biodiversity management is considered as a difficult task as it refers to diversity at all levels like genetic, species and community. The implementation of biodiversity conservation strategy is a challenging job especially in North India. The area is predominated with various Schedule/tribal populations, which consider themselves as an integral part of the forest ecosystem. The formulation of a biodiversity management and wildlife conservation plan for a developmental Project is one of the steps towards the environment conservation. Human activities like agricultural expansion, road construction, urbanization, and other developmental are supposed to be major threats to biodiversity and wildlife, therefore, the most effective and efficient mechanisms for conserving biodiversity is to prevent further destruction or degradation of habitats.

The destruction of habitats is the primary reason for the loss of biodiversity in terrestrial and aquatic ecosystems. Habitat loss could be attributed to conversion, habitat degradation and fragmentation. When people cut down trees, fill a wetland, plough grassland or burn a forest, the natural habitat of a species is changed or destroyed. Introduction of invasive species may cause disappearance of native species through biotic interactions. Invasive species are considered second only to habitat destruction as a major cause of extinction of species. Communities are affected by natural disturbances, such as fire, tree fall, and defoliation by insects. Man-made disturbances differ from natural disturbances in intensity, rate and spatial extent. For example, man by using fire more frequently may change species richness of a community. Exploitation, including hunting, collecting, fisheries and fisheries by-catch, and the impacts of trade in species and species' parts, constitute a major threat for globally threatened birds (30% of all), mammals (33% of all), amphibians (6% of those assessed), reptiles and marine fishes (Baillie et al. 2004). Trade affects 13% of both threatened birds and mammals. Extinction is a natural process. Species have disappeared and new ones have evolved to take their place over the long geological history of the earth. It is useful to distinguish three types of extinction processes. Over-fishing, habitat destruction, widespread marine pollution and human induced climate change threaten the survival of marine biodiversity. Pollution, oil and gas drilling and oil spills may increase the

risks of extinction by increasing mortality of marine organisms. The Silent Valley Project in Kerala was abandoned because it was considered as a threat to biodiversity in the region.

2.3 STATUS OF BIODIVERSITY IN THE SURROUNDING

The terrestrial flora of the study area i.e. buffer zone (10 km radial distance) from the project site can be categorized as agriculture vegetation, social forestry plantation, Agro-forestry plantation and natural/forest vegetation. No endangered or endemic flora was recorded from the core and buffer zone of the project area. Nahar Wildlife Sanctuary is situated ~6.0 Km in South Direction (crow approach distance) from the proposed project site.

Endangered species present within the study area are listed in Table 3.1. It was observed that out of 60 species only 5 species are listed in the Schedule I with 10 species of Schedule II under the Wildlife Protection Act, 1972 and Near Threatened, Vulnerable, Endangered & Critically Endangered categories of IUCN 3.1.

Table -3.1: Schedule-I Species observed within 10 Km Study area

Species	Schedule
REPTILE	
1. <i>Varanus bengalensis</i>	Schedule-I
AVES	
2. <i>Pavo cristatus</i>	Schedule-I
3. <i>Melanoperdix niger</i>	Schedule-I
MAMMALS	
4. <i>Gazella bennettii</i>	Schedule-I
5. <i>Antelope cervicapra</i>	Schedule-I

Table -3.2: Schedule-II Species observed within 10 Km Study area

Species	Schedule
REPTILE	
1. <i>Naja naja</i> (Indian cobra)	Schedule-II
2. <i>Daboia russelii</i> (Russell's viper)	Schedule-II
3. <i>Ptyas mucosus</i> (Common rat snake)	Schedule-II
4. <i>Saara hardwickii</i> (Spiny tailed lizard)	Schedule-II
MAMMALS	
5. <i>Presbytis entellus</i> (Langur)	Schedule-II
6. <i>Macaca mulatta</i> (Monkey)	Schedule-I
7. <i>Herpestes edwardsii</i> (Common mongoose)	Schedule-I
8. <i>Felis chaus</i> (Jungle cat)	Schedule-II
9. <i>Vulpus bengalensis</i> (Indian Fox)	Schedule-II
10. <i>Canis aureus</i> (Jackal)	Schedule-II

2.2 SCHEDULE-I SPECIES

Biodiversity conservation plan is developed with the aim to reduce adverse impact on the natural habitat of various wild animals. Day by day issues related to threats to natural terrestrial and aquatic ecosystems arises due to high anthropogenic activities and loss of natural habitat due to climate change. A conservation plan is needed for the conservation of critical habitats of wildlife for endangered and schedule-I species along with their scientific management strategy. During the industrial and construction activities, natural resources (Land, Biodiversity, Forest, Animals and Humans) are likely to exert tremendous pressure due to various activities in the respective region, while the present management plan will ensure mitigation of such impacts. A separate Wildlife Conservation Plan has been prepared for proposed Clinker Grinding unit with cement production capacity of 5.0 MTPA over an area of 21.78 ha at Village- Jhanswa in Tehsil- Matanhall, District- Jhajjar, Haryana. Some general behavior and biology of encountered schedule-I species are discussed below which help in making the conservation and management plan success fully.

3.2.1 INDIAN PEAFOWL:

Conservation status:

The Indian Peafowl is listed as Least Concern species in the Red List of International Union for Conservation of Nature (BirdLife International 2008), probably owing to its widespread distribution, occurrence of locally abundant semi-feral populations, and protection from people on religious grounds. In India, it is given the utmost protection by inclusion in the Schedule I of Indian Wildlife Act, 1972. Although the train feathers of the Indian Peafowl are traded for various reasons, it is not included on any Appendix of the Convention on International Trade of Endangered Species perhaps on the claim that these feathers are naturally fallen ones during annual molt of the species, and also that the scale of trade across international border is still to be understood.

Threats:

The Indian Peafowl is under threat from various quarters that include the demand for feathers and wild meat, conflict with farmers during cropping season, increased use of chemical fertilizers and pesticides, and habitat degradation. Other threats

include habitat degradation and loss - more significantly from conversion of their habitat to agriculture, habitation and Mining/Industrial growth, poisoning to counter crop damage, consumption of eggs and fat extracts for alleged medicinal values, and killing for wild meat (del Hoyo *et. al.*, 1994; Chakkaravarthy 2002). Although these threats are believed to be causing an alarming decline in populations, the magnitude and pattern of the effects in different parts of the country are yet to be quantified.

Conservation Measures;

It is critical that urgent efforts are made to understand the habitat and population states of the species through field based research and *in situ* conservation projects. A meeting of the Indian Board for Wild Life (held on 19 June 2006) underlined the need for such efforts. The actions required are:

- 1) Mapping of habitat and distribution status of the species across the country, inside and outside protected areas;
- 2) Time series analysis of habitat change to quantify the rate of change and identify high-risk areas and potential sites for further affirmative action;
- 3) Estimation of population size by established count methods such as line transect, call counts and roost counts;
- 4) Intensive ecological investigations in representative sites in major biogeographic zones with focus on the effects of threats in relation to breeding success and survival probability;
- 5) Quantification of trade, with details on source and people involved; and

Undertaking outreach activities to sensitize local communities, which may be carried out by a network of 'student clubs' (e.g. National Green Corps) throughout the country. These people could be trained to collect population data and undertake monitoring within their localities, and the reliability of the results could be ensured by adopting rigorous protocols.

3.2.2 BLACK PARTRIDGE (*Melanoperdix niger*)

Conservation status:

The black partridge is listed as vulnerable species in the Red List of International Union for Conservation of Nature (IUCN 3.1), probably owing to its distribution, occurrence of locally scattered semi-feral populations, and protection from people on religious grounds. In India, it is given the utmost protection by inclusion in the Schedule 1 of Indian Wildlife Act, 1972. The black partridge is sexually dimorphic. The male has entirely glossy black plumage and a black bill, while the female is generally a chestnut-brown bird with a whitish throat and belly and a dark horn-colored bill. The female is smaller than the male.

Threats:

The overriding threats are habitat loss, degradation and fragmentation as a result of large-scale commercial logging, which targets all remaining stands of valuable timber, even within protected areas, and the widespread clearance for plantations.

Conservation Measures:

It is critical that urgent efforts are made to understand the habitat and population status of the species through field based research and *in situ* conservation projects. A meeting of the Indian Board for Wild Life (held on 19 June 2006) underlined the need for such efforts. The actions required are:

- 1) Mapping of habitat and distribution status of the species across the country, inside and outside protected areas;
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- 4) Intensive ecological investigations in representative sites in major biogeographic zones with focus on the effects of threats in relation to breeding success and survival probability;
- 5) Quantification of trade, with details on source and people involved; and

Undertaking outreach activities to sensitize local communities, which may be carried out by a network of 'student clubs' (e.g. National Green Corps) throughout the country. These people could be trained to collect population data and undertake monitoring within their localities, and the reliability of the results could be ensured by adopting rigorous protocols.

3.2.3 GOH OR MONITOR LIZARD (*Varanus bengalensis*)

The name of "Monitor" bestowed upon these creatures has a curious origin, owing to a ridiculous etymological mistake. The Arabic term for lizard is "Ouaran". This has been wrongly taken to mean warning lizard, hence the Latin word Monitor.

Geographical Distribution:

Although called the Bengal Monitor, this species is among the most widely distributed of varanid lizards. It is found in river valleys in eastern Iran, Afghanistan, western Pakistan, India, Nepal, Sri Lanka, Bangladesh and Myanmar.

Habitat:

Many different types like (Rain) forests, valleys, farmlands, desert like areas and so on. It seems to be most common in farmlands and dry, open forests.

Food:

Although these creatures are relatively large in size, especially for a lizard, they mostly feed on insects such as ants and beetles scorpions. They also eat animals such as ground birds, and their eggs, fish, frogs, snakes, other lizards, snails and small mammals like rodents. Monitors are reported to have a very special preference for eggs.

Behaviour:

Mainly ground dweller, but is a very good climber as well. Bengal Monitors are usually solitary and usually found on the ground although the young are often seen on trees. They shelter and spend nights in burrows or crevices in rocks and buildings, make use also of abandoned termite mounds. In the night their body temperature drops below ambient. In the morning they raise their body temperatures by basking before commencing activity and for this reason they are

rarely active early in the morning and most active in the afternoons when temperatures are highest. Mean active body temperature is 34.5

Conservation status:

Not Listed (IUCN 2000); Endangered (ESA). In India, it is given the utmost protection by inclusion in the Schedule I of Indian Wildlife Act, 1972.

Threats:

The species is facing threat due to human activity. The species is still hunted for skin, oil for medicines for body ailments and meat for food. In some places, they are killed thinking that these animals are poisonous. Increased road network and traffic also causing accidental death. The habitat destruction and alteration due to expansion of agriculture and urbanization also posing serious threats.

Conservation Measures:

- Habitat improvement works will be carried out by planting bushes and shrubs in surrounding areas.
- Natural habitat places will be preserved in the surrounding.
- Speed limits of vehicles will be controlled to avoid accidental deaths.
- The people living in the surrounding area and employee of the company would be motivated towards the protection of the animal.
- Motivation will lead to timely information to the concerned authorities about any threat to wild life or any cases of poaching/hunting.

3.2.4 CHINKARA (*Gazella bennettii*)

The Indian Gazelle (*Gazella bennettii*), also known as Chinkara, is an antelope found in India, Pakistan and Iran. Indian gazelles are characterized by a sandy, yellowish red coloured fur with a pale white ventral region. Facial markings are well developed. They have a dark brown or black forehead and a light face with dark stripes and a noticeable nose spot. Fur colour varies seasonally. In the winters, Indian gazelles sport a grayish sandy colour, and there is a distinct brown band edging the white ventral area of the torso. In summer, the fur is darker brown. Indian Gazelles, *Gazella bennettii*, are primarily found in the northwestern region of India, in the state of Rajasthan. Their distribution extends from the south of the

Krishia River, as far east as in Central India to the north-central region of Iran. 60 to 70% of the global population of Indian gazelles is presently found in western Rajasthan. The Thar Desert of Western India remains a stronghold. Distribution in Pakistan has been greatly reduced by overhunting and although widespread, their populations have become scattered.

ECOLOGY & BEHAVIOR:

Indian gazelles can thrive in a variety of habitats. They inhabit arid areas, including sand deserts, flat plains and hills, dry scrub and light forest. They have been observed in dry deciduous forests, open woodlands, and dry areas such as sand dunes, semi-arid deserts, and arid valleys that have an annual rainfall of 150 to 750 mm. Indian gazelles are facultative drinkers and can withstand relatively long intervals between visits to water points by conserving metabolic water and taking advantage of water found in vegetation. They sometimes raid fields cultivated with rape seed and sorghum in desert regions.

DIET:

Indian gazelles are better adapted to browsing than grazing, but they can consume legumes and grasses in large quantities. Their diet typically consists of grasses, various leaves, crops and fruits such as pumpkins and melons. A majority of their metabolic water intake comes from the vegetation they consume. The brush and trees that make up their diet are found in mountain ranges and deciduous forests, while grasses and other herbaceous plants are found in valleys and agricultural fields. In the arid Thar Desert, Indian gazelles mainly consume four species of herbs: *Crotalaria burhia* (42% of diet), *Ziziphus nummularia* (15%), *Morimus emerginata* (11%), and *Prosopis cineraria* (9%). Indian gazelles eat fruits such as pumpkins and melons and thus act as seed dispersers.

MAJOR THREATS

Indiscriminate hunting has adversely affected gazelles in Afghanistan, Iran and Pakistan (hunted for meat and to a lesser degree for trophies). Habitat loss through overgrazing, conversion to agriculture and industrial development is also a factor.

The primary predators of Indian gazelles are golden jackals (*Canis aureus*), Bengal tigers (*Panthera tigris tigris*), Indian wolves (*Canis lupus pallipes*), Indian leopards (*Panthera pardus fusca*), crested hawk-eagles (*Nisaetus cirrhatus*), village or feral dogs (*Canis lupus*) and, most importantly, humans. Hunting and illegal poaching have greatly reduced population sizes of this species. Indian gazelles use their speed and stamina to evade predators and use their horns for defense.

KNOWN PREDATORS:

Golden jackals (*Canis aureus*); Bengal tigers (*Panthera tigris tigris*); Indian wolves (*Canis lupus pallipes*); Indian leopards (*Panthera pardus fusca*); Crested hawk-eagles (*Nisaetus cirrhatus*); village or feral dogs (*Canis lupus*).

CONSERVATION ACTIONS

The species is fully protected by law in India.

Education and Awareness: This is the most important aspect of wild life conservation. People will be educated regarding the importance of wild life conservation through mass publicity by installing sign-boards, conducting audio visual classes and distributing literature in respective villages in the buffer zone. Experts in the field of wild life conservation will also be invited to deliver talks through slides.

People Participation: With the help of the local people and employees of the Company watch will be kept on the wild life as well as illegal tree felling. Forest and police department will be informed if such incident occurs, to take legal action against the offenders. For this they will be trained for motivation.

Special Staff for the Protection and Anti-poaching: Special Staffs will be deployed by the forest department for patrolling and protection of the fauna and flora under their jurisdiction because the regular staff deployed for this purpose, due to their busy schedule, is unable to perform their work properly. Each of the special staff will be equipped with dress, raincoat, gumboots, sticks and wireless set for communication. Financial burden for the same has been included in financial projection of this report.

Reducing man wildlife conflicts: Unauthorized entry in to forest for illegal grazing, cutting or poaching are the major causes for Man-Wildlife conflicts. These practices will be reduced as much as possible.

Training and Awareness Programme: This is the most important aspect of wild life conservation. People will be educated regarding the importance of wild life conservation through mass publicity by installing sign-boards, conducting audio visual classes and distributing literature in respective villages in the buffer zone. experts in the field of wild life conservation will also be invited to deliver talks through slides.

Sign Boards: Following sign-boards to be displayed are:

WILDLIFE HAS RIGHT TO MOVE THROUGH ROADS
REPTILES CROSSING; DRIVE SLOW
PLANT TREE SAPLINGS WITH YOUR NAME
FIRE DESTROYS BOTH THE PLANTS AND ANIMALS
CAPTURING, HUNTING WILD ANIMALS IS PUNISHABLE OFFENCE
DON'T THROW BURNING OBJECTS
WILDLIFE IS OUR PRECIOUS HERITAGE
INFORM FOREST OFFICER IF WILDLIFE IS IN DISTRESS

3.2.5 BLACK BUCK (*Antelope cervicapra*)

Habitat: Blackbucks are found in wide range of habitat but it attains greatest densities in semi-arid grasslands. The Blackbuck (*Antelope cervicapra*) is native to India and Nepal and earlier occurred across almost the whole of the Indian subcontinent grasslands. Their distribution decreased during the 20th century and they are now nonexistent in wild in Bangladesh and Pakistan. Although blackbuck has disappeared from numerous areas due to habitat destruction for anthropocentric development in India, still they are increasing in many protected areas and areas specially dominated by Vishnoi communities in Rajasthan, Gujarat and Haryana.

Behavior: The blackbucks are active mainly during the day, though activity slows down at noon as days grow hotter toward summer. Blackbucks show extraordinary kind of social organization and behavior. Although the individual wandering male can be seen in isolation, they rarely live in isolation, they are mostly found in herds.

The average group size is 10-30 individuals but in suitable habitats herds having more than 100 individuals can be seen.

Group size varies with availability of forage and type of resources in habitat. The benefit of the large herd is that predator can be spotted faster with very lesser time invested for vigilance individually, thus maximum time can be utilized for foraging activities. A limitation of large group size is the dilution of resources and increase in foraging time. Herd size is generally smaller in summer as compared to monsoon or winter.

Food Habits: Blackbucks are mainly grazer and prefer open areas such as grassland, wasteland and marginal agricultural fields. In summer blackbucks may migrate to long distance for the search of water and food.

Seasonal fodder availability and its quality, the sun elevation during day and temperature of the area are important factors for foraging activity. Blackbucks feed on fresh tender leaves, grass, crops, cereals, vegetables and leaves of shrubs and trees. They forage for a long time, select succulent grasses, and tender shoots of crops and plants which help them to maintain water balance in their bodies.

Blackbucks mainly behave as grazers during monsoon season when grass and other forage availability are very high and some animals spend most of the time as browsers during summer when food availability is scarce. During winter season they behave as mixed feeders. Grasses like *Dichanthium annulatum* are preferred during and after monsoon season while in summer mainly fallen leaves and pods of tree like *Prosopis juliflora* and *Acacia* species meets the food requirements. Pathak *et al.* suggested that oats (*Avena sativa*) and berseem (*Trifolium alexandrinum*) can be used as nutritious feed for blackbucks in captivity.

Status: The blackbuck, which was twice thought to be Extinct due to hunting in the late 1800s and 1920s, has now improved in status. It has moved from the "Near threatened" to "Least Concern" in Red Data Book of IUCN (International Union for Conservation of Nature and Natural Resources). In CITES (Convention of International Trade for Endangered Species of Wild Flora and Fauna) is categorized

in Appendix III. In India, hunting and poaching of blackbuck are prohibited under Schedule I of the Wildlife Protection Act of 1972.

2.3 SCHEDULE-II SPECIES

3.3.1 Jackal (*Canis aureus*):

Population:

The Golden Jackal is fairly common throughout its range. High densities are observed in areas with abundant food and cover. In several parts of India, high densities of low-quality cattle are maintained. Due to religious beliefs, most people do not consume beef, and cattle carcasses are freely available for scavenging.

In India, jackal populations achieve high densities in pastoral areas such as Kutch, Maharashtra, Rajasthan, and Haryana. Based on intensive observations on breeding pack units and radio-collared individuals, jackal densities in the semi-arid Velavadar National Park were estimated between one and two jackals per km² in India.

Based on known density estimates for parts of India and considering that about 19% (i.e., about 637,000 km²) of the geographical area of India has forest cover with jackal populations (and that jackals are also found outside forested habitats), a minimum population estimate of over 80,000 Golden Jackals would not be unreasonable for the Indian sub-continent.

Habitat & Ecology:

Due to their tolerance of dry habitats and their omnivorous diet, the Golden Jackal can live in a wide variety of habitats. These range from the Sahel Desert to the evergreen forests of Myanmar and Thailand. They occupy semi-desert, short to medium grasslands and savannas in Africa; and forested, mangrove, agricultural, rural and semi-urban habitats in India and Bangladesh. Golden Jackals are opportunistic and will venture into human habitation at night to feed on garbage. Jackals have been recorded at elevations of 3,800 m in the Bale Mountains of Ethiopia and are well established around hill stations at 2,000 m in India.

Major Threats:

Over its entire range, except in protected areas like National Parks and Sanctuaries, the jackal population is steadily declining. Traditional land use practices, like livestock

rearing and dry farming that were conducive to the survival of jackals and other wildlife, are being steadily replaced by industrialization and intensive agriculture; wilderness areas and rural landscapes are being rapidly urbanized. Jackal populations adapt to some extent to this change and may persist for a while, but eventually disappear from such areas like other wildlife. There are no other known threats, except for local policies of extirpation and poisoning.

Conservation Action:

Golden jackals are present in all protected areas of India except for those in the high elevation regions of the Himalayas. Thus they have a wide coverage in terms of protected populations. The species is included in CITES Appendix III (in India). Jackals feature on Part II of Schedule II of the Wildlife Protection Act (1972) of India and are afforded the least legal protection (mainly to control trade of pelts and tails). However, no hunting of any wildlife is permitted under the current legal system in India. The golden jackal could be considered as a "species requiring no immediate protection" with caution and knowledge that populations throughout its range are likely declining. Besides being represented in a wide array of protected areas covering several landscapes, no special species targeted conservation efforts have been undertaken. Almost all zoos in India have golden jackals.

3.3.2 Indian Fox (*Vulpus bengalensis*):

Population:

The Indian Fox is endemic to the Indian subcontinent. Although widespread, it occurs at low densities throughout its range, and populations can undergo fluctuations due to prey availability and disease. Due to loss of short grassland-scrub habitat to intensive agriculture, industry and development projects the Indian Fox population is likely to be experiencing a slow decline. However, any decline is unlikely to be sufficient to warrant the listing of the species in a threatened category and the species is currently assessed as Least Concern.

Habitat & Ecology:

The Indian Fox prefers semi-arid, flat to undulating terrain, scrub and grassland habitats where it is easy to hunt and dig dens. It avoids dense forests, steep terrain, tall

grasslands and true deserts. The species is relatively common in areas of low rainfall, where the vegetation is typically scrub, thorn or dry deciduous forests, or short grasslands. In the Indian peninsula, the species is restricted to plains and open scrub forest. Home ranges have been estimated at about 2 km². Diet mostly consists of arthropods, rodents, reptiles, fruits and birds, in that order of occurrence in scats. Pups are born between December and February, but can be as late as March. Short resource rich grassland patches in an agro-pastoral landscape are preferred for denning and pup rearing.

Major Threats:

Although the Indian Fox is widespread, it occurs generally at low densities throughout its range, and populations can undergo major fluctuations due to prey availability and disease (rabies and canine distemper virus have been recorded to cause local population declines in western India). They can tolerate some human disturbance, although with expanding human populations and continued development of grasslands for agricultural and industrial uses, the habitat of the Indian Fox is continuously being depleted. The combination of above factors along with disease and/or natural mortality could potentially cause localized extirpations. In certain states like Gujarat, Maharashtra, and Rajasthan, Indian Fox habitat is widespread with minimal threats, while in other states like Karnataka and Tamil Nadu the habitats of the Indian Fox are under threat.

Conservation Action:

The populations of India are listed on CITES Appendix III. The Indian Wildlife Protection Act (1972 as amended up to 2005) prohibits hunting of all wildlife and lists the Indian Fox in Schedule II. However, no hunting of any wildlife is permitted under the current legal system in India.

Besides being represented in a wide array of protected areas covering several landscapes, no special species targeted conservation efforts have been undertaken. Almost all zoos in India have Indian Fox. In India, the species also occurs in the Desert National Park in Rajasthan; Velavadar Blackbuck National Park, Kachchh Bustard

Sanctuary, Narayan Sarovar Sanctuary in Gujarat; Sholapur Bustard Sanctuary in Maharashtra; Rollapadu Wildlife Sanctuary in Andhra Pradesh as well as several other protected areas.

3.3.3 Jungle Cat (*Felis chaus*):

Population:

Jungle Cat remains probably the most common cat species in South Asia (India, Nepal, Bangladesh), where the majority of the global population occurs and despite likely extensive declines in mainland Southeast Asia, where the species is now extremely scarce and largely restricted to remote lowland deciduous dipterocarp forest.

In India, there is evidence of continued, and likely accelerating, habitat loss and ongoing poaching for both skins and, potentially, as a result of conflict with farmers. The Jungle Cat's preference for habitat is open scrub and grassland. The majority of the suitable Indian habitat is classified as 'wasteland' which legally eases conversion into any other form of uses particularly industrialization and urbanization - the latter has been identified as a particular threat in India given the pace of urbanization of agricultural and unprotected forest areas.

Habitat & Ecology:

The Jungle Cat, despite its name, is not strongly associated with the classic rainforest "jungle" habitat, but rather with wetlands - habitats with water and dense vegetative cover, especially reed swamps, marsh, and littoral and riparian environments - scrubland, and deciduous dipterocarp forest. Water and dense ground cover can be found in a variety of habitats, ranging from desert (where it is found near oases or along riverbeds) to grassland, shrubby woodland and dry deciduous forest, as well as cleared areas in moist forest.

Major Threats:

The biggest threat to Jungle Cat is habitat loss particularly industrialization and urbanization of low intensity agricultural areas and scrubland in the Indian subcontinent. Habitat destruction for agricultural purposes and infrastructure development are also major issues. Unselective trapping, snaring and poisoning around agricultural and settled areas have caused population declines in many areas.

throughout its range. India formerly exported large numbers of Jungle Cat skins before the species came under legal protection (over 300,000 were declared as being held by traders there when export was banned in 1979).

Conservation Action:

The Jungle Cat is listed on CITES Appendix II. It is protected from hunting in some range states (India), but in many it receives no legal protection outside protected areas. The Indian Wildlife Protection Act (1972) prohibits hunting of all wildlife and lists the Indian Fox in Schedule II. However, no hunting of any wildlife is permitted under the current legal system in India. The ecology and status of the Jungle Cat is poorly known.

3.3.4 Common Mongoose (*Herpestes edwardsii*):

Population:

Indian Grey Mongoose is mostly common, often abundant, in suitable habitat throughout its main range, but it is relatively rare in North-east India. One study in central India, where the species is common, found its abundance even decreased moving from human settlement towards undisturbed forests.

Habitat & Ecology:

Although it is a common semi-synanthropic species, the natural history of Indian Grey Mongoose is little studied. It has been recorded in disturbed (even urban) areas, in dry secondary forests, and thorn forests, in central India during 2002-2003, saw it near refuse bins and dumps, scavenging on carrion, and on roads. This species feeds on a wide variety of animal food including insects and snakes.

Major Threats:

Indian Grey Mongoose has no range-wide threats sufficient to drive significant population declines. It is likely that in some areas the levels of harvest are sufficient to reduce local densities. Over recent centuries the species has probably benefited from conversion of closed evergreen forest.

Conservation Action:

The Indian Grey Mongoose is listed on CITES Appendix III by India. It is listed in Schedule II of the Wildlife (Protection) Act (1972) in India. In central India people

consider the mongoose to be sacred and thus it is not killed there. This species is found in numerous protected areas. Populations are not quantitatively monitored in any country; but the species remains widely and commonly seen in human-dominated areas, indicating a lack of significant ongoing threats and no need for separate conservation action.

3.3.5 Langur (*Presbytis entellus*):

Population:

The total population of this species is unknown. Most of the populations occupy human-dominated landscapes, with very few actually occurring in forested areas. Conflict with humans is a major cause of concern and predicted declines are based on this.

Habitat & Ecology:

Gray langurs are diurnal. They sleep during the night in trees but also on man-made structures like towers and electric poles when in human settlements. When resting in trees, they generally prefer the highest branches.

Ungulates like bovine and deer will eat food dropped by foraging langurs. Langurs are preyed upon by leopards, dholes and tigers. Wolves, jackals and pythons may also prey on langurs.

Major Threats:

Major threats for this species are: intensive agriculture, habitat loss, man-animal conflict, and fires. Hunting for food by newly settled human populations in Andhra Pradesh and Orissa is very rampant and many populations are affected locally.

Conservation Action:

The Jungle Cat is listed on CITES Appendix II. Langur feature on Part II of Schedule II of the Wildlife Protection Act (1972) of India and are afforded the least legal protection. However, no hunting of any wildlife is permitted under the current legal system in India.

3.3.6 Monkey (*Macaca mulatta*):

Population:

It occurs to the north of the Krishna River in central and eastern India and to the north of the lower Tapti River in western India, north into Afghanistan, Nepal, Sikkim, Bhutan, and northeast into China. There are introduced populations (mostly not mapped) in areas within this region as well as outside it, for instance south of the Krishna River in India.

Habitat & Ecology:

This species is diurnal and omnivorous, and alternatively arboreal and terrestrial. It resides in a range of habitats, including temperate coniferous, moist and dry deciduous, bamboo, and mixed forests, mangroves, scrub, rainforest, and around human habitations and developments, including cultivated areas, temples, and roadsides.

Macaca mulatta lives in a wide range of habitats, and shows a great deal of adaptability. Some populations live in flatlands, while others, in northern India and Pakistan, live in the Himalayas at elevations up to 3,000 m. These primates are able to acclimate to a variety of climatic extremes, from the hot, dry temperatures found in deserts, to cold winter temperatures which fall to well below the freezing point.

In addition to living in the wilderness, some populations of *M. mulatta* have become accustomed to living alongside humans. Occasionally, small groups can be found living in the densely populated urban areas of northern India. Groups of rhesus monkeys that become used to living in areas occupied by people usually search out other human-populated areas if people attempt to relocate them away from civilization.

Major Threats:

This species is generally unthreatened, though its original habitat is increasingly being lost to development. While *M. mulatta* exists easily around humans, the increasing level of cohabitation has been associated with waning levels of human tolerance for the animals. Confiscation for laboratory testing is a mostly localized threat, but it is considerable in certain areas. Capture and release of laboratory and "problem

monkeys* from rural and urban areas into natural forests is a major threat to wild macaques.

Conservation Action:

The species is included in CITES Appendix II (in India). Monkeys feature on Part II of Schedule II of the Wildlife Protection Act (1972) of India and are afforded the least legal protection. However, no hunting of any wildlife is permitted under the current legal system in India.

3.3.7 Spiny Tailed Lizard (*Saara hardwickii*):

Description:

Saara hardwickii, commonly known as Hardwicke's spiny-tailed lizard or the Indian spiny-tailed lizard is a species of agamid lizard found patchily distributed in the Thar desert, Kutch, and surrounding arid zones in India and Pakistan. These lizards are mainly herbivorous and live in numbers in some areas. These lizards are found in loose clusters and attract raptors and predators. They are also hunted by local peoples in the belief that the fat extracted from it is an aphrodisiac.

Habitat & Ecology:

Generally found in firm ground rather than pure sand dunes, Hardwicke's spiny-tailed lizard is often found living in colonies, sometimes on the outskirts of villages. It prefers elevated patches of land especially in Kutch where it is invariably found on isolated patches of high ground (called Bets) above the monsoon water level.

The lizard basks close to the entrance of its burrow. It is very alert and smoothly slides into its burrow at the first hint of danger. The spiny-tailed hibernates through the winter and emerges in spring. By the time it is ready for hibernation, the lizard puts on long strips of fat on each side of the backbone which presumably enables it to survive the long winter months.

Major Threat:

Projected agricultural growth would cause considerable declines of lizard (>20%) populations. In India, these lizards are caught for their meat, and also for medicines.

Conservation Action:

The species is included in CITES Appendix II (in India). Spiny tailed lizard feature on Part II of Schedule II of the Wildlife Protection Act (1972) of India and are afforded the least legal protection. However, no hunting of any wildlife is permitted under the current legal system in India.

3.3.8 Common Rat Snake (*Ptyas mucosus*):

Description:

Ptyas mucosus, commonly known as the oriental ratsnake, Indian rat snake, 'darash' or dhaman, is a common species of colubrid snake found in parts of South and Southeast Asia. Dhamans are large snakes, growing to 2 m (6.6 ft) and occasionally even to 3 m (9.8 ft). Their colour varies from pale browns in dry regions to nearly black in moist forest areas. Dhamans are diurnal, semi-arboreal, non-venomous, and fast-moving. Dhamans eat a variety of prey and are frequently found in urban areas where rodents thrive.

Habitat & Ecology:

Dhamans, though harmless to humans, are fast-moving, excitable snakes. In captivity individuals remain highly territorial and may continue to defend their turf aggressively, attempting to startle or strike at passing objects. Dhamans are diurnal and semi-arboreal. They inhabit forest floors, wetlands, rice paddies, farmland, and suburban areas where they prey upon small reptiles, amphibians, birds, and mammals. Adults, unusually for a colubrid, prefer to subdue their prey by sitting on it rather than by constricting, using body weight to weaken prey.

3.3.9 Russell's Viper (*Daboia russelii*):

Description:

Russell's viper (*Daboia russelii*) is a species of venomous snake in the family Viperidae. *Daboia* is a monotypic genus of venomous Old World vipers. The single member species, *D. russelii*, is found in Asia throughout the Indian subcontinent, much of Southeast Asia, southern China and Taiwan. The species was named in honor of Patrick Russell (1726–1805), a Scottish herpetologist who first described many of India's snakes. Apart from being a member of the big four snakes in India, *Daboia* is

also one of the genera responsible for causing the most snakebite incidents and deaths among all venomous snakes on account of many factors, such as their wide distribution, generally aggressive demeanor, and frequent occurrence in highly populated areas.

Habitat & Ecology:

This species is not restricted to any particular habitat, and while it is mostly found in open, grassy or bushy areas it may also occur in secondary forests (scrub jungles), forested plantations and farmland. It avoids dense forests and is most common in plains, coastal lowlands and hills. This species is often found in highly urbanized areas and settlements in the countryside, where it feeds on rodents' commensal with humans.

Major Threat:

Road kill mortality, killing due to its venom potency and aggression on encounter with humans on field are two most commonly known threats. Illegal venom trade for various use including medical and research use is regularly noticed in parts of its range. In many parts of country, it is exploited for skin and edible use.

Conservation Action:

The species is included in CITES Appendix II (in India). Russell's viper feature on Part II of Schedule II of the Wildlife Protection Act (1972) of India and are afforded the least legal protection. However, no hunting of any wildlife is permitted under the current legal system in India.

3.3.10 Indian cobra (*Naja naja*):

Description:

The Indian cobra (*Naja naja*) also known as the spectacled cobra, Asian cobra, or binocellate cobra is a species of the genus *Naja* found in the India, Pakistan, Bangladesh, Sri Lanka, Nepal, and Bhutan, and a member of the "big four" species that inflict the most snakebites on humans in India. This snake is revered in Indian mythology and culture, and is often seen with snake charmers. It is now protected in India under the *Indian Wildlife Protection Act* (1972).

Habitat & Ecology:

The Indian cobra is native to the Indian subcontinent and can be found throughout India, Pakistan, Sri Lanka, Bangladesh, and southern Nepal. In India, it may or may not occur in the state of Assam, some parts of Kashmir, and it does not occur in high altitudes of over 2,000 metres (6,600 ft) and extreme desert regions.

The Indian Cobra inhabits a wide range of habitats throughout its geographical range. It can be found in dense or open forests, plains, agricultural lands (rice paddy fields, wheat crops), rocky terrain, wetlands, and it can even be found in heavily populated urban areas such as villages and city outskirts. This species is absent from true desert regions. The Indian cobra is often found in the vicinity of water. Preferred hiding locations are holes in embankments, tree hollows, termite mounds, rock piles and small mammal dens.

Major Threat:

The Indian cobra is not considered an endangered species, but there are some threats to the species. These include killing them out of fear or for human consumption and road kill. The Indian cobra is also the snake used by Indian snake charmers. Its toxic venom is also necessary in the production of anti-venom and other research including pain-killers and anti-cancer drugs, some of it harvested illegally in regions of India and other countries within its range.

They are also hunted for their skin bearing the distinctive hood markings which is then used in the leather industry. The Indian cobra is one of the many venomous snakes exploited for making traditional Chinese medicines and also snake vine. The species is listed in CITES because it closely resembles other threatened species. The species is also protected in India under the Indian Wildlife Protection Act (1972).

CHAPTER-4: ACTION PLAN AND FINANCIAL PROJECTION FOR CONSERVATION PLAN

4.1 Introduction

Protected areas and threatened species could most effectively be safeguarded if local people considered it in their own interest to do so. Working with rather than against local people has become a major working principle for IUCN. For the protection of habitat sensitive wildlife and other living form need proper action plan and budgetary allocation which will be a roadmap for the success of conservation scheme.

4.2 Conservation Plan for fauna requires knowledge on:

- 1 Home range of the animal
- 2 Territorial requirement of the animal
- 3 Deciding the number of animals to be conserved and accordingly evaluating the carrying capacity of the habitat
- 4 Conservation is aimed at single species or multiple species
- 5 Conservation is proposed in a managed ecosystem or an un-managed, natural ecosystem.
- 6 However, very little knowledge exists on the above parameters of most of the animals.

4.3 Reasons for decline of wildlife:

Several reasons for the decline of wild life and methods for their conservation are proposed. However, the best method for the conservation of wild life is related directly to the maintenance of ecosystems in their natural condition, allowing their natural development and protection to the wildlife and their habitat. Both these phenomena (ecosystem development and habitat protection) are related to anthropogenic factors. Some of the important anthropogenic factors are listed below:

- I. Habitat fragmentation and destruction
- II. Man-animal conflict
- III. Forest fire
- IV. Poaching
- V. Stake-holders dependence on forest resources

VI. Creating awareness amongst forest stake holders

To the above-mentioned factors may be added a non-anthropogenic but important factor:

VII. Water scarcity

4.4 Action Plan

4.4.1 Non-Formal Education

Conservation education and awareness would be imparted both at the formal and non-formal levels. At the formal level, it would be given at school, colleges and university levels. Formal education, in spite of all the curriculum development and introduction of the study of ecology, wildlife and conservation at the school and college levels, however, largely remains text book and examination oriented. Because of the situation, non-formal education becomes all the more necessary for creating the right kind of awareness and attitude among people at all levels- children, teenagers, adults, family groups, teachers, administrators, politicians and policymakers. To achieve this some local tours of school and college students would be arranged to nearby National Parks.

4.2.2 Institutional Infrastructure

The prime requisite for building up an understanding and awareness about wildlife and conservation is to develop an appreciation, respect and love for nature. Most people lack the curiosity to know even the names of animals and plants they come across in their day-to-day life. Development of an inquisitive mind, a keen sense of observation and curiosity about the fauna and flora are, therefore, very important. Concern for conservation can only emanate from a love for nature and awareness about the interdependence of all species of animals and plants, including the man. To arouse curiosity about the wildlife in the young mind some quiz and essay competitions would be arranged in the schools and colleges of the buffer zone and some nearby areas.

4.2.3 Indian Tradition of Conservation

The theme of conservation, wildlife and reverence for life is reflected in some of the exquisite images in Indian art paintings, sculpture, architecture and decorative art. The most wide-ranging wild life imagery is found in Indian miniature paintings. Early literatures like the *Panchatantra* and *Hitopadesha* contain animal fables that have been

used to preach both wisdom and morals. The long term tradition and abiding faith in conservation of nature is vividly seen in recent times also like the Chipko and Appiko movements. These conservation themes would be popularized through pamphlets and posters.

4.2.4 Role of the Individual

Each individual should develop a personal ethic towards nature and wildlife which could pave the way for commitment and conviction not to destroy wildlife particularly that of not considering hunting as a sport, nor to use products made out of skins or other parts of endangered animals. Unless these products are boycotted by their users, the clandestine killing and poaching of wildlife at the hands of unscrupulous people would continue. Everyone can play important role in spreading the message of conservation among their friends, family and community at the large.

4.2.5 Eco-Development Works

People in and around the forest area generally are hostile against the forest department and its staff, because they are prevented from taking out timber and other forest products illegally. Such antagonistic behaviour arises mainly because little effort is made to meet their genuine demands either from outside the forest area or from the forest area but in a sustainable manner. Regular interaction with them with agreement for sustainable utilization of forest resources combined with some incentives can completely change their indifferent or even un-concerned attitude to conservative attitude.

4.2.6 Checks and control on the Movement of Vehicle

Due to movement of vehicles, animals might get injured. For this reason, speed limit of vehicles would be fixed and operators would be educated and advised regularly to drive vehicle safely and slowly. All operators would also be advised to stop the vehicle on seeing such animals and let it go away before moving the vehicle further.

4.2.7 Pressure horn

Noise generated by pressure horn disturbs the wild life and forces them to leave the place. No pressure horn would be fixed on vehicle plying in these industries. All the drivers would be advised to make minimum use of horn while working in industry.

4.2.8 Vehicles head lights

Efforts would be made to cover the lights suitably with paint so that strong beam of head light is not formed and light falls in front of the vehicle only.

4.2.9 People Participation

With the help of the local people and employees of the Company, watch would be kept on the wild life as well as illegal tree felling. A Forest and a police department would be informed if such incident occurs, to take legal action against the offenders. For this they would be trained for motivation.

4.2.10 Encourage local villagers to grow trees on their on their field bounds/court yards

In consultation with the Forest Department, the company would provide some finance, to grow saplings of tree species, having importance for wood, small timber and fuel wood to distribute to the villagers. Bamboo would be another important species with a lot of environmental and economic value. This no doubt would help reduce dependence of people on RF forest; as a result the ecological condition of the area would improve so the wild life would be attracted to this area.

4.2.11 Reducing Environmental Pollution

To keep the environment free from smoke, cooking gas cylinders would be provided to all the plant workers. To control pollution from plant measure outlined in EMP would be followed.

4.2.12 Provide employment to the villagers

On the basis of their suitability, jobs in plant would be provided to the nearby villagers. As a result, their economic condition would improve. This would keep them busy so that they would not be tempted/compelled to cause destruction to forest which would help improve the status of wild life in the zone of influence of mining.

4.3 Reclamation and Habitat Restoration

4.3.1 Green Belt Development

A green belt will be developed along the boundary of the haul road beside the proposed plant. The area for green belt plantation consists of undisturbed soil; hence plantation can be made in any garden or along the road. Green belt will be erected not from biodiversity

or conservation point of view, but is basically developed as a screen to check the spread of dust pollution. A green belt, 2m in width will be developed on both sides of the road and at the periphery of the project site. Green belt plantation will be started with the onset of the operation of plant and will be completed within the time.

Following precaution will be taken:

- Seedlings of only local species, suitable for green belt plantation will be considered.
- All the representative plant species of the region are found to grow in and around the study site.
- Care will be provided against grazing and browsing.
- Timely watering during the initial stages of survival and provisions for the allocation of funds will be made as well.
- During the running of plant, flora will be regenerated in different stages and the area having matured afforestation will be properly fenced so as to avoid cutting, browsing and hacking of branches and pruning of trees.
- Awareness will be created among villagers residing on the periphery of the plant regarding the use of plantations.
- Plantation of indigenous species, fodder and fruit bearing tree species which can also act as habitats for wild life will be carried out.
- Plantation of fruits bearing trees is attracting wildlife population.

4.3.2 Green Belt in Haul Road

A green belt, 2-3 m in width will be developed around the haul / motorable road.

- Green belt plantation will be started with the onset of the industry and will be completed within the time.
- Seedlings of native plants will be procured for plantation.
- Green belt will be watered through tanker.
- Compost for plantation will be obtained through vermin-composting.
- Green belt plantation will be protected properly. The saplings will be protected with tree guards.
- However, only local species will be used in the plantation.
- Selection of plants for green belt plantation will be made on following criteria:

- The plant should be a fast growing species
- It should have deep root system
- Should bear the leaves for a longer period
- Should be a local species
- Should have good survival rate.

With these above considerations following, local plant species are being taken for green belt plantation.

4.3.3 Plantation in the Buffer zone

Trees are being planted in the buffer zone also. This plantation will be done at selected places only and only local species will be used in the plantation. Plantation of such tree species is ensuring provision for food to the herbivores, which in turn would be the food source for the carnivores. Water, particularly during drier seasons, becomes the most important factor to all types of wild animals including the mammals, birds and reptiles. If water is available safely, then all other factors become secondary for the presence and survival of the wild life in any forested area. Places suitable for mini watersheds will be identified in the core as well as in the buffer zone to store rainwater. Further, to make water available at all the times, throughout the year, some of these water holes will be recharged through artificial means. Proper slope will be given to approach these water sources so that the wild animals would be able to drink water without any difficulty. Proper cover through vegetation or any other type of even artificial cover will be developed near these water sources so that the prey species would be able to hide themselves from the predators, at the time of approaching the water sources. To attract the birds, plants yielding food to the birds will be planted on priority basis. If water and food are available to the birds without any anthropogenic disturbances the area can become an ideal place for bird watching.

4.3.4 Plantation Programme

The tree plantation will be made all along the industry approach roads surrounding the site services and road sides.

The survival rate will be 80%. The dead plants will be replaced by fresh plants in next year and 20% as replacement from second year. From first to third year 1.44 hectare area will

be planted within the plant area and from third year onwards plantation will be carried out in the nearby school, hospital, police station, community center and other public utility places.

The total project area is 21.78 Ha, out of which, 33% should be maintained under greenbelt, i.e., 7.21 Ha should be under green cover within plant boundary. As per MoEF&CC Guidelines, number of plants per hectare within the green belt should not be less than 2000. In line with such guidelines, the number of plants has been calculated as 14380 for 7.21 Ha area. Based on the local land quality and climatic conditions, around 20% mortality in the plantation has been observed. The same number of plants is being replaced annually to compensate the mortality.

As per the guideline, local mortality rate has been calculated and given in the table below.

Table: 4.1 Schedule of plantation for the five year

S.No.	Year of Plantation	Target of Plantation	Assumed survival	Replenishment of Casualties	Total
1.	I Yr. (1.44 Ha)	2880	2304	.	2880
2.	II Yr. (1.44 Ha)	2880	2304	576	3456
3.	III Yr. (1.44 Ha)	2880	2304	576	3456
4.	IV Yr. (1.44 Ha)	2880	2304	576	3456
5.	V Yr. (1.44 Ha)	2880	2304	576	3456

Irrigation and proper protection measures will be provided by project proponent in order to sustain the plantation.

4.4 Financial Projection

Rs. 50.00 Lakh has been allocated towards conservation of scheduled fauna in the area for the implementation of conservation proposal. An effective conservation plan will help in proper management of habitat of such ecologically and nationally significant species. Implementation of conservation plan should be step by step in described format. M/s Wonder Cement Ltd. will allocate budget in assistance with the forest department, Jhajjar, Haryana. The year wise budgetary allocation for all scheduled fauna is listed table below.



Expenditure for Conservation Plan in 25 Years (Amount in 450 Lakhs)

SN	Proposed Conservation Activity	Capital Cost (in Lakh)
1	Awareness generation of local people, labour, different age group students, distribution of posters, pamphlets, fixing signage and organization awareness camps etc. to educate farmers against extensive use of pesticides and Insecticides in agriculture fields.	40
2	Habitat development work such as Development in the areas for the herbivores, water requirement of wild animals during lean season construction of Water guzzlers, ponds in the area and their regular filling with water, Removal of invasive species like congress grass & Mesquite from WLS Nahar	80
3	Excavation of WLS Nahar lime to time as needed , Beautification work for WLS Nahar to attract more tourists and wildlife, Development of WLS Nahar	80
4	Green Development Work in the areas by planting suitable species as per the local conditions and shrubs which are friendly to Wildlife& birds. Execution of activities for enrichment of Ecosystem and improvement of Environment	75
5	Rescue operation for wild animals	20
6	Development of outsourcing staff in Rewari from local community as per requirement	25
7	Development of water Bodies and execution of other Soil & Moisture Conservation activities in areas in order to maintain & improve ground water regime	60
8	Regular Maintenance of Wildlife Sanctuary Nahar	25
9	Purchases of Rescue Item, Rescue Vehicles	15
10	Development of green area on the site by planting suitable species as per the local conditions and shrubs which are friendly to birds & installation of Rain Water Harvesting System within its premises so that the rain water could be utilized to improve the water table in and around the project site	30 (Expenditure will be made by the applicants on the project site)
Total		450


Shri. Singh

Year wise funds to be deposited by the user agency to Divisional Wildlife officer, Gurugram, Haryana

Years	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Amount in Lakhs	10	15	15	15	15	15	15	15	15	15	20	20	20	20	20	20	20	20	20	20
Years	21	22	23	24	25															
Amount in Lakhs	20	20	20	20	25															

P. Singh

Chapter-5: CONCLUSION AND RECOMMENDATION

The study area comprises of Jhajjar district of Haryana State. The current land use study reveals that the study area has majority of agricultural land & followed by scattered plantation (26.791%).

Some of the reported fauna was given protection by the Indian Wild Life (Protection) Act, 1972 by including them in different schedules. The conservation plan has been prepared for the protection of scheduled -I fauna on the basis of habitat improvement way of conservation to facilitate the existing wildlife in terms of food shelter and water requirement for the fulfillment of the aim of this conservation plan.

The baseline study was conducted for the evaluation of the floral and faunal biodiversity of the terrestrial environment of the study area (10 Km radius from the industry area) and it comprises of total 85 plant species were enlisted out of which 45 tree species, 10 Herbs, 17 Shrubs and 3 climber species were encountered during the present survey within the study area which facilitate 60 faunal species. Among the faunal groups 16 species of mammals, 28 species of birds, 11 species of herpeto-fauna and 5 species of butterflies were reported. Total Five species of fauna are documented which belongs to schedule-I and 10 species from Schedule-II as per Wildlife Protection Act, 1972. Hence, conservation Plan has been prepared for the same.



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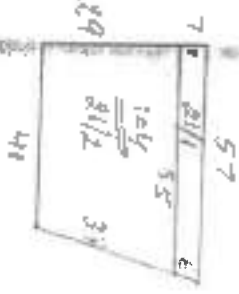
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संज्ञा ४१

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W. J. Anderson
25/7/2019

$$\frac{F(\omega)}{\omega^2} = \frac{1}{\omega^2}$$

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$$D_1 = \frac{1}{1 + \frac{1}{2}}$$

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$\frac{d}{dt}$

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Mr. Andrew - 4/20/19

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अध्यादेश

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अधिसूचना

नई दिल्ली, 1 जून, 2015

क्र.सं. 1449(अ)—निम्नलिखित प्रारूप अधिसूचना, जिसे केन्द्रीय सरकार, पर्यावरण (संरक्षण) अधिनियम, 1986 (1986 का 29) की धारा 3 की उपधारा (2) के खंड (v) और खंड (xiv) तथा उपधारा (3) के साथ पठित उपधारा (1) द्वारा प्रदान किये गये अधिकारों का प्रयोग करते हुए, जारी करने का इस्तेमाल करता है, पर्यावरण (संरक्षण) नियम, 1986 के नियम 5 के उपनियम (3) की अपेक्षाओं के अनुसार, जनसंख्या की जांच के लिए प्रकाशित की जाती है, जिसके अन्तर्गत प्रभावित होने की संभावना है; और यह सूचना दी जाती है कि उक्त प्रारूप अधिसूचना पर, उक्त तरीके से, जिसके इस अधिसूचना वाले भारत के राज्य की परिधि के अन्तर्गत पर्यावरण को उपलब्ध करा दी जाती है, साथ ही उसकी अधिकारी की समिति पर या उसके अध्यक्ष के द्वारा किया जाएगा,

2. कि कोई व्यक्ति, जो प्रारूप अधिसूचना में अंतर्निहित प्रस्तावों के अन्तर्गत में कोई व्यक्ति या व्यक्ति को अंतर्निहित है, इस प्रकार कि वह व्यक्ति के अन्तर्गत, केन्द्रीय सरकार द्वारा विचार किए जाने के लिए, लक्ष्य या सुझाव सचिव, पर्यावरण और जलवायु परिवर्तन मंत्रालय, इस पर्यावरण मंत्रालय और राज्य सरकार, नई दिल्ली, के द्वारा जारी की गई है, पर्यावरण मंत्रालय के द्वारा जारी की गई है।

अधिसूचना

गोहर वन्यजीव अभयारण्य, हरियाणा राज्य के रेवाड़ी जिले की सीमा पर लगभग 211 हेक्टेयर का एक आरक्षित वन है और यह राष्ट्रीय राजधानी क्षेत्र का एक भाग है तथा इसमें कृष्ण सार हिरण, सियार, सोमडी, ग्राह और ऐसे अन्य छोटे पशु की एक अच्छी संख्या के निवास का क्षेत्र है।

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(1)

और, माहर वन्यजीव अभयारण्य में प्रयोज्य जैसे नीमलाय, सिंघार, जंगली बिल्ली, मेढर, लालकान, कोबरा, रेंगेल, बाइल, रेंड सरी, मयूर, इंडियन रॉस्टर, उल्लू, सुग्गा, धार आदि महत्वपूर्ण हैं ;

और, माहर वन्यजीव अभयारण्य में वनस्पतिजल जैसे रौंदा, कीकर, खैरी, गूलर, पीतल, मल्ल, योफन, पमपर, किंनोटा, कलीस, हीस, आकास बेत, कचरी, मोला संती, दुधौ आदि महत्वपूर्ण हैं ;

और, उक्त पारिस्थितिकीय और पर्यावरणीय दृष्टि से पारिस्थितिकीय संवेदी जोन के रूप में माहर वन्यजीव अभयारण्य के संरक्षित क्षेत्र के चारों ओर के क्षेत्र को, जो इस अधिसूचना के पैरा 1 में विनिर्दिष्ट विस्तार और सीमाओं के क्षेत्र को संरक्षित और सुरक्षित करना आवश्यक है तथा उक्त पारिस्थितिकीय संवेदी जोन में उद्योगों के प्रचालन या प्रसंस्करण या उद्योगों के वर्गों का प्रचालन और प्रसंस्करण करने को प्रतिषिद्ध करना आवश्यक है ;

अतः, अब, केन्द्रीय सरकार, पर्यावरण (संरक्षण) नियम, 1986 के नियम 5 के उपनियम (3) और पर्यावरण (संरक्षण) अधिनियम, 1986 (1986 का 29) की धारा 3 की उपधारा (2) के खंड (v) और खंड (vi) के साथ पठित और उपधारा (1) द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए, हरियाणा राज्य में माहर वन्यजीव अभयारण्य की सीमा से 100 मीटर तक के विस्तारित क्षेत्र को माहर वन्यजीव अभयारण्य पारिस्थितिकीय संवेदी जोन (जिसे इसमें इसके पश्चात् पारिस्थितिकीय संवेदी जोन कहा गया है) के रूप में अधिसूचित करती है, जिसका विवरण निम्नांकित है, अर्थात् :-

1. पारिस्थितिक संवेदी जोन का विस्तार और उसकी सीमाएं—(1) पारिस्थितिक संवेदी जोन 94 हेक्टेयर के क्षेत्र में समाविष्ट माहर वन्यजीव अभयारण्य के संरक्षित क्षेत्र की सीमा के चारों ओर 100 मीटर तक विस्तारित होगा ।

(2) पारिस्थितिक संवेदी जोन पूर्व-उत्तर (उपाबंध 1 मानचित्र के बिन्दु सं. 3) की ओर $28^{\circ}24'51.600''$ उत्तर अक्षांश और $76^{\circ}24'40.650''$ पूर्व देशान्तर ; पश्चिम (उपाबंध 1 मानचित्र के बिन्दु सं. 8) की ओर $28^{\circ}24'44.387''$ उत्तर अक्षांश तथा $76^{\circ}23'57.205''$ पूर्व देशान्तर ; उत्तर (उपाबंध 1 मानचित्र के बिन्दु सं. 2) की ओर $28^{\circ}24'59.856''$ उत्तर अक्षांश और $76^{\circ}24'20.555''$ पूर्व देशान्तर और दक्षिण की ओर (उपाबंध 1 मानचित्र के बिन्दु सं. 6) की ओर $28^{\circ}24'35.133''$ उत्तर अक्षांश तथा $76^{\circ}24'28.218''$ पूर्व देशान्तर से घिरा हुआ है ।

(3) अक्षांश और देशान्तर के साथ पारिस्थितिक संवेदी जोन की सीमा का मानचित्र में उल्लेख 1 के रूप में दिया गया है ।

(4) पारिस्थितिक संवेदी जोन का सम्बन्धन उनके अक्षांश और देशान्तर सहित उपाबंध 1 के साथ है ।

2. पारिस्थितिक संवेदी जोन के लिए आर्थिक महायोजना - (1) राज्य सरकार, पारिस्थितिक संवेदी जोन के प्रयोजन के लिए उपाबंध 1 की इस अधिसूचना के अधिनियम के तहत से दी गई की अवधि के भीतर स्थानीय व्यक्तियों के परामर्श में, इस आर्थिक महायोजना के सम्बन्ध में आर्थिक महायोजना तैयार करेगी ।

(2) आर्थिक महायोजना राज्य सरकार में सक्षम प्राधिकारी द्वारा अनुमोदित होगी ।

(3) पारिस्थितिक संवेदी जोन के लिए आर्थिक महायोजना इस अधिसूचना में विनिर्दिष्ट रूप में पेशी गिते में राज्य सरकार तथा सुसंगत केंद्रीय और राज्य विधियों के सामंजस्य में भी तथा केंद्रीय सरकार द्वारा जारी मार्गनिर्देश, यदि कोई हों, द्वारा तैयार होगी ।

(4) आंचलिक महायोजना, इसमें पर्यावरणीय और पारिस्थितिकी विचारों को समाविष्ट करने के लिए निम्नलिखित सभी संबंध राज्य सरकार के विभागों के परामर्श से तैयार होंगे, अर्थात्:-

- (i) पर्यावरण ;
- (ii) वन ;
- (iii) नगर विकास ;
- (iv) पर्यटन ;
- (v) नगरपालिका ;
- (vi) राजस्व ;
- (vii) कृषि ; और
- (viii) हरियाणा राज्य प्रदूषण नियंत्रण बोर्ड ।

(5) आंचलिक महायोजना अनुमोदित विद्यमान मू-उपयोग, अवसंरचनात्मक और क्रियाकलापों पर संबंधित नियंत्रण अधिरोपित नहीं करेगी जब तक कि इस अधिसूचना में और आंचलिक महायोजना में सभी अवसंरचना और अधिक प्रभावी और पारिस्थितिकीय अनुकूल क्रियाकलाप वस्तु इस प्रकार विनिर्दिष्ट न हों ।

(6) आंचलिक महायोजना में अनावश्यकदित क्षेत्रों के जीर्णोद्धार, विद्यमान जल निकासों के संरक्षण, अस्वास्थ्य के प्रबंधन, जल-संभरी के प्रबंधन, भूतल जल के प्रबंधन, मृदा और नदी संरक्षण, स्थानीय समुदायों की आवश्यकताओं तथा पारिस्थितिकी और पर्यावरण से संबंधित ऐसे अन्य पहलू, जिन पर ध्यान देना आवश्यक है, के लिए उपबंध लेंगे ।

(7) आंचलिक महायोजना सभी विद्यमान पूजा स्थलों, ग्रामी और नगरीय बंदोबस्तों, बनों के प्रकट और किस्मों, कृषि क्षेत्रों, उपजाऊ भूमि, हरित क्षेत्र जैसे उद्यान और उन्नी प्रकार के स्थान, उद्यान कृषि क्षेत्र, मनोरोधन, झीलें और अन्य जल निकायों का अभ्यवेदन करेगी ।

(8) आंचलिक महायोजना पारिस्थितिक संवेदी जल में विकास को पारिस्थितिक अनुकूल विकास और स्थानीय समुदायों की जीवनोपार्जन को सुनिश्चित करते हुए विनियमित होगी ।

3. राज्य सरकार द्वारा किए जाने वाले उपाय- राज्य सरकार इस अधिसूचना के उपबंधों को प्रभावी बनाने के लिए निम्नलिखित उपाय करेगी, अर्थात् :-

(1) मू-उपयोग - पारिस्थितिक संवेदी जल में आनीद-बनोद के प्रबंधन के लिए विनियमित किए गए हैं वन, उद्यान-कृषि क्षेत्र, कृषि क्षेत्र, पार्क और खुले स्थलों का पारिस्थितिक और आनुवंशिक संबंधित क्रियाकलापों के लिए उपयोग या संप्रसारित नहीं होगा ।

परंतु पारिस्थितिक संवेदी जल के भीतर कृषि भूमि का संरक्षण, मशीनरी खनिजों की विनिर्माण पर और राज्य सरकार के पूर्व अनुमोदन से, स्थानीय निवासियों की आवश्यकताओं को पूरा करने के लिए और पैर 4 की प्रकृति के संबंध में के आनीद-बनोद और पैर 4 की प्रकृति के संबंध में के आनीद-बनोद के समान रूप से क्रियाकलापों को पूरा करने के लिए अनुमोदित होंगे, अर्थात् :-

- (i) प्रदूषण नियंत्रण के कारण होने वाले मृदा उपयोग ;
- (ii) वन जल संचयन और
- (iii) कुटीर उद्योग, जिसके अंतर्गत ग्रामीण उद्योग भी हैं ।

परंतु यह भी कि राज्य सरकार के पूर्व अनुमोदन और संविधान के अनुच्छेद 244 का तत्काल प्रवृत्त विधि के उपबंधों के अनुपालन के बिना, जिसके अंतर्गत अनुसूचित जनजाति और अन्य पदस्थता का निर्वाही (जो अधिकारों की मान्यता) अधिनियम, 2006 (2007 का 2) की है, वाणिज्यिक या उद्योग विभाग नियंत्रणों के लिए जनजातीय भूमि को उपयोग अनुमति नहीं होगा :

फसंतु यह और भी कि पारिस्थितिक संवेदी जल के अंतर भू-अभिलेखों में उपसंकेत कोई छुटि
मंजीदरी समिति के विचार प्राप्त करने के परचम राज्य सरकार द्वारा प्रत्येक मास में एक बार संशोधित
होगी और उक्त छुटि के संशोधन की भारत सरकार के पर्यवेक्षण, मन और तलवायु परिवर्तन संवालय की
सुचना देनी होगी ।

परंतु यह और भी कि उपर्युक्त बुद्धि का संकोचन में इस उप पैरा के अधीन तथा उपरोक्त के सिवाय किसी भी दशा में भू-उपयोग का परिवर्तन सम्मिलित नहीं होगा।

परन्तु यह और भी कि जिससे हरित क्षेत्र में जैसे वन क्षेत्र, कृषि क्षेत्र आदि में कोई पारिजातिक बदौली नहीं होगी और अनपेक्षित या अतः उत्पादक कृषि क्षेत्रों में पुनः वनीकरण करने के प्रयत्न किए जाएंगे।

प्राकृतिक श्रोतों - अनातिक महाभोजन में सभी प्राकृतिक श्रोतों की पहचान की जाएगी और उनके संरक्षण और पुनरुद्भूतकरण के लिए योजना सम्मिलित होगी और राज्य सरकार द्वारा ऐसे क्षेत्रों पर जो उनके निम्न विकास कियाकलाप प्रतिनिधि करने के लिए ऐसी रणनीति में भागीदारी तैयार किए जायेंगे ।

(क) पर्यटन - (क) पारिस्थितिक संवेदी जीन के भीतर पर्यटन संबंधी क्रियाकलाप, जो आंचयिक मध्ययोजना के तहत रूप में निम्नलिखित रूप में होंगे।

(ख) पर्यटन मन्त्रालय तथा पर्यटन विभाग, हरियाणा सरकार द्वाारा राजस्व और वन विभाग, हरियाणा सरकार के परामर्श से तैयार होगी।

(अ) पर्यटन संबंधी विज्ञापनाप निम्नलिखित के अधीन विनियमित होने, अर्थात् :-

(i) पारिस्थितिक संवेदी जीवों के भीतर सभी नए पर्यटन क्रियाकलापों का विस्तृत पर्यवेक्षण क्रियाकलापों का विस्तार राष्ट्रीय व्यापक संरक्षण प्रणालियों, पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय द्वारा (समय-समय पर यथा संशोधित) मार्गनिर्देशों के अनुसार होगा जिसमें पारिस्थितिक पर्यवेक्षण, पारिस्थितिक शिक्षा और पारिस्थितिक शिक्षा को न्यूनतम दिया जाएगा और पारिस्थितिक संवेदी जीवों की वृद्धि क्षमता के अध्ययन पर आधारित होगा ;

(ii) पारिस्थितिक संवेदी जीव के अंतर्गत होयस और सिरंगाहों के जल संचिरीय अनुपात बढ़ी है।

(iii) आंचलिक स्तरापरोजना का अनुमोदन किए जाने तक, पर्यटन के किंव दिक्कत और विस्तार पर्यटन विभाग/संस्थाओं के विस्तार की आवश्यक स्थान निर्दिष्टित संबंधित राज्य सरकारों के विभागों पर जोषित संबंधित निर्दिष्टित प्राधिकरणों द्वारा अनुमोदन किया गया।

(4) **जैसाकि विवरण :-** पाकिस्तान संघीय जीन से सम्बन्धित विभिन्न विभाग के संगे इससे घटे लगे जीन कोश **अधिसूचना**, **रीन विवरण**, **जल प्रपातों**, **इस्की**, **पाई बागों**, **इस्की**, **बुखरी**, **स्वच्छ**, **अमण**, **अपराधन**, **प्रपातों** आदि की पहचान की जायेगी और इनके **अधिकतम** **जायदाद** लगे उनकी संरक्षा और संरक्षा के लिए इन अधिसूचना के प्रकाशन की तारीख से एक मास के भीतर, उपयुक्त योजना बनायेगी और ऐसी योजना आर्थिक महायोजना का भाग होगा।

(5) मानव निमित्त विरासत स्थलों - पारिस्थितिक संवेदी जोत में भवनों, संरचनाओं, शिल्प-तट्ट, ऐतिहासिक, फलात्मक और सांस्कृतिक महत्त्व के क्षत्रों की पहचान करना होगा और इस अधिसूचना के प्रकाशन की तारीख

से इस माह के भीतर उनके संरक्षण की योजनाएं तैयार करवा दी जाएगी तथा आंचलिक महासभाओं में सम्मिलित की जाएगी।

(6) ध्वनि प्रदूषण - पारिस्थितिक संवेदी जोन में ध्वनि प्रदूषण के नियंत्रण के लिए राज्य सरकार का पर्यावरण विभाग, वायु (प्रदूषण नियंत्रण और नियंत्रण) अधिनियम, 1981 (1981 का 14) और उसके अधीन बनाए गए नियमों के उपबंधों के अनुसार में मार्गदर्शक सिद्धांत और विनियम तैयार करेगा।

(7) वायु प्रदूषण - पारिस्थितिक संवेदी जोन में, वायु प्रदूषण के नियंत्रण के लिए राज्य सरकार का पर्यावरण विभाग, वायु (प्रदूषण नियंत्रण और नियंत्रण) अधिनियम, 1981 (1981 का 14) और उसके अधीन बनाए गए नियमों के उपबंधों के अनुसार में मार्गदर्शक सिद्धांत और विनियम तैयार करेगा।

(8) बहिष्कार का निस्कारण - पारिस्थितिक संवेदी जोन में उपस्थित बहिष्कार का निस्कारण, जल (प्रदूषण नियंत्रण तथा नियंत्रण) अधिनियम, 1974 (1974 का 6) और उसके अधीन बनाए गए नियमों के उपबंधों के अनुसार होगा।

(9) ठोस अपशिष्ट - ठोस अपशिष्टों का निपटारा निम्नलिखित रूप में होगा -

(i) पारिस्थितिक संवेदी जोन में ठोस अपशिष्टों का निपटारा भारत सरकार के तत्कालीन पर्यावरण और वन मंत्रालय की समय-समय पर यथा संबंधित अधिसूचना सं. का.अ. 998(अ), तारीख 25 सितंबर, 2000 नगरपालिका ठोस अपशिष्ट (प्रबंध और हस्तांतरण) नियम, 2000 के उपबंधों के अनुसार किया जाएगा।

(ii) स्थानीय प्रदूषण प्रदूषण जैव निम्नीकरणीय और अजैव निम्नीकरणीय संघटकों में ठोस अपशिष्टों के संप्रदायिक के लिए योजनाएं तैयार करेगी।

(iii) जैव निम्नीकरणीय सामग्री को अधिकतम: खाद बनाकर या कृमि खेती के माध्यम से पुनःचक्रित किया जाएगा।

(iv) अपवर्धनिक सामग्री का निपटारा पारिस्थितिक संवेदी जोन के बाहर पड़ताल किए गए स्थल पर किसी पर्यावरणीय स्वीकृत रीति में होना और पारिस्थितिक संवेदी जोन में ठोस अपशिष्टों को जलाना या भस्मीकरण अनुमति नहीं होगा।

(10) जैव चिकित्सीय अपशिष्ट - पारिस्थितिक संवेदी जोन में जैव चिकित्सीय अपशिष्टों का निपटारा भारत सरकार के तत्कालीन स्वास्थ्य पर्यावरण और वन मंत्रालय की समय-समय पर यथा संबंधित अधिसूचना सं. का.अ. 630 (अ) तारीख 20 जुलाई, 1998 द्वारा प्रकाशित जैव चिकित्सीय अपशिष्ट (प्रबंध और हस्तांतरण) नियम, 1998 के उपबंधों के अनुसार किया जाएगा।

(11) राष्ट्रीय परिवहन - परिवहन की राष्ट्रीय प्रतिबंधित आवाज के अनुसार निम्नलिखित होगी और इस संबंध में आंचलिक महासभाओं की विशेष रूप से अधिकृत किए गए और आंचलिक महासभाओं के द्वारा होने और राज्य सरकार के सदस्य अधिकारी के द्वारा अनुमोदित होने और, राष्ट्रीय प्रतिबंधित निषेध और विनियमों के अनुसार राष्ट्रीय गतिविधियों के अनुपालन को मानीटर करेगी।

4. पारिस्थितिक संवेदी जोन में प्रतिबंध और विनियमित क्रियाकलापों की सूची - पारिस्थितिक संवेदी जोन में सभी क्रियाकलाप पर्यावरण (संरक्षण) अधिनियम, 1986 के उपबंधों द्वारा शासित होंगे और नोचे दी गई तालिका में विनिर्दिष्ट रीति में विनियमित होंगे, अर्थात् -

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सारणी

क्रम सं.	क्रियाकलाप	टीका-टिप्पणी
(1)	(2)	(3)
अ. प्रतिष्ठित क्रियाकलाप :		
1.	वाणिज्यिक खनन, पत्थर की खदान और उनको तोड़ने की इकाइयाँ।	(क) सभी प्रकार के खनन (मृदा और वृहत खनिज), पत्थर की खानें और उनको तोड़ने की इकाइयाँ वास्तविक स्थानीय निवासियों की धरोहर आवश्यकताओं के विकास नहीं होंगी ; (ख) खनन सक्षमता, माननीय उच्चतम न्यायालय की रिट याचिका (सिविल) सं. 1885 का 202 टी.एन. गीहमर्जन विरुद्ध बनाम भारत सरकार के मामले में आदेश तारीख 4.8.2006 और रिट याचिका (सी) सं. 2012 का 435 गीवा फाउंडेशन बनाम भारत सरकार के मामले में तारीख 21.04.2014 के अंतरिम आदेश के अनुसरण में सर्वोच्च प्रचालन होगा।
2.	आवा मशीनों की स्थापना।	पारिस्थितिक संवेदी जोन के भीतर नहीं और विद्यमान आवा मशीनों का विस्तार अनुज्ञात नहीं होना।
3.	जल या वायु या मृदा या ध्वनि प्रदूषण करित करने वाले उद्योगों की स्थापना।	पारिस्थितिक संवेदी जोन के भीतर नए और विद्यमान प्रदूषण करित करने वाले का विस्तार अनुज्ञात नहीं होगा।
4.	किसी परिसंरचनात्मक पदार्थों का उपयोग या उत्पादन।	सागू विधियों के अनुसार प्रतिबिद्ध (अन्यथा उपबंधित के सिवाय)।
5.	होटल और रिसोर्ट का वाणिज्यिक स्थापन।	नए वाणिज्यिक स्थापन जैसे होटल और रिसोर्ट पारिस्थितिक संवेदी जोन के भीतर सत्कार्य प्रभाव से प्रतिबिद्ध होंगे।
6.	वातावरण तकली का वाणिज्यिक उपयोग।	सागू विधियों के अनुसार प्रतिबिद्ध (अन्यथा उपबंधित के सिवाय)।
7.	नए वृहत जल विद्युत परियोजना का स्थापना।	सागू विधियों के अनुसार प्रतिबिद्ध (अन्यथा उपबंधित के सिवाय)।
8.	पर्यटन से संबंधित क्रियाकलाप जैसे गर्म वायु गुबारी आदि द्वारा अभ्यारण क्षेत्र के ऊपर से उड़ना जैसे क्रियाकलाप करना।	सागू विधियों के अनुसार प्रतिबिद्ध (अन्यथा उपबंधित के सिवाय)।
9.	प्लास्टिक के पैली का उपयोग।	सागू विधियों के अनुसार प्रतिबिद्ध (अन्यथा उपबंधित के सिवाय)।
10.	प्राकृतिक जल निकासों या सतही क्षेत्र में अनुपचारित बहिसोव और ठोस अपशिष्टों का निरसारण।	सागू विधियों के अनुसार प्रतिबिद्ध (अन्यथा उपबंधित के सिवाय)।
11.	संनिर्माण क्रियाकलाप।	स्थानीय निवासियों की धरोहर आवश्यकताओं, जिसके अंतर्गत

		पैरा 3 के उप पैरा (1) में सूचीबद्ध क्रियाकलाप भी हैं, के सिवाय, पारिस्थितिक संवेदी ज़ोन के भीतर किसी प्रकार के नए संनिर्माण अनुमत नहीं होंगे। प्रदूषण न बढ़ित करने वाले सघु उद्वागी से संबंधित संनिर्माण क्रियाकलाप की दशा में विनियमित होगी और न्यूनतम रखा जाएगा।
12	मध्यम घनत्व के फाइबर बोर्ड, पार्टिकल बोर्ड, इकाईया और संबंध की स्थापना।	लानू विधियों के अनुसार प्रतिषिद्ध (अन्यथा उपबंधित के सिवाय)।
13	ईट भूतों की स्थापना।	लानू विधियों के अनुसार प्रतिषिद्ध (अन्यथा उपबंधित के सिवाय)।
14	वाणिज्यिक इलिकवाप्टर सेवा।	लानू विधियों के अनुसार प्रतिषिद्ध (अन्यथा उपबंधित के सिवाय)।
15	म्योबाइल टावरों की संस्थापना।	लानू विधियों के अनुसार प्रतिषिद्ध (अन्यथा उपबंधित के सिवाय)।

आ. विनियमित क्रियाकलाप

वृत्तों की कटाई।	(क) राज्य सरकार में सक्षम प्राधिकारी की पूर्व अनुमति के बिना वन, सरकारी या राजस्व या निजी भूमि पर वृत्त कटानों में किसी वृत्तों की कटाई नहीं होगी। (ख) वृत्तों की कटाई संबंधित केंद्रीय या राज्य अधिनियम या उसके अधीन कवर गए नियमों के उपबंध के अनुसार विनियमित होंगे।
कृषि प्रणालियों में आमूल परिवर्तन। वाणिज्यिक जल संस्रजन जिसके अंतर्गत भू-जल संशयन भी है।	लानू विधियों के अधीन विनियमित होंगे। (क) भूमि के अधिभोगी के वास्तविक कृषि और घरेलू क्लस के लिए जल का निष्कर्षण (सतही और भूमिगत जल) अनुमत होगा। (ख) औद्योगिक, वाणिज्यिक उपयोग के लिए सतही और भूमिगत जल का निष्कर्षण के लिए संबंधित विनियमक प्राधिकरण पूर्व लिखित अनुज्ञा अपेक्षित होगी जिसके अंतर्गत कितने परिणाम में वह निष्कर्षण करेगा, भी है। (ग) सतही या भूजल का विक्रय अनुमत नहीं होगा। (घ) किसी खास जल, जिसके अंतर्गत कृषि भी है, के प्रदूषण या प्रदूषण की रोकने के लिए सभी उपबंध किए जाएंगे। भूमिगत स्रोतों की प्रोत्साहन देना।
विद्युत केबलों और दूरसंचार टावरों की परिनिर्माण।	लानू विधियों के अधीन विनियमित होंगे।
होटलों और लॉज के विद्यमान परिसरों में बाड़ लगाना।	उचित पर्यावरण ससाधात निर्धारण और न्यूनीकरण उपाय यथा लानू अनुसार होंगे।
विद्यमान सड़कों को चौड़ा करना और उन्हें सुदृढ़ करना तथा नई सड़कों का संनिर्माण।	

22.	एक से अधिक वातावरण का संरक्षण ।	सामू विधियों के अधीन विनियमित होंगे ।
23.	विदेशी प्रजातियों का प्रसारण ।	सामू विधियों के अधीन विनियमित होंगे ।
24.	वाणिज्यिक साकल्य और होटल ।	सामू विधियों के अधीन विनियमित होंगे ।
25.	वायु और ध्वनि प्रदूषण ।	सामू विधियों के अधीन विनियमित होंगे ।
26.	पहाड़ी कालों और नदी तटीय संरक्षण ।	सामू विधियों के अधीन विनियमित होंगे ।
27.	प्रदूषण प्रदूषण न करने वाले सधु उद्योग ।	पारिस्थितिक संवेदी क्षेत्रों से गैर प्रदूषण, गैर परिसरकटस्थ, सधु और सेवा उद्योग, कृषि उद्योग, कृषि या कृषि आधारित उद्योग, जो देशीय माल के औद्योगिक उत्पादों का उत्पादन करते हैं और जो पर्यावरण पर कोई विपरीत प्रभाव नहीं डालते हैं ।
28.	पारिस्थितिक जल निष्कास्य या सतही क्षेत्र में उपचारित बहिर्वाह का निस्सारण ।	उपचारित बहिर्वाह के पुनर्प्रक्रमण को प्रोत्साहित करना और अव्यक्त या ठोस अपशिष्टों के निपटारे के लिए विद्यमान विनियमों का अनुपालन करना होगा ।
29.	वन उत्पादों और गैर वन उत्पादों (फनटीपकरी) का संरक्षण ।	सामू विधियों के अधीन विनियमित होंगे ।
30.	सुरक्षा बलों के कैंप ।	सामू विधियों के अधीन विनियमित होंगे ।
31.	नदी तटीय से पर्यटन, बजरी, और शालू की निष्कृति ।	सामू विधियों के अधीन विनियमित होंगे ।
32.	33 किसेमीटर से ऊपर के संवरण और वितरण प्रणाली का विद्यमान ।	सामू विधियों के अधीन विनियमित होंगे ।
33.	नए काल आधारीत उद्योग ।	पारिस्थितिक संवेदी क्षेत्रों के भीतर नए काल आधारित उद्योगों की स्थापना अनुमत नहीं होगी । परंतु पारिस्थितिक संवेदी क्षेत्रों में 100% आंकलित काल स्टाक उपयोग करने वाले नए काल आधारित उद्योगों की स्थापना की जा सकती है ।

अनुमति प्राप्त किया जाएगा :

34.	स्थानीय समुदायों द्वारा चलाए जा रहे कृषि और वातावरण प्रणालियों के साथ पर्यावरण, पर्यावरण और कृषि और सतही माल ।	सामू विधियों के अधीन विनियमित होंगे ।
35.	वर्षा जल संग्रहीत ।	सक्रिय रूप से बढ़ावा दिया जाए ।
36.	जीविक स्रोत ।	सक्रिय रूप से बढ़ावा दिया जाए ।
37.	सभी गतिविधियों के लिए हरित औद्योगिकी का सहण करना ।	सक्रिय रूप से बढ़ावा दिया जाए ।
38.	नवीकरणीय ऊर्जा स्रोत का उपयोग ।	सामू विधियों के अधीन अनुमत होंगे ।

39.	मानवसंपत्तिक बाड ।	संगु विधियों के अधीन अनुज्ञात होंगे ।
40.	कुटीर उद्योगों जिसके अंतर्गत कार्मिक कारीगर आदि भी हैं ।	सक्रिय रूप से बढ़ावा दिया जाए ।
41.	कृषि करने, जिसके अंतर्गत बागवानी, उद्यान कृषि और पशु उद्यान भी हैं ।	संगु विधियों के अधीन अनुज्ञात होंगे ।

5. पारिस्थितिक संवेदी ज्ञान मानीटरी समिति. (1) केंद्रीय सरकार, पारिस्थितिक संवेदी ज्ञान के प्रभावी मानीटरी के लिए एक मानीटरी समिति का गठन करेगी जो निम्नलिखित से मिलकर बनेगी, अर्थात् :-

- (क) उपायुक्त, रेवाड़ी - अध्यक्ष ;
- (ख) अतिरिक्त उपसुक्त, रेवाड़ी - सदस्य ;
- (ग) पर्यावरण के क्षेत्र में कार्य करने वाले गैर सरकारी संगठनों जिसके अंतर्गत विद्यमान संस्थान भी हैं) का एक वर्ष की अवधि के लिए हरियाणा राज्य सरकार द्वारा नामनिर्दिष्ट एक प्रतिनिधि - सदस्य ;
- (घ) सांदेशिक अधिकारी, हरियाणा राज्य प्रदूषण नियंत्रण बोर्ड - सदस्य ;
- (ङ) जिला मगर निरीक्षक, रेवाड़ी - सदस्य ;
- (च) हरियाणा सरकार द्वारा राज्य के किसी प्रतिष्ठित संस्था या विश्वविद्यालय का नामनिर्दिष्ट पारिस्थितिक और पर्यावरण क्षेत्र का एक वर्ष की अवधि के लिए विशेषज्ञ - सदस्य ;
- (छ) प्रखंड वन्यजीव अधिकारी, मुड़गांव - सदस्य ;
- (ज) उप वन्य संरक्षक (संवेदीय), रेवाड़ी - सदस्य-सचिव ।

निर्देश का निबंधन

(1) पारिस्थितिक संवेदी ज्ञान मानीटरी समिति इस अधिसूचना के उपबंधों के अनुपालन को मानीटर करेगी ।

(2) पारिस्थितिक संवेदी ज्ञान में भारत सरकार के सम्बन्धी पर्यावरण और वन मंत्रालय की अधिसूचना सं. का.आ. 1533(अ) तारीख 14 सितंबर, 2008 की अनुसूची में के अधीन सम्मिलित क्रियाकलापों और इस अधिसूचना के पैरा 4 के अधीन प्रतिनिधि प्रतिविधियों के सिवाय अन्य जाने ऐसे क्रियाकलापों की वक्ता में वास्तविक विनिर्दिष्ट स्थलीय दस्तावेजों पर आधारित मानीटरी समिति द्वारा संवीक्षा की जाएगी और उक्त अधिसूचना के उपबंधों के अधीन पूर्व पर्यावरण निगरानी के लिए केंद्रीय सरकार के पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय की निर्दिष्ट की जाएगी ।

(3) इस अधिसूचना के पैरा 4 के अधीन तथा विनिर्दिष्ट प्रतिनिधि क्रियाकलापों के सिवाय, भारत सरकार के पर्यावरण, और वन मंत्रालय की अधिसूचना संख्यांक का.आ. 1533(अ) तारीख 14 सितंबर, 2008 की अधिसूचना के अनुसूची के अधीन ऐसे क्रियाकलापों, जिन्हें सम्मिलित नहीं किया गया है, परंतु पारिस्थितिक संवेदी ज्ञान में आते हैं, ऐसे क्रियाकलापों की वास्तविक विनिर्दिष्ट स्थलीय दस्तावेजों पर आधारित मानीटरी समिति द्वारा संवीक्षा की जाएगी और उसी संबद्ध विनियामक प्राधिकरणों को निर्दिष्ट किया जाएगा ।

(4) मानीटरी समिति का सदस्य-सचिव या प्रमुख उपायुक्त, ऐसे व्यक्ति के विरुद्ध, जो इस अधिसूचना के किसी उपबंध का उल्लंघन करता है, भर्त्सना (अज्ञात) अधिनियम, 1988 की धारा 19 (1988 का 23) के अधीन परिचालन प्रमुख प्राधिकरण द्वारा किया जाएगा ।

24-20-2017

(5) मनीटरी समिति मृदा व मृदा के आधार पर अन्वेषणों पर निर्भर रहते हुए संबद्ध विभागों के प्रतिनिधियों का विशेषज्ञ, औद्योगिक संयंत्रों का संबंध पशुधरियों के प्रतिनिधियों को अपने विचार-विमर्श में समावेश के लिए आमंत्रित कर सकती।

(6) मनीटरी समिति प्रत्येक वर्ष की 31 मार्च तक की अपनी वार्षिक कार्यवाही रिपोर्ट राज्य के मुख्य वन्य जीव अभ्यारण्य को उपाध्यक्ष द्वारा उपस्थित कर विधान के अनुसार उक्त वर्ष के 30 जून तक प्रस्तुत करेगी।

(7) केन्द्रीय सरकार जब पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय मनीटरी समिति को अपने कृषकों के प्रजाती निरीक्षण के लिए समय-समय पर ऐसे निदेश दे सकती, जो वह ठीक समझे।

इस अधिसूचना के उपबंधों को प्रभाव देने के लिए केन्द्रीय सरकार और राज्य सरकार अतिरिक्त उपाय, यदि कोई हों, विनिर्दिष्ट कर सकती।

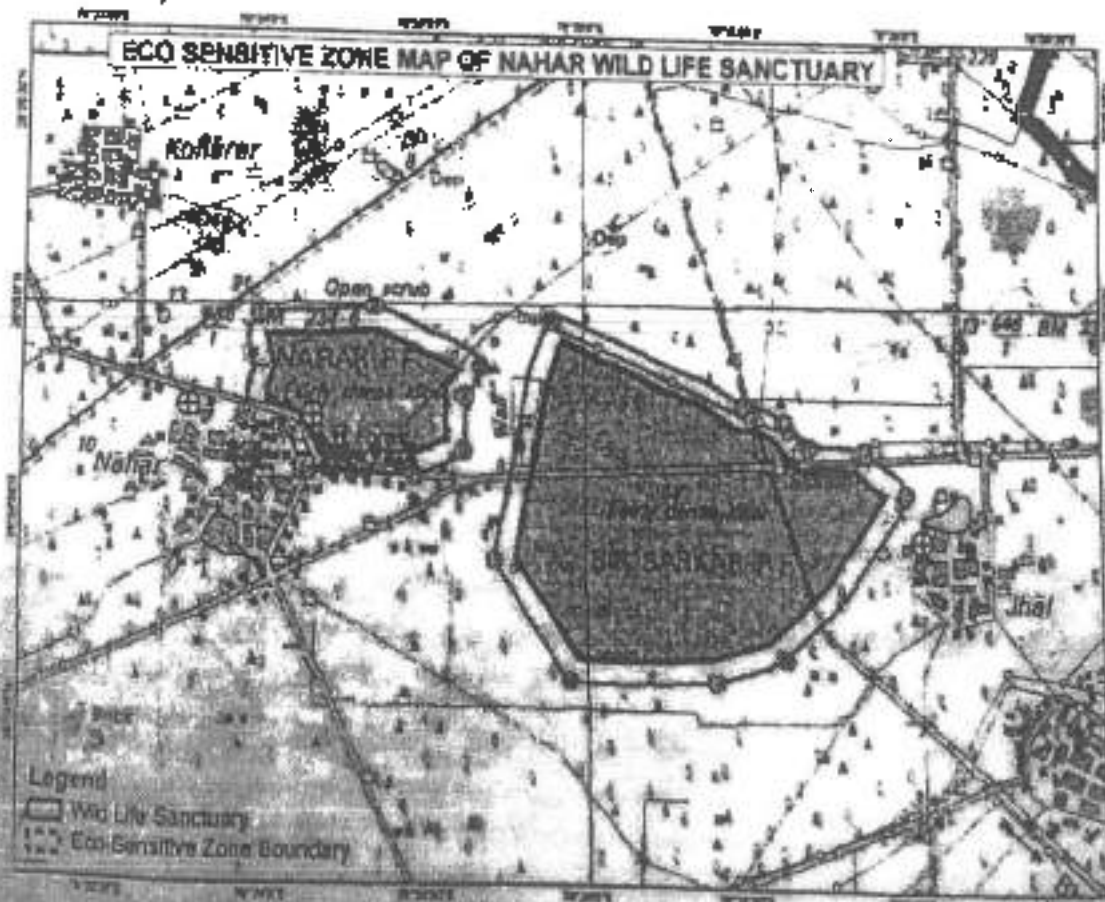
माननीय भारत के उच्चतम न्यायालय या उच्च न्यायालय या राष्ट्रीय हरित प्राधिकरण द्वारा पारित कोई आदेश या पारित होने वाले किसी आदेश, यदि कोई हों, के अन्तर्गत, इस अधिसूचना के उपबंध होंगे।

(फ. सं 28-33/2014-एसजेड-आरई)

डी. बी. डी. सुब्रह्मण्यम, वैधानिक सचिव

उपाध्यक्ष।

नाहर वन्यजीव अभ्यारण्य, हरियाणा के पारिस्थितिकीय संवेदी ज़ोन की सीमा का मानचित्र



अनुसूची-III

भारत संसदीय असेम्बली, हरियाणा की पारिस्थितिक संवेदी जोन के बाहरी सीमा के प्रमुख बिन्दुओं की दर्जित करने वाले समन्वयन

क्रम सं.	अक्षांश	देशांतर
1.	76° 23' 59.352" पू.	28° 24' 58.921" उ.
2.	76° 24' 20.555" पू.	28° 24' 58.855" उ.
3.	76° 24' 40.850" पू.	28° 24' 51.000" उ.
4.	76° 24' 37.822" पू.	28° 24' 48.708" उ.
5.	76° 24' 37.389" पू.	28° 24' 38.641" उ.
6.	76° 24' 28.215" पू.	28° 24' 35.133" उ.
7.	76° 24' 7.701" पू.	28° 24' 38.830" उ.
8.	76° 24' 3.881" पू.	28° 24' 41.8/1" उ.
9.	76° 23' 57.205" पू.	28° 24' 44.387" उ.

अनुसूची-III

पारिस्थितिक संवेदी जोन मनीटरी समिति - की गई कार्रवाई की रिपोर्ट का रूप विभाग

1. बैठकों की संख्या और तिथि ।
2. बैठकों का कार्यवृत्त : कृपया मुख्य उत्प्रेक्षणीय बिंदुओं का वर्णन करें । बैठक के कार्यवृत्त को एक पृथक अनुबंध में उपाबद्ध करें ।
3. जागतिक महासंयोजन की संवर्दी की प्रतिक्रिया जिसके अंतर्गत पर्यटन महासंयोजन (पारिस्थितिक संवेदी जोनवार) ।
4. सू-अभिलेख में सदस्य गतिविधियों के सुधार के लिए अग्रिम किए गए महत्वपूर्ण का सारांश (पारिस्थितिक संवेदी जोनवार) ।
5. ईआईए अधिसूचना, 2006 (पारिस्थितिक संवेदी जोनवार) के अधीन आने वाली गतिविधियों की संविदा के मामलों का सारांश । यदि एक पृथक उपाबंध के रूप में उपाबद्ध किए जा सकते हैं ।
6. ईआईए अधिसूचना, 2006 (पारिस्थितिक संवेदी जोनवार) के अधीन आने वाली गतिविधियों की संविदा के मामलों का सारांश । यदि एक पृथक उपाबंध के रूप में उपाबद्ध किए जा सकते हैं ।
7. पर्यावरण (संरक्षण) अधिनियम, 1986 की धारा 19 के अधीन दर्ज की गई शिकायतों का सारांश (पारिस्थितिक संवेदी जोनवार) ।
8. कोई अन्य महत्वपूर्ण विषय ।

MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE NOTIFICATION

New Delhi, the 1st June, 2013

S.O. 1409(E).—The following draft of the notification, which the Central Government proposes to issue in exercise of the powers conferred by sub-section (1), read with clause (v) and clause (xiv) of sub-section (2) and sub-section (3) of Section 3 of the Environment (Protection) Act, 1986 (29 of 1986) is hereby published, as required under sub-rule (1) of rule 5 of the Environment (Protection) Rules, 1986, for the information of the public likely to be affected thereby, and notice is hereby given that the said draft notification shall be taken into consideration on or after the expiry of a period of sixty days from the date on which copies of the Gazette containing this notification are made available to the public.

Any person interested in making any objections or suggestions on the proposals contained in the draft notification may forward the same in writing, for consideration of the Central Government within the period so specified to the Secretary, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jorbagh Road, Allgari, New Delhi-110 003, or send it to the e-mail address of the Ministry at: est.mefgare.in

Draft Notification

WHEREAS, the Nahar Wildlife Sanctuary is a reserved forest of about 211 hectares situated in Haryana district of Haryana State and is a part of 'National Capital Region' and the area supports a good population of Black Bucks, Jackals, Foxes, Monitor Lizards and such other small animals;

AND WHEREAS, Nahar Wildlife Sanctuary is important for its flora such as Badi bel, Jackal, Jungle Cat, Mongoose, Indian Cobra, Russell's viper, Rat Snake, Peafowl, Indian Roller, Owl, Parakeet, Ring dove etc.,

AND WHEREAS, Nahar Wildlife Sanctuary is important for its fauna such as Roost, Kite, Kestrel, Osprey, Pigeon, Mongoose, Pipit, Parrot, Kingfisher, Karil, Heron, Akash bel, Kachri, Sema Sand, Dugong etc.,

AND WHEREAS, it is necessary to conserve and protect the area, the extent and boundaries of which is specified in paragraph 1 of this notification around the protected area of the Nahar Wildlife Sanctuary as Eco-sensitive Zone from ecological and environmental point of view and to prohibit industries or class of industries and their operations and processes in the said Eco-sensitive Zone;

NOW, THEREFORE, in exercise of the powers conferred by sub-section (1) read with clause (v) and clause (xiv) of sub-section (2) of Section 3 of the Environment (Protection) Act, 1986 (29 of 1986) and sub-rule (3) of rule 5 of the Environment (Protection) Rules, 1986, the Central Government hereby notifies upto 100 meters from the boundary of Nahar Wildlife Sanctuary in the State of Haryana as the Nahar Wildlife Sanctuary Eco Sensitive Zone (hereinafter referred to as the Eco-sensitive Zone) details of which are as under, namely:-

1. **Extent and Boundaries of Eco-sensitive Zone.** (1) The Eco-sensitive Zone is upto 100 meters all around the boundary of the protected area of the Nahar Wildlife Sanctuary comprising an area of 94 hectares approximately.

(2) The Eco-sensitive Zone is bounded by 28°24'31.000"N latitude and 76°24'40.650"E longitude towards East-North (point No.3 of Annexure I map); 28°24'44.387"N latitude and 76°23'57.205"E longitude towards West (point No.9 of Annexure I map); 28°24'59.853"N latitude and 76°24'20.555"E longitude towards North (point No.2 of Annexure I map) and 28°24'35.133"N latitude and 76°24'26.215"E longitude towards South (point No.6 of Annexure I map).

(3) The map of Eco-sensitive Zone boundary together with its latitude and longitude is appended as Annexure I.

(4) The coordinates of Eco-sensitive Zone with its latitude and longitude is appended as Annexure II.

2. **Zonal Master Plan for the Eco-sensitive Zone.** (1) The State Government shall, for the purpose of the Eco-sensitive Zone prepare, a Zonal Master Plan, within a period of two years from the date of publication of this notification in the Official Gazette, in consultation with local people and adhering to the stipulations given in this notification.

(2) The Zonal Master Plan shall be approved by the competent authority in the State Government.

(3) The Zonal Master Plan for the Eco-sensitive Zone shall be prepared by the State Government in such manner as is specified in this notification and also in consonance with the relevant Central and State laws and the guidelines issued by the Central Government, if any.

(4) The Zonal Master Plan shall be prepared in consultation with all concerned State Departments for integrating environmental and ecological considerations into it, namely:-

- (i) Environment;
- (ii) Forest;
- (iii) Urban Development.

- (iv) Tourism
- (v) Municipal
- (vi) Revenue
- (vii) Agriculture and
- (viii) Haryana State Pollution Control Board;

incorporating environmental and ecological considerations into it.

(a) The Zonal Master Plan shall not impose any restriction on the approved existing land use, infrastructure and activities to be more efficient and eco-friendly.

The Zonal Master plan shall provide for restoration of degraded areas, conservation of existing water bodies, management of catchment areas, watershed management, groundwater management, soil and moisture conservation, needs of local community and such other aspects of the ecology and environment that need attention.

The Zonal Master Plan shall demarcate all the existing worshipping places, village and urban settlements, types and kinds of forests, agricultural areas, fertile lands, green area, such as, parks and like places, horticultural areas, orchards, lakes and other water bodies.

The Zonal Master Plan shall regulate development in Eco-sensitive Zone so as to ensure Eco-friendly development and livelihood security of local communities.

Measures to be taken by State Government:- The State Government shall take the following measures for giving effect to the provisions of this notification, namely:-

(a) Land use:- Forests, horticulture areas, agricultural areas, parks and open spaces earmarked for recreational purposes in the Eco-sensitive Zone shall not be used or converted into areas for commercial or industrial related development activities.

Provided that the conversion of agricultural lands within the Eco-sensitive Zone may be permitted on the recommendation of the Monitoring Committee, and with the prior approval of the State Government, to meet the residential needs of local residents, and for the activities listed against serial numbers 27, 35 and 46 in column (2) of the Table in paragraph 4, namely:-

- (i) Small scale industries and housing provision.
- (ii) Rainwater harvesting; and
- (iii) Cottage industries including village artisans.

Provided further that no use of tribal land shall be permitted for commercial and industrial development activities without the prior approval of the State Government and without compliance of the provisions of article 244 of the Constitution or the law for the time being in force, including the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 (2 of 2007);

Provided also that any error appearing in the land records within the Eco-sensitive Zone shall be corrected by the State Government, after obtaining the views of the Monitoring Committee, once in each case and the correction of error shall be intimated to the Central Government in the Ministry of Environment, Forest and Climate Change.

Provided also that the above correction of error shall not include change of land use in any case except as provided under this sub-paragraph:

Provided also that there shall be no consequential reduction in green area, such as forest area and agricultural area and efforts shall be made to reform the unused or unproductive agricultural areas.

(b) Natural Springs:- The catchment areas of all natural springs shall be identified and plans for their conservation and rejuvenation shall be incorporated in the Zonal Master Plan and the guidelines shall be drawn up by the State Government in such a manner as to prohibit development activities in or near these areas which are detrimental to such areas.

(c) Tourism:- (i) The activities relating to tourism within the Eco-sensitive Zone shall be as per Tourism Master Plan, which shall form part of the Zonal Master Plan.

(ii) The Tourism Master Plan shall be prepared by the Department of Tourism, Government of Haryana in consultation with Department of Revenue and Forests, Government of Haryana.

(iii) The activity of tourism shall be regulated under, namely:-

(a) Tourism activities or expansion of existing tourism activities within the Eco-sensitive Zone shall be in accordance with the eco-tourism guidelines issued by the National Tiger Conservation Authority, Ministry of Environment, Forest and Climate Change (As amended from time to time) with emphasis on eco-tourism, eco-education and eco-development and based on carrying capacity study of the Eco-sensitive Zone;

(b) New construction of hotels and resorts shall not be permitted within the Eco-sensitive Zone.

24/06/2015

(2N) till the Zonal Master Plan is approved, development for tourism and expansion of existing tourism activities shall be permitted by the concerned regulatory authorities based on the actual site specific survey and recommendation of the Monitoring Committee.

(4) Natural Heritage.- All sites of valuable natural heritage in the Eco-sensitive Zone such as the gneiss pool reserve areas, rock formations, waterfalls, springs, gorges, groves, caves, ponds, walks, rides, cliffs, etc. shall be identified and preserved and plan shall be drawn up for their protection and conservation, within six months from the date of publication of this notification and such plan shall form part of the Zonal Master Plan.

(5) Man-made heritage sites.- Buildings, structures, artefacts, areas and precincts of historical, architectural, aesthetic, and cultural significance shall be identified in the Eco-sensitive Zone and plans for their conservation shall be prepared within six months from the date of publication of this notification and incorporated in the Zonal Master Plan.

(6) Noise pollution.- The Environment Department of the State Government shall draw up guidelines and regulations for the control of noise pollution in the Eco-sensitive Zone in accordance with the provisions of the Air (Prevention and Control of Pollution) Act, 1981 (14 of 1981) and the rules made thereunder.

(7) Air pollution.- The Environment Department of the State Government shall draw up guidelines and regulations for the control of air pollution in the Eco-sensitive Zone in accordance with the provisions of the Air (Prevention and Control of Pollution) Act, 1981 (14 of 1981) and the rules made thereunder.

(8) Discharge of effluents.- The discharge of treated effluent in Eco-sensitive Zone shall be in accordance with the provisions of the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974) and the rules made thereunder.

(9) Solid wastes.- Disposal of solid wastes shall be as under:-

(i) the solid waste disposal in Eco-sensitive Zone shall be carried out as per the provisions of the Municipal Solid Waste (Management and Handling) Rules, 2000 published by the Government of India in the erstwhile Ministry of Environment, Forest and Climate Change vide notification number S.O. 908 (E), dated the 25th September, 2000 as amended from time to time;

(ii) the local authorities shall draw up plans for the segregation of solid wastes into biodegradable and non-biodegradable components;

(iii) the biodegradable material shall be recycled preferably through composting or vermiculture;

(iv) the inorganic material shall be disposed of in an environmentally acceptable manner at site identified outside the Eco-sensitive Zone and no burning or incineration of solid wastes shall be permitted in the Eco-sensitive Zone.

(10) Bio-medical waste.- The bio-medical waste disposal in the Eco-sensitive Zone shall be carried out as per the provisions of the Bio-Medical Waste (Management and Handling) Rules, 1998 published by the Government of India in the erstwhile Ministry of Environment, Forest and Climate Change vide Notification number S.O. 430(E), dated the 20th July, 1998 as amended from time to time.

(11) Vehicular traffic.- The vehicular movement of traffic shall be regulated in a habitat friendly manner and specific provisions in this regard shall be incorporated in the Zonal Master Plan and till such time as the Zonal master plan is prepared and approved by the Ministry of Environment, Forest and Climate Change, Monitoring Committee shall ensure compliance of vehicular movement under the relevant Acts and the rules and regulations made thereunder.

List of activities prohibited or to be regulated within the Eco-sensitive Zone.- All activities in the Eco-sensitive Zone shall be governed by the provisions of the Environment (Protection) Act, 1986 (29 of 1986) and the rules made thereunder and shall be regulated in the manner specified in the Table below, namely:-

Table

Sl. No.	Activity	Remarks
1	2	3
	A. Prohibited Activities:	
1.	Commercial Mining, stone quarrying and crushing units.	(a) All new and existing mining (minor and major minerals), stone quarrying and crushing units are prohibited except for the domestic needs of bona fide local residents.
		(b) The mining operations shall strictly be in accordance with the orders of the Hon'ble Supreme Court dated 08.08.2013 in the matter of T.M. Godevaram Thirumulpad Vs. UOI in W.P.(C) No.202 of 1985 and dated 21.04.2014 in the matter of Goa Production Vs. UOI in W.P.(C) No.435 of 2012.
2.	Setting up of saw mills.	No new and expansion of existing saw mills shall be permitted within the Eco-sensitive Zone.
3.	Setting up of industries causing water or air or soil or noise pollution.	No new or expansion of polluting industries in the Eco-sensitive Zone shall be permitted.

4	Use or production of any hazardous substances.	Prohibited (except as otherwise provided) as per applicable laws.
5	Commercial establishments of hotels and resorts.	No new or expansion of existing commercial establishments such as hotels and resorts shall be permitted within the Eco-sensitive Zone.
6	Commercial use of firewood.	Prohibited (except as otherwise provided) as per applicable laws.
7	Establishment of new major hydroelectric projects.	Prohibited (except as otherwise provided) as per applicable laws.
8	Undertaking activities related to tourism like over-flying the sanctuary area by hot-air balloons, etc.	Prohibited (except as otherwise provided) as per applicable laws.
9	Use of plastic carry bags.	Prohibited (except as otherwise provided) as per applicable laws.
10	Discharge of untreated effluents and solid waste in natural water bodies or land area.	Prohibited (except as otherwise provided) as per applicable laws.
11	Construction activities.	No new construction of any kind shall be permitted within the Eco-sensitive Zone, except for the domestic needs of local residents including the activities listed in sub-paragraph (1) of paragraph 2. In case of the construction activity related to small scale industries not causing pollution shall be regulated and kept at the minimum.
12	Setting-up of Medium Density Fiber Particle Board Unit/Plants.	Prohibited (except as otherwise provided) as per applicable laws.
13	Setting-up of brick kilns.	Prohibited (except as otherwise provided) as per applicable laws.
14	Commercial helicopter services.	Prohibited (except as otherwise provided) as per applicable laws.
15	Erection of mobile Tower.	Prohibited (except as otherwise provided) as per applicable laws.
B. Regulated Activities:		
16	Felling of trees.	(a) There shall be no felling of trees on the forest land or Government or revenue or private lands without prior permission of the competent authority in the State Government. (b) The felling of trees shall be regulated in accordance with the provisions of the concerned Central or State Act and the rules made there under.
17	Drastic change of agriculture system.	Regulated under applicable laws.
18	Commercial water resources including ground water harvesting.	(a) The extraction of surface water and ground water shall be permitted only for <i>bona fide</i> agricultural use and domestic consumption of the occupier of the land. (b) The extraction of surface water and ground water for industrial or commercial use including the amount that can be extracted, shall require prior written permission from the concerned Regulatory Authority. (c) No sale of surface water or ground water shall be permitted. (d) Steps shall be taken to prevent contamination or pollution of water from any source including agriculture.
19	Erection of electrical cables and telecommunication towers.	Promote underground cabling.
20	Fencing of existing premises of hotels and lodges.	Regulated under applicable laws.
21	Widening and strengthening of existing roads and construction of new roads.	Shall be done with proper Environment Impact Assessment and mitigation measures, as applicable.
22	Movement of vehicular traffic at night.	Regulated for commercial purpose under applicable laws.
23	Introduction of exotic species.	Regulated under applicable laws.
24	Commercial Signboards and hoardings.	Regulated under applicable laws.

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24.	Air and vehicular pollution.	Regulated under applicable laws.
25.	Protection of hill slopes and river banks.	Regulated under applicable laws.
26.	Small scale industries not causing pollution.	Non-polluting, non-hazardous, small-scale and service industry, agriculture, floriculture, horticulture or agro-based industry producing products from indigenous goods from the Eco-sensitive Zone which do not cause any adverse impact on environment shall be permitted. Recycling of treated effluent shall be encouraged and for disposal of sludge or solid wastes the existing regulations shall be followed.
28.	Discharge of treated effluents in natural water bodies or land area.	Regulated under applicable laws.
29.	Collection of Forest produce or Non-Timber Forest Produce (NTFP).	Regulated under applicable laws.
30.	Security Forces Camp.	Regulated under applicable laws.
31.	Collection of boulders, gravel and sand from the river beds.	Regulated under applicable laws.
32.	Laying of transmission and distribution system above 33KV.	Regulated under applicable laws.
33.	New wood based industry.	No establishment of new wood based industry shall be permitted within the limits of Eco-sensitive Zone. Provided that new wood based industry may be set up in the Eco-sensitive Zone using 100% imported wood stock.
C. Permitted Activities:		
34.	Ongoing agriculture and horticulture practices by local communities along with dairies, dairy farming and fisheries.	Permitted under applicable laws.
35.	Rain-water harvesting.	Shall be actively promoted.
36.	Organic farming.	Shall be actively promoted.
37.	Adoption of green technology for all activities.	Shall be actively promoted.
38.	Use of renewable energy sources.	Permitted under applicable laws.
39.	Vegetative fencing.	Permitted under applicable laws.
40.	Cottage industries including village industry, etc.	Shall be actively promoted.
41.	Agriculture operations including plantation, horticulture and orchards.	Permitted under applicable laws.

Eco-sensitive Zone Monitoring Committee.—(1) The Central Government hereby constitutes a Monitoring Committee, for effective monitoring of the Eco-sensitive Zone, which shall comprise of the following, namely:—

- Deputy Commissioner, Rewari - Chairman;
- Additional Deputy Commissioner, Rewari - Member;
- a representative of Non-governmental Organisations working in the field of environment (including heritage conservation) to be nominated by the Government of Haryana for a term of one year - Member;
- Regional Officer, Haryana State Pollution Control Board - Member;
- District Town Planner, Rewari - Member;
- one expert in the area of ecology and environment from any reputed institution or University of the State to be nominated for a term of one year by the Government of Haryana - Member;
- Divisional Wildlife Officer, Gurgaon - Member;
- Deputy Conservator of Forests (Territorial) Rewari - Member Secretary.

Terms of Reference:

- The Monitoring Committee shall monitor the compliance of the provisions of Notification.
- The activities that are covered in the Schedule to the notification of the Government of India in the erstwhile Ministry of Environment and Forests number S.O. 1533(E), dated the 14th September, 2006, and are falling in the Eco-sensitive Zone, except for the prohibited activities as specified in the Table under paragraph 4 thereof, shall be scrutinised by the Monitoring Committee based on the actual site-specific conditions and referred to the Central Government in the Ministry of Environment, Forest and Climate Change for prior environmental clearances under the provisions of the said notification.
- The activities that are not covered in the Schedule to the notification of the Government of India in the erstwhile Ministry of Environment and Forests number S.O. 1533(E), dated the 14th September, 2006 and are falling in the Eco-sensitive Zone, except for the prohibited activities as specified in the Table under paragraph

thereof, shall be monitored by the Monitoring Committee based on the actual site-specific conditions and referred to the concerned Regulatory Authorities.

- (4) The Member Secretary of the Monitoring Committee or the concerned Deputy Commissioner(s) shall be competent to file complaints under section 19 of the Environment (Protection) Act, 1986/29 of 1986 against any person who contravenes the provisions of this notification.
 - (5) The Monitoring Committee may invite representatives or experts from concerned Departments, representatives from Industry Associations or concerned stakeholders to assist in its deliberations depending on the requirements on issue to issue basis.
 - (6) The Monitoring Committee shall submit the annual action taken report of its activities as on 31st March of every year by 30th June of that year to the Chief Wild Life Warden of the State as per pro-forma appended as Annexure III.
 - (7) The Central Government in the Ministry of Environment, Forest and Climate Change may give such directions as it deems fit, to the Monitoring Committee for effective discharge of its functions.
- The Central Government and State Government may specify additional measures, if any, for giving effect to provisions of this notification.

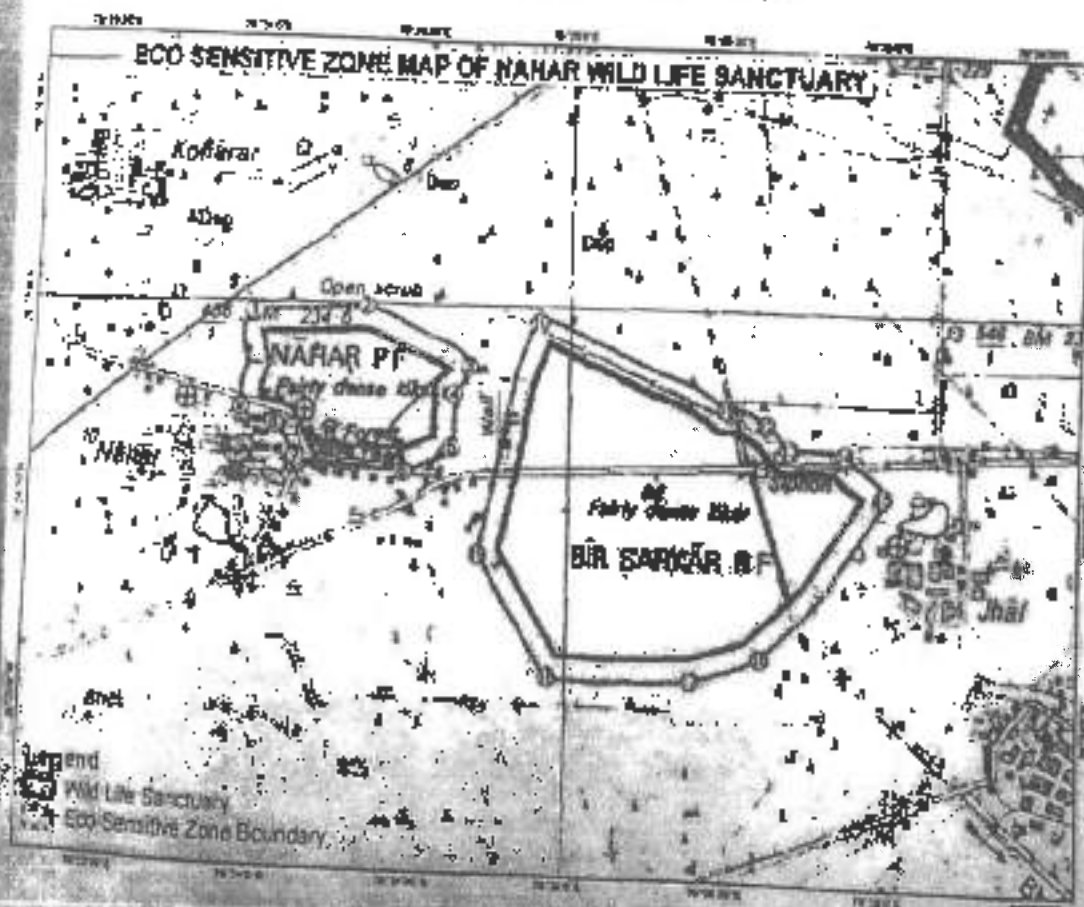
The provisions of this notification shall be subject to the orders, if any, passed, or to be passed, by the Hon'ble Supreme Court of India or the High Court or National Green Tribunal.

[P. No. 25/33/2014-ESZ-RE]

Dr. G. V. SUBRAHMANYAM, Scientist 'C'

Map of Eco-sensitive Zone boundary of Nahar Wildlife Sanctuary, Haryana.

Annexure I



The coordinates showing prominent points of the outer boundary of Eco-sensitive Zone of Natar Wildlife Sanctuary, Haryana

Annexure II

COORDINATES OF ECO-SENSITIVE ZONE		
Id	Longitude	Latitude
1	76 23' 59.352" E	28 24' 58.921" N
2	76 24' 20.555" E	28 24' 59.855" N
3	76 24' 40.650" E	28 24' 51.000" N
4	76 24' 37.822" E	28 24' 46.706" N
5	76 24' 37.389" E	28 24' 38.641" N
6	76 24' 28.215" E	28 24' 35.133" N
7	76 24' 7.701" E	28 24' 36.930" N
8	76 24' 3.691" E	28 24' 41.871" N
9	76 23' 57.285" E	28 24' 44.387" N

Annexure III

Performance of Action Taken Reports- Eco-sensitive Zone Monitoring Committee.-

1. Number and date of Meetings.
2. Minutes of the meetings: Mention main noteworthy points. Attached Minutes of the meeting on separate Annexure.
3. Status of preparation of Zonal master Plan including Tourism master Plan.
4. Summary of cases dealt for rectification of error apparent on face of land record. Details may be attached as Annexure.
5. Summary of cases scrutinised for activities covered under Environment Impact Assessment Notification, 2006. Details may be attached as separate Annexure.
6. Summary of case scrutinised for activities not covered under Environment Impact Assessment Notification, 2006. Details may be attached as separate Annexure.
7. Summary of complaints lodged under Section 19 of Environment (Protection) Act, 1986.
8. Any other matter of importance.

mailto:monitor@forest.in

2019 16:33

mailto:monitor@forest.in

Subject: Email Alert From System Administrator of Online Submission and Monitoring of Wildlife Clearances Proposal (OSMWCP) portal

***** This email has come from outside of RK Group Companies. DO NOT OPEN Attachments or CLICK ON ANY LINK unless you are sure that the email is safe. Please report suspicious email to IT Deptt. immediately. *****

This is to acknowledge that a proposal seeking prior approval of Central Government under the Forest (Conservation) Act 1980 as per the details given below has been successfully uploaded on the portal of the Ministry of Environment, Forests and Climate Change Government of India.

1. Proposal No. : FPHR/Others/4300/2019
2. Proposal Name : proposed Clinker Grinding Unit with Cement Production Capacity of 5.0 MTPA (Phase-I: 2.5 MTPA & Phase-II: 2.5 MTPA) and D.G. Set (6.5 MW) at Village: Jhanawa, Sub Tehsil: Sahasawas, Tehsil: Matanhail, District: Jhajjar (Haryana).
3. Category of the Proposal : Others
4. Date of Submission : 06/07/2019
5. Name of the Applicant with Contact Details
Name : Shashi
Mobile No. : 8890060500
State : Madhya Pradesh
District : chittorgarh
Pincode : 312801
6. Protected Area (ha.) : 0

The proposal will be examined by Wild Life Warden, Forest (Conservation) Act, 1980 to assess its completeness.

(System Administrator)

*** This is a system generated email, please do not reply. ***

To

M/s Wonder Cement Limited
 17, Old Fatehpura, Near SevaMandir,
 Udaipur

Memo No. HEPC/SP1/2020/479

Date:29.05.2020

Subject: Special package of incentives to M/s Wonder Cement Limited, approved by Haryana Enterprise Promotion Board under the provisions of EPP, 2015.

Please refer to your Investment Proposal dated 28th May 2019 (Annexure-1) and input template vide email dated 4th July 2019 (Annexure-2), for setting up of a project of Mega Project category, under the Enterprise Promotion Policy 2015, with total proposed investment of INR 300 Cr. and employment of 750 persons in Block 'D', Sahaswasi, district Jhajjar, Haryana for manufacturing of cement.

The project proposal was placed before Haryana Enterprise Promotion Board (HEPB) in its 7th meeting held on 11th February 2020 on recommendation of the Empowered Executive Committee (EEC) meeting held on 24.09.2019 for consideration of grant of special package of incentives. Based on the projections of Investment, Employment, Annual Turnover, Tax Accruals submitted by you, and after undertaking Cost Benefit Analysis (Annexure 3), the following special package of incentives has been approved by HEPB in its 7th meeting held on 11th February 2020:

Sr. No	Approved Package of Incentives	Benefit as per EPP Policy (INR Cr.)	Benefit over & above policy	Total Quantum of Incentives including Special Package (INR Cr.)
1	Investment Subsidy on net SGST (Net SGST Reimbursement) @ 70% for 10 years	273.38	5.09	278.46
2	Employment Generation Subsidy @ Rs 30,800 per employee for a period of 10 Years	6.72	8.72	15.44
3	Stamp duty refund @100%	2.00	0.00	2.00
4	100% Electricity Duty Exemption for 10 Years	1.64	0.53	2.17
Total		283.74	14.34	298.08

It may be noted that the special package is being granted subject to the fulfilment of following terms and conditions:

1. The project fulfils the eligibility criteria of Mega Projects, as defined in EPP 2015 and further detailed in the Cost - Benefit Analysis model approved by HEPB. (Annexure 3, Copy of approved model).
2. You will comply with the terms and conditions / instructions of the respective scheme, notified by the Department of Industries & Commerce, for availing incentives.
3. The proposed investment must be implemented within 3 years from the date of approval by HEPB.
4. The disbursement of incentives shall be in back-ended manner on commencement of commercial production on furnishing proof of investment made on the project.
5. The incentive under any head, as mentioned in the above Table, shall be applicable for either the number of years or the quantum, whichever is attained earlier.
6. In case, the actual investment/employment/ Turnover/ Tax Accruals is less than the projections provided by you in the Input Template Sheet, the State Government reserves the right to withdraw/ modify the special package of incentives.
7. The project of the investors would have to remain in operations for a minimum period of five years over and above the time period for which incentives have been received, failing which the additional incentives received over & above those generally available, would have to be refunded alongwith applicable interest rate.


Assistant General Manager
for Director of Industries & Commerce, Haryana
-cum-Deputy CEO,
Haryana Enterprises Promotion Centre

Investment 300 cr.
Emp. 150 direct.
50 Acres

30 MAY 2019

28th May 2019

Hon'ble Director Industries & Commerce
Government of Haryana,
Chandigarh
Haryana

Hon'ble Sir

Subject: Customised incentive package for setting up a cement unit in the State of Haryana

✓ M/S Wonder Cement Limited (WCL) is one of India's fastest growing cement company with an installed capacity of 8.50 million tons of cement put up at Nimbahera, District Chittorgarh, Rajasthan, and Dhulla in Maharashtra with an investment of approximately Rs. 3500 crores.

WCL is further expanding its capacity through a clinkerisation unit at Nimbahera & cement Grinding Unit at Badnawar in Madhya Pradesh with an estimated project cost of Rs. 1500 cr. Upon completion of its expansion project the installed capacity of cement of the company shall go up to 10.50 million tons.

WCL is part of RK Group whose flagship company R K Marble Pvt Ltd is one of the leading Marble mining and processing Company in India and Vietnam. It has large mining operations of marble & slate in India & abroad coupled with state of art processing facilities at Kishangarh in the State of Rajasthan and Vietnam. From Vietnam it is exporting world's best quality white marble to about 65 countries across the globe.



WONDER CEMENT LIMITED

Corporate Office: 17, Old Patalgum, Near Bawa Mandi, Udaipur - 315 004, Rajasthan (India).
Tel: +91-824-62967100, Fax: +91-824-6296668, E-mail: corp.office@wondercement.com

Registered Office: Melurva Road, Madangal, Kishangarh - 305 501, District - Ajmer, Rajasthan (India).
Tel/Fax: +91-1463-263151, E-mail: regd.office@wondercement.com, Website: www.wondercement.com

essential for sustaining the operations for initial few years for a new start up. We therefore look forward of hand holding by state Government by means of grant of customized package with a bouquet of incentives in form of 100% GST exemption, electricity duty exemption etc.

From the Industrial Policy of Haryana we gather that Sohawalas wherein Village Jhanswa falls under categorisation of Block D. And we also understand that industries set up in Block D are eligible for following standard package of incentives.

- 75% SGST net paid reimbursement for a period of first 5 years and 35% for next 3 years, with cap of 100% of Fixed capital investment

- Employment generation subsidy
- 100% refund of stamp duty paid on purchase of land
- Electricity Duty exemption for a period of 7 years, and
- 50% exemption in External Development charges (EDC).
- Special package of incentives over & above the standard package, in case of a Mega Project having potential to develop ancillary enterprises is also considered by Haryana Enterprise Promotion Board

As stated above, cement being a highly capital intensive industry with cut throat competition from industry behemoths, a relatively small and growing company like us would require some hand holding from State of Haryana. Our project has very good scope for development of ancillary industries like HDPE/PP bag manufacturing unit, transporters, dealers/distributors for our products across state, maintenance services, housing for staff, etc. The incentives listed out above will not be sufficient and we shall request you to provide a customised incentive package which inter-alia may include the following:

- 100% reimbursement of Gross SGST for a period of 10 years with cap of 300% of fixed capital investment

Wishful

WONDER CEMENT LIMITED
Corporate Office: 17, Old Madhyam, Near New Market, Ludhiana - 141 004, Rajasthan (India)
Tel: +91-2244-53051133, Fax: +91-2244-5005223, E-mail: corp.office@wondercement.com
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Tel: +91-1453-260101, E-mail: regd.office@wondercement.com, Website: www.wondercement.com



WONDER CEMENT

CIN: U28499RJ2005PL0021205

Investment 300 cr.
Emp. 150 aied.
50 Acres

30 MAY 2019

28th May 2019

Hon'ble Director Industries & Commerce
Government of Haryana,
Chandigarh
Haryana

Hon'ble Sir

Subject: Customised Incentive package for setting up a cement unit in the State of Haryana

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Registered Office: Midrange Road, Madanganj, Kishangarh - 305 801, District - Ajmer, Rajasthan (India).
Telefax: +91-1463-280161, E-mail: regd.office@wondercement.com. Website: www.wondercement.com

Considering the Industry Friendly attitude of Haryana Government and also the vigour with which major infrastructure and mass housing projects are being implemented in the State, the company wishes to establish a 2.50 Million Ton capacity cement grinding unit at Village Jhanswa, Sub Tehsil Sahalawas, Jhajar. This unit shall serve consumers predominantly in the State of Haryana, Delhi NCR and rest of North Indian States.

(We have completed the land acquisition of approximately 50 Acres for setting up of the proposed Grinding Unit in Village Jhanswa, Sub Tehsil Sahalawas, District Jhajar, Haryana. Upon completing the land acquisition, the company has initiated the process of

- Change of Land use (CLU) for this land from Agriculture to industrial use, and
- Obtaining Environment Clearance (CE) from MOEF and Consent to Establish (CTE) a cement Grinding Unit from State Pollution Control Department.)

We are hopeful that considering the industry friendly environment in Haryana, both CLU and EC & CTE shall be obtained by the company shortly.

Sir, It would not be out of place to mention that setting up a cement grinding unit is a capital intensive project. The expected outlay for setting up Grinding Unit including a private railway siding will be Approx. Rs. 300 crores. The cement industry is highly competitive and operates at very thin margin. The industry is dominated by established big players who have practically no interest and depreciation burden. The interest and depreciation burden of a new cement unit is very high, which makes operation of new cement unit non competitive with existing established players. In such scenario, the support of state Government is very

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WONDER

essential for sustaining the operations for initial few years for a new start up. We therefore look forward of hand holding by state Government by means of grant of customized package with a bouquet of incentives in form of 100% GST exemption, electricity duty exemption etc.

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- Employment generation subsidy
- 100% refund of stamp duty paid on purchase of land
- Electricity Duty exemption for a period of 7 years, and
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- Special package of incentives over & above the standard package. In case of a Mega Project having potential to develop ancillary enterprises is also considered by Haryana Enterprise Promotion Board

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Wishat

- 1 • 100% reimbursement of Gross SGST for a period of 10 years with cap of 300% of fixed capital investment

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Tel: +91-224-33291133, Fax: +91-224-3008331, E-mail: corp.office@wondercement.com

Registered Office: Mehra Road, Madanpuri, Mahangarh - 308 801, District - Alwar, Rajasthan (India).

Telefax: +91-1483-200101, E-mail: regd.office@wondercement.com, Website: www.wondercement.com



WONDER

- Employment generation subsidy
- 100% refund of stamp duty paid on purchase of land
- Electricity Duty exemption for a period of 10 years
- 100% exemption in External Development charges (EDC).
- Free allocation of fly ash from near by Thermal Power Plants of the State Government for entire useful life of the Grinding unit i.e. 25 years.
- Reimbursement of freight for transportation of fly ash from Thermal Power Plant situated in Haryana to our Grinding unit, which is an environment hazard for the state.
- 100% Exemption of conversion charges from agriculture to industrial land
- Provide Change of Land Use (CLU) on priority basis.
- Single window clearances for necessary approvals required for Grinding Unit.]

✓ Such incentives are currently available in different forms in our home state of Rajasthan, Maharashtra, Madhya Pradesh and Uttar Pradesh. All these State Governments are also vigourously inviting Wonder Cement for setting-up a Grinding Unit in their respective states. Considering the resolve of these States we have either already installed or in the process of installing cement units in these states.

✓ Nimbahera, where we have our clinker production facilities, is conveniently connected to Jhajjar by rail, we find a synergy if we put up a grinding unit at Jhajjar & expand our reach in your State further.

*Approved.
B. Singh*

We would further like to submit that putting up a cement grinding unit would provide following advantage to the State of Haryana:

- Investment of approx.. Rs. 300 cr. in the State of Haryana having a capacity of 2.5 million tons of cement grinding at Sub Tehsil Sahlawas, Jhajjar.

WONDER CEMENT LIMITED

Corporate Office: 17, Old Panchpura, Near Seva Mandir, Udaipur - 315 004, Rajasthan (India.)

Tel: +91-294-3600110, Fax: +91-294-3006333, E-mail: corp.office@wondercement.com

Registered Office: Bikaner Road, Madanpura, Jhajjar - 805 001, District - Jhajjar, Rajasthan

Telephone: +91-4653-000101, E-mail: regd.office@wondercement.com, Website: www.wondercement.com



- Our proposed grinding unit at Haryana would use clinker produced at our mother plant at Nimbaheda and thereby without necessitating use of natural resources of Haryana.
- Since Grinding unit mainly produce PPC cement, it will use flyash being generated as by-product at state Thermal Power Plants & thereby helping in preserving environment by consuming a pollutant material and using the same in a much better way. We understand that at many thermal plants fly ash is disposed through wet disposal which not only create health hazards to environment of nearby area & also use scarce water resources.
- Since clinker is not produced at Grinding unit but is transported from the mother integrated plant, the air pollution is also very negligible.
- Providing direct (about 150 persons) & indirect employment (about 600 persons) mainly to the local people of the area/State
- Development of ancillary units such as Packing bags plant, restaurants, truck service centres etc. in the area & thereby helping in rapid Industrialisation of the area
- Earning precious revenue for the State by way of taxes in time to come.

A brief summary of the proposed Cement Grinding Unit is enclosed herewith as Annexure - 1 for your ready reference.

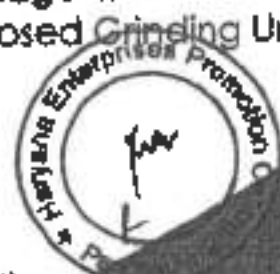
Considering our submissions, we sincerely hope that you will grant us a customised incentive package on the above lines at the earliest

We assure you that it will be very long and mutually rewarding relationship. Once the customised package is announced, we would immediately start work on the proposed Grinding Unit.

WONDER CEMENT LIMITED

Corporate Office: 17, Old Fishergate, Near Bawa Mandir, Udaipur - 315 004, Rajasthan (India)
Tel: +91-294-23081135, Fax: +91-294-2308133, E-mail: corp.office@wondercement.com

Registered Office: Mahana Road, Wadanganj, Khandagiri - 305 801, District - Ajmer, Rajasthan (India).
Telefax: +91-1483-230151, E-mail: regd.office@wondercement.com, Website: www.wondercement.com



A letter of confirmation about the Incentives and other assistance available to Wonder Cement Limited from Government of Haryana would be highly desirable to finalise & commit proposed investment of our company in a cement Grinding Unit in the State of Haryana

Thanking you

Yours Sincerely

For Wonder Cement Limited



(Parmanand Patidar)

Director

Encl: As above



WONDER CEMENT LIMITED

Corporate Office: T7, Old Faltbura, Near Ganga Mandi, Ludhiana - 141 004, Rajasthan (India).
Tel: +91-204-3333118, Fax: +91-204-3006333, E-mail: corp.office@wondercement.com

Registered Office: Main Road, Madanganj, Jharkhand - 805 801, District - Ajmer, Rajasthan (India).
Tel: +91-143-290101, E-mail: regd.office@wondercement.com, Website: www.wondercement.com



Annexure-I

Brief Particulars of the proposed Project of Wonder Cement Limited in Haryana

Sr. No.	Particulars	Information
1	Project	Cement Grinding Unit
2	Estimated Project Cost	Rs. 300 Crores
3	Capacity	2.5 Million Tons Per Annum
4	Location	Village JHanswa, Sub Tehsil : Sahalwas, District Jhajar
5	Size of Plot	Approximately 50 Acres
6	Source of Clinker	Companies own Plant at Nimbahera, Dist Chittorgarh, Rajasthan
7	Source of Flyash	Nearby Thermal Power Plant in Jhajar
8	Any Generation of Air, Water or Soil Pollutant	Except for very slight emission of dust which is well within the best norms laid out by Pollution control board, no other pollution would be emitted by the plant. Further the plant shall consume flyash generated by State Government's thermal power plant and thus helping them in effective removal of a pollutant.
9	Employment Generation	Direct employment to 150 persons and Indirect Employment to at least 600 persons.
10	Ancillary units	Cement is a capital intensive and a heavy commodity. Ancillary units such as Packing Bags units, restaurants, transporters, truck service centres etc come in big number around cement unit leading to rapid industrialisation.
11	Revenue to State	All the industrial activities so created provide precious revenue to state government. Further once the incentive to the unit expires and it becomes self-reliant it becomes a very major source revenue to State Government.

WONDER CEMENT LIMITED

Corporate Office: 17, Old Fatehpura, Near Bawa Mandir, Udaipur - 313 004, Rajasthan (India.)

Tel: +91-294-22801193, Fax: +91-294-300533, E-mail: corp.office@wondercement.com

Registered Office: Khinong Road, Nandarganj, Nandarganj - 305 901, District - Ajmer, Rajasthan (India).

Telephone: +91-1463-350161, E-mail: regd.office@wondercement.com, Website: www.wondercement.com



WONDER
CEMENT



priyanka vashisht <priyankav.hpc@gmail.com>

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1 message

PRASHANT SHARMA <prashant.sharma@wondercement.com>
To: priyanka vashisht <priyankav.hpc@gmail.com>

4 July 2019 at 09:34

Dear Madam

As discussed yesterday, updated file is enclosed herewith.

Regards

prashant



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Keywords: adolescents; depression; self-esteem; social support

Sl. No.	Name of the Beneficiary	Age	Sex	Marital Status	Occupation	Income (Rs.)	Assets (Rs.)	Liabilities (Rs.)	Net Worth (Rs.)	Remarks
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Cost as per Policy

Value obtained through Formula

Net GST Subsidy/Contribution Calculation						
Particulars/Year	1	2	3	4	5	6
Net GST (RHS C)	26.60	33.32	28.76	29.70	35.76	29.76
GST (RHS C)	54.77	68.46	62.15	62.15	62.15	62.15
GST (RHS C)	54.77	68.46	62.15	62.15	62.15	62.15

Net GST Subsidy/Contribution (RHS C)	62.49	35.15	62.42	62.42	28.75	29.76
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Net GST Subsidy/Contribution (RHS C)	27.9
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Stamp Duty Reduced (RHS C)	2.0000
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EDC Description (RHS C)	0.00
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Electricity Duty Description Calculation														
Particulars/Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Electricity Duty Invoiced	4.7758	0.752	0.7084	0.5304	0.1004	0.0084	0.0084	0.0084	0.0084	0.0084	0.0084	0.0084	0.0084	0.0084
Electricity Duty Description (RHS C)	0.0084	0.0084	0.0084	0.0084	0.0084	0.0084	0.0084	0.0084	0.0084	0.0084	0.0084	0.0084	0.0084	0.0084

Net of Electricity Duty Description (RHS C)	5.68
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Employment Subsidy Calculation				
Particulars/Year	1	2	3	4
Employment Subsidy (RHS C)	1.46	1.46	1.46	1.46

Net of Employment Subsidy (RHS C)	6.72
-----------------------------------	------



✓ 12/11/2011
IPD/HRC

Incentive (Rs. cr)	Provision in ZPP 2015	Value in NPV (INR Cr)
Net SOST Indemnification	75% for first 5 years & 35% for next 3 years	273.36
Stamp Duty Refund	100%	2.80
EDC Refund	50%	8,00,00
Electricity Duty Exemption	100% for 7 years	1.44
Employment Subsidy	INR 36000 and INR 50000 per year for 5 years for SC/Women and General Category employees respectively	6.71
Value of Incentive as per EPP 2015		283.74

Incentive Table	
Incremental eligibility over & above EPP (INR Cr)	403.91
Total Incentive (As per policy + Over & Above Policy) that can be given to Investor (INR Cr)	300.00

f. *[Signature]*
FD-HEPC



Benefit to State		Value in NPV (INR Cr)
Net SOST Account		800.18
Tax due to Employment		15.40
Multiplier Benefit		6.71
Total Benefit (INR Cr)		822.29

Amount: [redacted] Data on the Budget for current and future CEs analysis

S. No.	Subsidiary	Appropriation			As per Provision of EPP 2015	Total value post proportion	Over & above EPP 2015
		Year	Quantum				
1	100% of the total amount				273.46	273.46	5.00
2	100% of the total amount				6.72	15.44	8.72
3	100% of the total amount				2.00	2.00	8.00
4	100% of the total amount				1.64	2.17	0.53
5	100% of the total amount				0.00	0.00	0.00
TOTAL					283.84	298.07	14.23



Handwritten signature: *[Signature]*
 Director, Karnataka Enterprises Promotion Centre
 Bangalore

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PRE - FEASIBILITY REPORT

FOR

**Proposed Clinker Grinding Unit
with Cement Production Capacity of
5.0 MTPA (Phase-I: 2.5 MTPA &
Phase-II: 2.5 MTPA) and D.G. Set (6.5 MW)**

At

**Village: Jhanswa, Tehsil: Matanhail,
District: Jhajjar (Haryana)**

APPLICANT



M/s. Wonder Cement Limited

R.K. Nagar, Tehsil: Nimbahera,

Dist: Chittorgarh (Rajasthan)

Telephone No.91166-52020

Fax No.0294-3006333

E-mail:darshan.jal@wondercement.com

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ABBREVIATIONS

APCEs	Air Pollution Control Equipments
CCBM	Closed Circuit Ball Mill
CER	Corporate Environmental Responsibility
CPCB	Central Pollution Control Board
CO ₂	Carbon dioxide
CREP	Corporate Responsibility for Environmental Protection
CRZ	Central Regulation Zone
CSR	Corporate Social Responsibilities
CSE	Cement Sustainability Initiative
DG	Diesel Generator
ENE	East of North East
EIA	Environmental Impact Assessment
ENE	East of North East
FY	Financial Year
GU	Grinding Unit
Ha	Hectare
ISO	International Organization for Standardization
IGSTPP	Indira Gandhi Super Thermal Power Project
KLD	Kilo Litre Per Day
KM	Kilo Meter
Kg	Kilogram
M	Meter
MW	Mega Watt
MT	Metric Tonnes
MTPA	Million Tonnes Per Annam
NCR	National Capital Region
NH	National Highway
NNE	North of North East
NE	North East
NNW	North of North West
NW	North West
NTPC	National Thermal Power Corporation Limited
OHSAS	Occupational Health and Safety Assessment Series
OPC	Ordinary Portland Cement
PF	Protected Forest
PPC	Portland Pozzolana Cement
RCC	Reinforced Cement Concrete
RF	Reserved Forest
RO	Reverse Osmosis
R&R	Rehabilitation and Resettlement
SSE	South of South East
SW	South West

STP	Sewage Treatment Plant
SH	State Highway
TPH	Tonnes Per Hours
TPA	Tonnes Per Annun
VRM	Vertica Roller Mill
WCL	Wonder Cement Ltd.



PRE-FEASIBILITY REPORT

1.0 EXECUTIVE SUMMARY

M/s. Wonder Cement Ltd. is proposing Clinker Grinding Unit with Cement Production Capacity of 5.0 MTPA (Phase-I: 2.5 MTPA & Phase-II: 2.5 MTPA) and D.G. Set (6.5 MW) at Village: Jhanswa, Tehsil: Matanhail, District: Jhajjar (Haryana). Salient features of the project are given in Table - 1.

Table - 1
Salient Features of the Project

S. No.	PARTICULARS	DETAILS
A.	Nature of the Project	Proposed Project
B.	Size of the Project	Units
		Proposed Capacity
		Cement (MTPA) 5.0 (Phase-I: 2.5 & Phase-II: 2.5)
		D.G. Set (MW) 6.5
C.	Category of the Project	As per EIA Notification dated 14 th September, 2006; as amended from time to time; the project falls under Category "B", Project or Activity '3(b)' - Cement Plants
D.	Location Details	
	Villages	Jhanswa
	Tehsil	Matanhail
	District	Jhajjar
	State	Haryana
	Latitude	28° 28' 15.90" N to 28° 28' 55.26" N
	Longitude	76° 24' 2.35" E to 76° 24' 48.81" E
	Toposheet No.	53 D/ 6 & 53 D/ 7 and 53 D/ 10
	Location Map has been shown in Figure - 1.	
F.	Area Details	
	Total Project Area	54 ha
	Greenbelt Area / Plantation Area (ha)	17.82 ha (-33 % of the total project area)
F.	Environmental Setting Details (with approximate aerial distance & direction from proposed project site)	
G.	Nearest Village	Jhanswa (0.5 km in NE direction)
1.	Nearest Town	Matanhail (12.0 km in NNE direction)
1.	Nearest City	Charki Dadri (18.0 km in NW direction)
3.	Nearest National Highway / State Highway	SH - 23 (8.0 km in SSE direction)
4.	Nearest Railway station	Jhajjar Railway Station (4.0 km in NNW direction)
5.	Nearest Airport	Indira Gandhi International Airport, New Delhi (115.0 km in ENE direction)
5.	National Parks, Wildlife Sanctuaries, Biosphere Reserves, etc. within 10 km	Nahar Wildlife Sanctuary (6.0 km in South direction)

Proposed Clinker Grinding Unit with Cement Production Capacity of 5.0 MTPA (Phase - I: 2.5 MTPA & Phase - II: 2.5 MTPA) and D.G. Set (6.5 MW) At Village: Jhanswa, Tehsil: Matanhall, District: Jhajjar (Haryana)	Pre-Feasibility Report
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S. No.	PARTICULARS	DETAILS
	radius.	
7.	Reserve Forest (RF) / Protected Forest (PF) etc. within 10 km. radius	- o Bir Sarkar RF (6.5 km in SSE direction) - o Nahar RF (6.5 km in South direction)
8.	Water Bodies (within 10 km radius)	Jawahar Lal Nehru Feeder (Canal) (8.0 km in East direction)
9.	Seismic Zone	Zone - IV as per IS: 1893 (Part-I): 2002
F.	Cost Details	
1.	Total Cost of the Project	Rs. 850 Crores (Phase - I: Rs. 480 Crores & Phase - II: Rs. 350 Crores)
2.	Cost for Environment Management Plan	- o Capital Cost - Rs. 14 Crores (For each Phase) - o Recurring Cost - Rs. 7 Crores / annum (For each Phase)
G.	Basic Requirements for the project	
	Water Requirement	550 KLD (Phase - I: 300 KLD & Phase - II: 250 KLD) Source: Ground Water
	Power Requirement	25 MW (Phase - I: 13 MW & Phase - II: 12 MW) Source: Haryana State Grid and D.G. Set (For emergency back-up).
	Manpower Requirement	230 Persons (Phase - I: 178 & Phase - II: 52) Source: Unskilled / Semi-skilled - local area, skilled - outside/local

2.0 INTRODUCTION OF THE PROJECT/ BACKGROUND INFORMATION

(I) Identification of Project and Project Proponent

M/s. Wonder Cement Limited is a unit of M/s R. K. Marble Group. Wonder Cement Limited is a cutting-edge cement manufacturing company with total cement production capacity of 8.0 MTPA (Line 1 and Line 2). Line 3 with 4.0 MTPA cement production is under implementation. The company aspires to establish itself as a leading player in the industry. Its Registered & Corporate Office is at Madanganj - Kishanganj, District Ajmer (Rajasthan). This company is ISO 9001:2008, ISO 14001 and OHSAS 18001 certified unit.

(II) Brief description of nature of the project

M/s. Wonder Cement Ltd. is proposing Clinker Grinding Unit with Cement Production Capacity of 5.0 MTPA (Phase - I: 2.5 & Phase - II: 2.5) and D.G. Set (6.5 MW) at Village: Jhanswa, Tehsil: Matanhall, District: Jhajjar (Haryana).

As per EIA Notification dated 14th Sept., 2006, as amended from time to time; the project falls under Category "B", Project or Activity '4(b)' - Cement Plants.

(iii) Need for the project and its importance to the country and/or region

The housing and real estate sector is the biggest demand driver of cement, accounting for about 65 per cent of the total consumption in India. The other major consumers of cement include public infrastructure at 20 per cent and industrial development at 15 per cent.

Cement production capacity stood at 502 million tonnes per year (MTPA) in 2018. Cement consumption is expected to grow by 4.5 per cent in FY19 supported by pick-up in the housing segment and higher infrastructure spending. The industry is currently producing 280 MT for meeting its domestic demand and 5 MT for exports requirement.

The Government of India has been laying a massive emphasis on infrastructure development, with 100 smart cities, modernisation of 500 cities, affordable housing for all by 2021, cement concreting of national highways, provision of sanitation facilities, etc. all in the pipeline for development over the course of the next years. These all leads to future growth of Indian Cement Industry.

The housing sector is the biggest demand driver of cement, accounting for about 67% of the total consumption in India. The other major consumers of cement include infrastructure at 13%, commercial construction at 11% and industrial construction at 9%.

Due to the increasing demand in various sectors such as housing, commercial construction and industrial construction, cement industry is expected to reach 550-600 Million Tonnes Per Annum (MTPA) by the year 2025. Thus, this project is of prime importance to country and local region.

(iv) Demand- Supply Gap

India's cement demand is expected to reach 550-600 MTPA by 2025. Demand - Supply projection for cement on National and State basis reveals that there exists an imbalance between availability and demand of cement particularly in eastern region. Eastern India is poised to witness a sizeable spurt in demand, mainly aided by the government's "housing for all" scheme. Under these circumstances to bridge the gap, Wonder Cement limited is proposing Clinker Grinding Unit at Village: Jhariswa, Tehsil: Matanhall, District: Jhajjar (Haryana).

(v) Imports vs. Indigenous production

The proposed project will utilize locally available raw material and cement produced in the state will be consumed domestically.

(vi) Export Possibility

WCL proposes to address cement demands of Haryana, Rajasthan, Punjab, Delhi NCR and UP. No cement export is envisaged.

(vii) **Domestic/ Export Markets**

The proposed cement production will cater to the cement demands in the states of Haryana, Rajasthan, Punjab, Delhi NCR and UP.

(viii) **Employment Generation (Direct and Indirect) due to the project**

Direct and Indirect employment will be generated due to the proposed project. During construction phase, employment opportunity to approximately 47 persons is estimated. The total manpower requirement during operation phase of the project is estimated to be approx. 130 (Phase - I: 128 & Phase - II: 52). Unskilled/ semi-skilled manpower can be sourced from the local area and skilled manpower will have to be sourced from outside/ local.

3.0

PROJECT DESCRIPTION

(i) **Type of Project including Interlinked and interdependent projects, if any**

M/s. Wonder Cement Ltd. is proposing Clinker Grinding Unit with Cement Production Capacity of 5.0 MTPA (Phase-I: 2.5 MTPA & Phase-II: 2.5 MTPA) and D.G. Set (6.5 MW) at Village: Jhanswa, Tehsil: Matanhalli, District: Jhajjar (Haryana).

Interlinked and Independent Projects:

Interlinked Project: Integrated Cement Plant at R K, Nagar, Tehsil: Nimbahera, Dist: Chittorgarh (Rajasthan).

Interdependent Project: There is no interdependent project.

(ii) **Location (map showing general location, specific location, and project boundary & project site layout) with coordinates**

Location Map is given below:

(vi) Domestic/ Export Markets

The proposed cement production will cater to the cement demands in the states of Haryana, Rajasthan, Panjab, Delhi NCR and UP.

(viii) Employment Generation (Direct and Indirect) due to the project

Direct and Indirect employment will be generated due to the proposed project. During construction phase, employment opportunity to approximately 47 persons is estimated. The total manpower requirement during operation phase of the project is estimated to be approx. 230 (Phase - I: 178 & Phase - II: 52). Unskilled/ semi-skilled manpower can be sourced from the local area and skilled manpower will have to be sourced from outside/ local.

3.0 PROJECT DESCRIPTION

(i) Type of Project including interlinked and interdependent projects, if any

M/s. Wonder Cement Ltd. is proposing Clinker Grinding Unit with Cement Production Capacity of 5.0 MTPA (Phase-I: 2.5 MTPA & Phase-II: 2.5 MTPA) and D.G. Set (6.5 MW) at Village: Jhanswa, Tehsil: Matanhall, District: Jhajjar (Haryana).

Interlinked and Independent Projects:

Interlinked Project: Integrated Cement Plant at R.K. Nagar, Tehsil: Nimbahera, Dist: Chittorgarh (Rajasthan).

Interdependent Project: There is no interdependent project

(ii) Location (map showing general location, specific location, and project boundary & project site layout) with coordinates

Location Map is given below:

Proposed Roller Grinding Unit with Cement Production Capacity of 3.6 MTPA (Phase - I: 2.5 MTPA & Phase - II: 1.1 MTPA) and D.G. Set (6.5 MW)
At Village: Jhamwa, Tehsil: Motianhall, District: Jhajjar (Haryana)

Pre-Feasibility Report

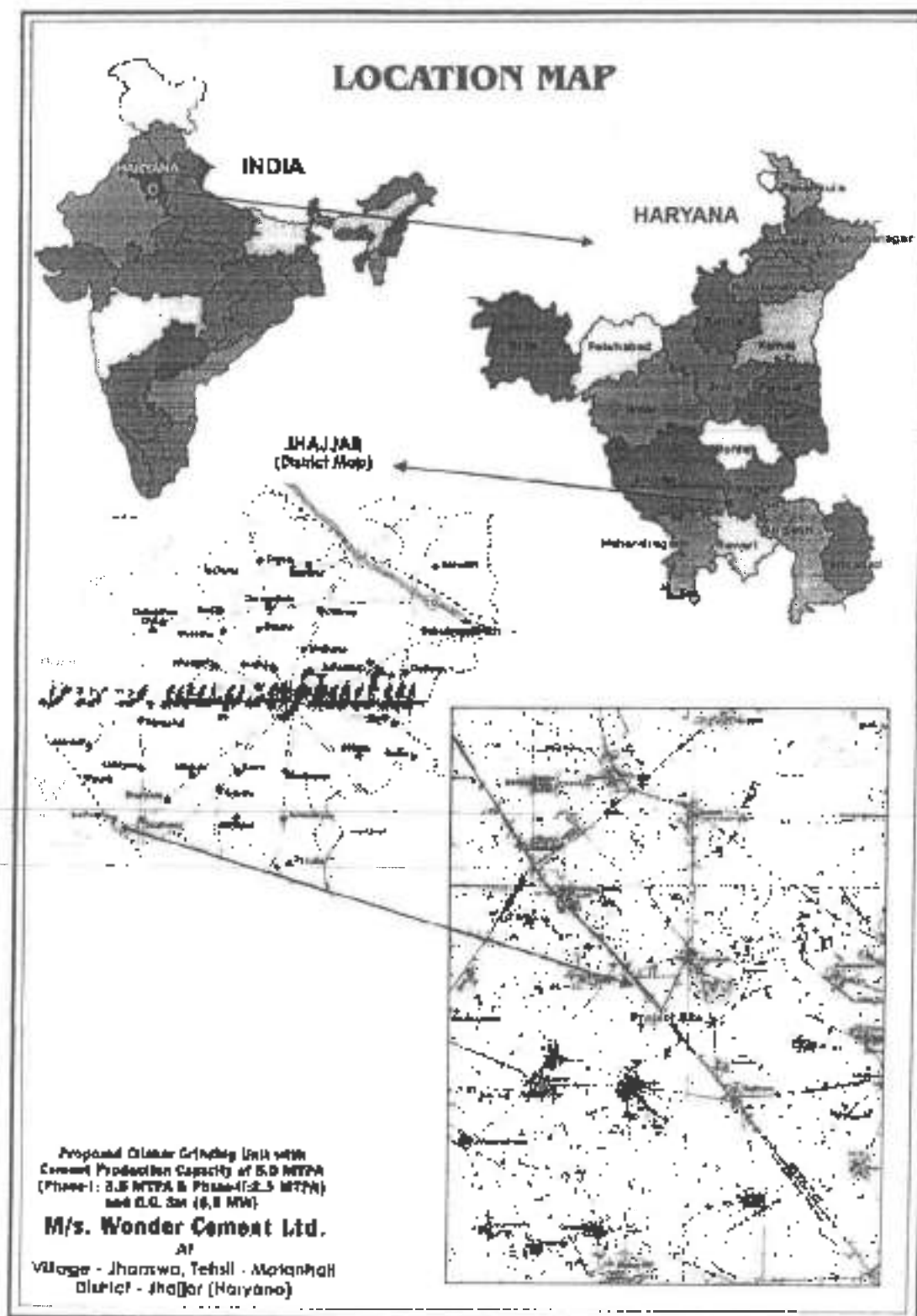


Figure - I: Location Map

38
152

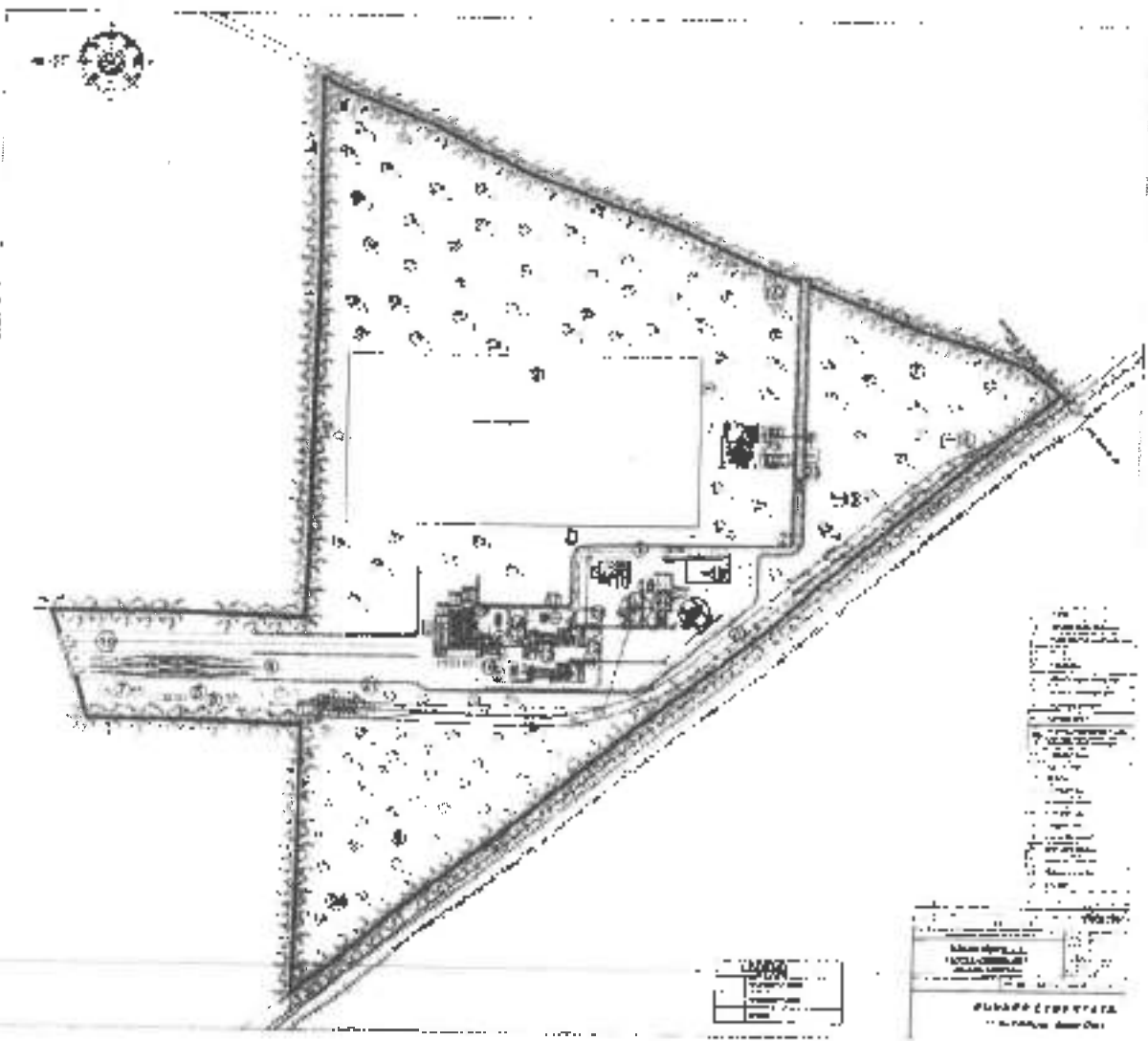


Figure - 2: Project Site Layout

Proposed Cement Grinding Unit with Cement Production Capacity of 1.5 MTPA (Phase - I) & 2.5 MTPA (Phase - II) 2.5 MTPA) and 6.5 MTPA (Phase - III) 6.5 MTPA) at Jhagat, Jhagat (Haryana)

(ii) Key Plan

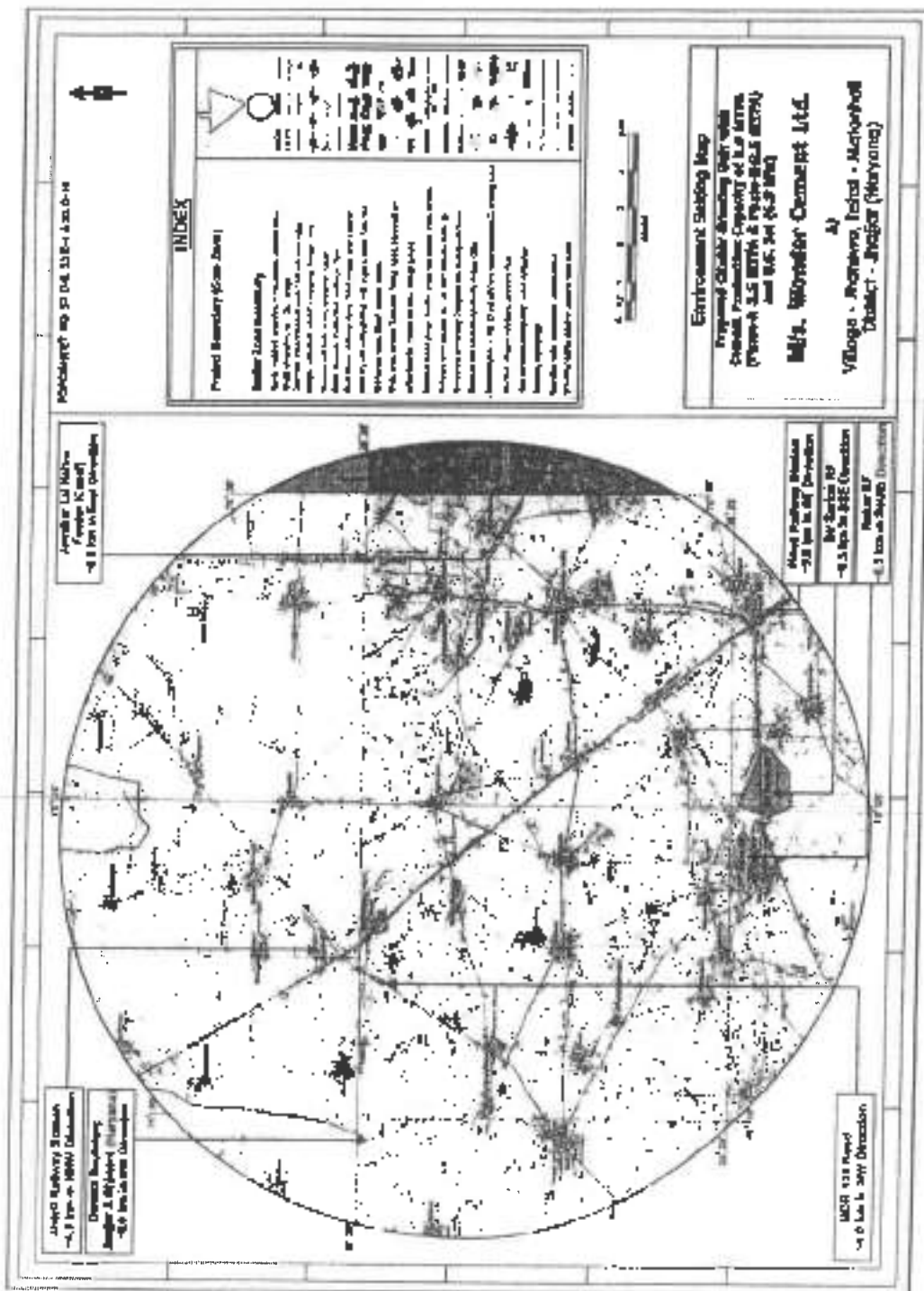


Figure - 3: Key Plan

- (iv) Details of alternative sites consideration and basis of selecting the proposed site, particularly the environmental considerations gone into should be highlighted.

This site has been selected and finalized based on:

- Availability of raw material i.e. fly ash
- Power availability in this part of the State is good
- Nearest to road & rail for transportation of raw material and finished product

From the above considerations, the proposed site falling under the Village: Jhanswa, Tehsil: Matanhall, District: Jhajjar (Haryana) has been found suitable for setting up the proposed Clinker Grinding Unit.

- (v) Size or magnitude of operation

M/s. Wonder Cement Ltd. is proposing Clinker Grinding Unit with Cement Production Capacity of 5.0 MTPA (Phase - I: 2.5 MTPA & Phase-II: 2.5 MTPA) and D.G. Set (6.5 MW) at Village: Jhanswa, Tehsil: Matanhall, District: Jhajjar (Haryana).

As per EIA Notification dated 14th Sept., 2006 as amended from time to time, the project falls in Category "B" under S. No. 3 (Material Production), Project Activity '3 (b)' Cement Plants.

- (vi) Project description with process details (a schematic diagram/ flow chart showing the project layout, components of the project etc. should be given)

Project Description

S. No.	Units	Proposed Capacity
1.	Cement (MTPA)	5.0 (Phase I: 2.5 & Phase II: 2.5)
2.	D.G. Set (MW)	6.5

Process Description

The manufacturing process comprises of:

- o Clinker storage & handling
- o Fly Ash storage & handling
- o Gypsum storage & handling
- o Clinker grinding & Cement production and storage
- o Cement packing & dispatch

D.G. Set will also be installed for emergency Power back up.

The manufacturing process details are given below:

✓ **Clinker Storage & Handling**

Clinker will be received at plant site by road & railway. Clinker will be unloaded and transported by a belt conveyor to the clinker silo. From the silo, clinker will be conveyed to the mill hopper by a combination of extraction equipment and belt conveyors. Clinker will be sourced from Integrated Cement Plant at Chittorgarh (Rajasthan).

✓ **Fly Ash Storage & Handling**

Fly ash will be sourced from Thermal Power Plants, IGSTPP and CLP, Jharkhand, Jhajar and will be received through closed bulkers & fed into silo through pneumatic conveying system.

✓ **Gypsum Storage & Handling**

Gypsum will be received by road / railway through trucks and will be unloaded by truck tippler and transported to storage by a belt conveyor. Gypsum will be reclaimed by reclaimers for further conveying to Mill hoppers by conveyors.

✓ **Clinker grinding & Cement production and storage**

A RP-CCBM of 265 TPH will be installed for grinding cement to 3800 Blaine as per quality requirements. Fresh clinker and clinker from recirculating circuit is fed to Roll press for pre-grinding. Pre-ground clinker from Roll press is fed to static separator where fines will lifted to Dynamic separator and coarse material is re-circulated to Roll press. After separation in dynamic separator fines will collected in product cyclones for transport to Bucket elevator feeding Cement Silos. Part of coarse material from dynamic separator, Fly ash and Gypsum are fed to Ball mill for grinding. Ball mill outlet product will fed to Dynamic separator from where product cement will collected in product cyclones for transport to Bucket elevator feeding Cement Silos.

Or Vertical Roller Mill

In this circuit Clinker, Gypsum and Fly ash will fed to the table of Roller Mill. Fines will air swept to Dynamic separator. Product cement from Dynamic separator will collected in product Bag house or product cyclones for further transport to Cement Silos. Coarse clinker from separator and coarse ground material from mill table will re-circulated and fed to mill table again along with fresh clinker.

✓ **Cement Packing and Dispatch**

Rotary electronic packing machines will be used for packing of cement. Loading of packed bags onto the trucks will be done by truck loading machines. Bags are of 50 kgs each. Loose cement will be dispatched through closed bulkers to bulk consumers. Cement will be dispatched by road and railway.

Typical flow diagram cement manufacture by dry process is shown below in Figure.

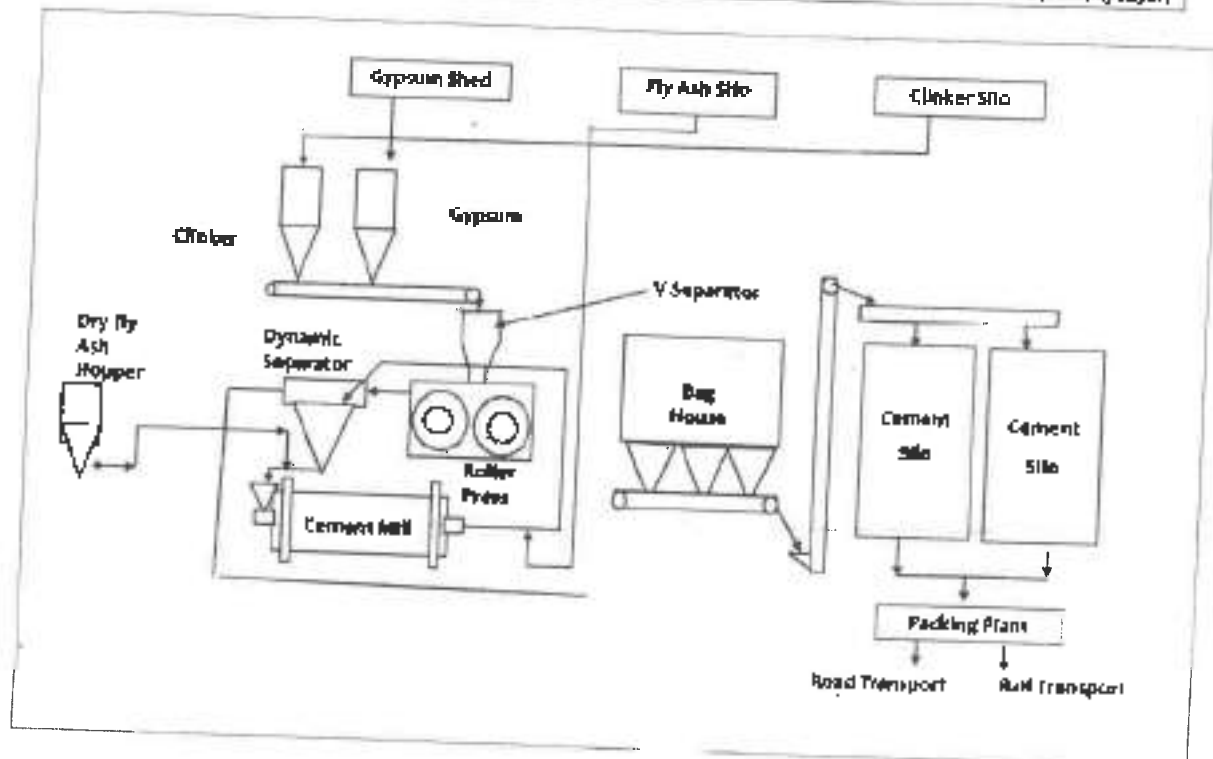


Figure 4: Process Flow Chart

EQUIPMENT DETAILS

Equipment Selection

A list of equipment and storage capacities are given below. To select a particular type of equipment or storage for the project, among others, the following issues have been considered:

- Equipment costs
- Energy consumption
- Raw material characteristics
- Sizes to which the equipment is available
- Lead times for particular types of equipment
- Operating experience with various types of equipment
- Ease of operation of equipment
- Product to be manufactured
- Site conditions
- Local skills available
- Environmental issues.

Proposed Clinker Grinding Unit with Cement Production Capacity of 5.0 MTPA (Phase-I : 1 & Phase-II : 2.1) and D.G. Set (6.5 MW)
At Village: Marawa, Tehsil: Maranahat, District: Baflo (Maharashtra)

Pre-feasibility Report

Proposed Machineries Details

S. No.	Description	Unit	Capacity (Phase - I)	Capacity (Phase - II)
1.	Gypsum crusher	TPH	1 x 300	1 x 500
2.	Clinker Grinding Circuit	TPH	1 x 350	1 x 350
3.	Packing plant			
4(a).	Packer	TPH	2 x 240	2 x 240
4(b).	Truck Loaders	Nos.	6	6
5.	Truck Tipplers for Gypsum (1), Clinker unloading (2) and fly ash (1 nos)	TPH	4 x 100	4 x 100
6.	Apron Feeders under Truck Tipplers	TPH	3 x 300	3 x 300
7.	Belt Conveyors, Elevators, system for material transport	Lot	1	1

Details of Pollution Control Equipments

S. No.	Locations	Proposed
1.	Cement Mill	Bag House
2.	Packing Plant	Bag Filters
3.	Transfer points	Bag Filters

(vi) Raw material required along with estimated quantity, likely source, marketing area of final products, mode of transport of raw material and finished product.

a) Raw Material Requirements:

Details reg. raw material is given in Table - 2 and reg. fuel in Table - 3:

Table - 2

Raw Material Requirement, Source & Transportation

S. No.	Material	Quantity (MTPA)				Source	Distance / Mode of Transportation
		Phase - I		Phase - II			
		PPC	(OPC)	PPC	(OPC)		
1.	Clinker	1.5	2.325	2.5	2.325	Existing Cement Plant in Nimbahera, Dist. Chittorgarh, Rajasthan / Outsourced	Rail / 550 km
2.	Fly ash	0.875	0	0.875	0	Thermal Power Plants, IGSTPP and CLP, Jharkh. Jhalla	Road / 20 km
3(a).	Mineral Gypsum	0.125	0.125	0.125	0.125	RSMML, Nagaur/ Bikaner (Raj.)	Road & Rail / 365 km
3(b).	Chemical Gypsum					Dye & dye Intermediate plants in Surat Vapi Gujarat	Road & Rail / 750 km

Table - 3
Fuel Requirement

S. No.	Name	Quantity	Source	Distance & Mode of Transportation	Calorific value (Kcal/kg)	% Ash	% Sulphur
1.	Diesel (HSD)	300 Liter/Hr	IOC depot Jhajjar	10 km	10000	-	0.05%

b) **Marketing Area and Mode of transportation of Final Product**

The primary markets of interest for the proposed project are located in the states of Haryana, Rajasthan, Punjab, UP and Delhi NCR. No cement export is envisaged.

Mode of transportation for final product will be by Road & Railway.

(viii) **Resources optimization/ recycling and reuse envisaged in the project, if any, should be briefly outlined.**

- o Dust collected in air pollution control equipments will be recycled into the process.
- o Water used for cooling will be partially absorbed in the process and partially subjected to evaporation & recycling; hence, no wastewater will be discharged from the plant premises.
- o Approx. 15 KLD domestic waste water will be generated; which will be treated in STP and the treated water will be utilized for greenbelt development / plantation.

(ix) **Availability of water its source, energy /power requirement and source should be given.**

a) **Water Requirement and Source**

Total water requirement for the proposed project will be 550 KLD (300 KLD for Phase - I and 250 KLD for Phase - II) and the same will be sourced from Ground water. Recycled water from STP & Cooling tower blow down will be utilized for dust suppression and greenbelt development. Break-up of water requirement is given in Table-4 below:

Table - 4

Water Requirement

Purpose	Requirement (KLD)		Source
	Phase - I	Phase - II	
Cooling	170	120	Ground water
Drinking	30	30	
TOTAL	300	250	

b) **Power Requirement and Source**

Total power requirement for the proposed project will be 25 MW (Phase - I: 13 MW & Phase - II: 12 MW)

Source: Haryana State Grid and D.G. Set (For emergency back-up)

- (x) Quantity of waste to be generated (Liquid and solid) and scheme for their management/disposal
 - o No waste water will be generated from cement manufacturing process, as it is based on dry process technology.
 - o Water used for cooling will be partially absorbed in the process and partially subjected to evaporation & recycling; hence, no wastewater will be discharged from the plant premises
 - o Approx. 15 KLD domestic waste water will be generated; which will be treated in STP and the treated water will be utilized for greenbelt development / plantation
 - o Used oil & grease will be generated from plant machinery / Gear boxes as hazardous waste will be sold to the CPCB authorized recycler.
 - o No solid waste will be generated from the cement manufacturing process.
 - o Dust collected in air pollution control equipments will be recycled into the process.

4.0 SITE ANALYSIS

(i) Connectivity

The project site is well connected to SH - 22 (-8.0 km in SSE direction) and MDH - 130 (-4.0 km in NW direction). Nearest town to the proposed project site is Matanahad -12.0 km in NNE direction from the project site and nearest city is Charki Dadri -18.0 km in NW direction from the project site. Nearest Railway Station is Jharli Railway Station which is -4.0 km in NW direction from the project site and nearest Airport is Indira Gandhi International Airport, New Delhi -65.0 km in ENE direction from the project site.

The site is well connected with communication facilities like telephone, fax, wireless and telex and as such, no constraints are envisaged in this aspect as the Tehsil and District headquarters are near to the site.

(ii) Land from Land use and land ownership

Total requirement for the proposed Clinker Grinding Unit will be 54 ha; which is Private agricultural land and the same will be converted into industrial after introduction of the project. No forest land is involved.

(iii) Topography

Topography of the core zone for the proposed Clinker Grinding Unit is almost flat.

(iv) Existing land use pattern (agriculture, non-agriculture, forest, water bodies (including area under CRZ), shortest distances from the periphery of the project to periphery of the forests, national park, wild life sanctuary, eco sensitive areas, water bodies (distance from the HFL of the river), CRZ.

Table - 5
Environmental Setting of the Area

S. NO.	PARTICULARS	DETAILS (with approximate aerial distance & direction from proposed project site)
1.	Nearest Village	Jhanswa (0.5 km in NE direction)
2.	Nearest Town	Matanhall (12.0 km in NNE direction)
3.	Nearest City	Charkhi Dada (-18.0 km in NW direction)
4.	Nearest National Highway / State Highway	SH - 22 (8.0 km in SSE direction)
5.	Nearest Railway station	Jharkh Railway Station (4.0 km in NNW direction)
6.	Nearest Airport	Indira Gandhi International Airport, New Delhi (65.0 km in ENE direction)
7.	National Parks, Wild Life Sanctuaries, Biosphere Reserves within 10 Km. radius	Nahar Wildlife Sanctuary (6.5 km in South direction)
8.	Reserve Forest (RF) / Protected Forests (PF) etc. within 10 km radius	o Bir Sarkar RF (6.5 km in SSE direction) o Nahar RF (6.5 km in South direction)
9.	Water Bodies (within 10 km radius)	Jawahar Lal Nehru Feeder (Canal) (8.0 km in East direction)
10.	Soil Type	Black Cotton Soil
11.	Seismic Zone	Zone - IV as per IS: 1893 (Part-I): 2002

(v) Existing Infrastructure

There is no existing infrastructure at project site.

(vi) Soil Classification

The soil is Black Cotton Soil in nature.

(vii) Climatic Data from Secondary Sources

The region is a part of semi-arid zone in Haryana. The climate of the region is generally hot. Summer and winter temperatures are respectively 40-45°C and 10-15 °C. Annual rainfall mentioned in records is approximately 600-1000 mm.

(viii) Social Infrastructure available

All basic amenities such as school, hospital, market etc. are available in the nearby towns. The project site is well connected with social infrastructure facilities like medical, post office, schools, police stations etc. and as such no constraints are envisaged in this aspect.

5.0 PLANNING BRIEF

- (i) Planning Concept (type of industries, facilities, transportation etc.) / Town and country Planning/ Development authority classification.

Proposed Industry is Cement industry (Red Category). Transportation of raw material and final product will be done via existing road network & railway also and cement concrete road will be developed within the proposed project area.

- (ii) Population Projection

Temporary influx of people will be there as the managerial and supervisory staff will generally be outsider. A projection may be made by a governmental organization, or by those unaffiliated with a government.

- (iii) Land use planning

Total requirement for the proposed Clinker Grinding Unit will be 54 ha; which is Private agricultural land and the same will be converted into Industrial after introduction of the project. Out of the total project area; 12.82 ha area will be developed under greenbelt plantation.

- (iv) Assessment of infrastructure demand (Physical & Social)

M/s. Wonder Cement Ltd. will assess the demand of infrastructure (Physical & Social) in the nearby area of the proposed site and will develop it under Corporate Environmental Responsibility (CER) program for rural development initiatives for the upliftment of the nearby communities from time to time.

- (v) Amenities/Facilities

M/s. Wonder Cement Ltd. will be providing all the amenities like First aid room, drinking water facilities, Toilet facility, canteen etc. for the permanent and contract employees. The operational workers will be employed from nearby area, who may commute daily from their residence for work therefore; no long-term housing will be required. Also, Nearest city and district headquarter Jhajar is about 27 km from the project site, employees may also be accommodated there. Transport and other facilities will be provided by the company.

6.0 PROPOSED INFRASTRUCTURE

- (i) Industrial Area (Processing Area)

Following Infrastructure will be provided as following:

- Workshop

Adequately equipped workshop has been envisaged for all disciplines i.e. mechanical, electrical, electronic computer maintenance etc. at proposed Clinker Grinding Unit.

- **Warehouse and Spare Parts Store**
A store building will be constructed as warehouse or spare parts store. Fenced open-air yard with sheds will be built for storing heavy machinery parts.
- **Elevators, Cranes, Hoists and Maintenance Tools**
Elevators, maintenance cranes/ hoists and all required specially designed maintenance tools for equipment and plant will be provided.
- **Technical & Administrative office**
A suitable technical office & administrative office will be constructed for the project activities and operation phase.
- **Time and Security office**
At the entrance of the main plant, a time office and a security office will be constructed.
- **Dispensary/First Aid**
A dispensary/first aid facility will be provided in the plant premises.
- **Canteen**
A canteen will be provided in the plant premises.
- **Weighbridge**
Two Electronic weighbridges will be provided to take care of the incoming and outgoing materials at the plant.
- **Bags godown**
Space will be provided in the packing plant area for the storage of bags.
- **Parking**
Adequate parking space will be provided in the plant premises for the parking of vehicles.
- **Storage Facilities**

Type of Material	Type of Storage	Capacity (Tonnes)	
		Phase - I	Phase - II
Cement	RCC Silo	2 x 7500	2 x 7500
Clinker	RCC Silo	35000	35000
Fly ash	RCC Silo	3000	3000
Gypsum	Covered Yard	6000	6000

(ii) Residential Area (Non processing area)

The operational workers will be employed from nearby area who may commute daily from their residence for work therefore; no long-term housing will be required. Also, Nearest city and district headquarter Jhajar is about 27 km from the project site; employees may also be accommodated there. Transport and other facilities will be provided by the company.

(iii) **Greenbelt**

Out of the total project area (54 ha), 17.82 ha (~33 % of the total project area) will be developed under greenbelt area & plantation in order to reduce dust & noise pollution levels & to increase aesthetic beauty of the area.

(iv) **Social Infrastructure**

Proposed project will result in growth of the surrounding areas by increased direct and indirect employment opportunities in the region including ancillary development and supporting infrastructure.

(v) **Connectivity**

The project site is well connected to SH - 22 (~8.0 km in SSE direction) and MDR - 130 (~4.0 km in NW direction). Nearest town to the proposed project site is Maranahat ~11.0 km in NNE direction from the project site and nearest city is Charkhi Dadri ~18.0 km in NW direction from the project site. Nearest Railway Station is Jhark Railway Station which is ~4.0 km in NNW direction from the project site and nearest Airport is Indira Gandhi International Airport, New Delhi ~65.0 km in ENE direction from the project site.

All communication facilities such as telephone, telefax, STD, ISD & internet are available in the vicinity of the project site.

(vi) **Drinking Water**

30 KLD of water will be required for drinking purpose in the proposed project which will be sourced from Ground water.

(vii) **Sewerage System**

Domestic waste water generated from plant will be treated in STP and treated water will be used for greenbelt development / plantation.

(viii) **Industrial Waste Management**

- o No waste water will be generated from cement manufacturing process, as it is based on dry process technology.
- o In Grinding Unit, water used for cooling at various stages will be totally absorbed in the process or will be subjected to evaporation & recycling. Hence, no waste water will be discharged from the Clinker Grinding Unit.
- o Domestic waste water generated from plant will be treated in STP and treated water will be used for greenbelt development / plantation.

(ix) **Solid Waste Management**

- o No solid waste will be generated from the cement manufacturing process.

Comments will in a period of 30 days from the date of issue of this letter (L.O.L.). On your failure, this letter shall stand withdrawn and permission shall be refused as per the provisions of Rule 26-C (2) of Rules 1965.

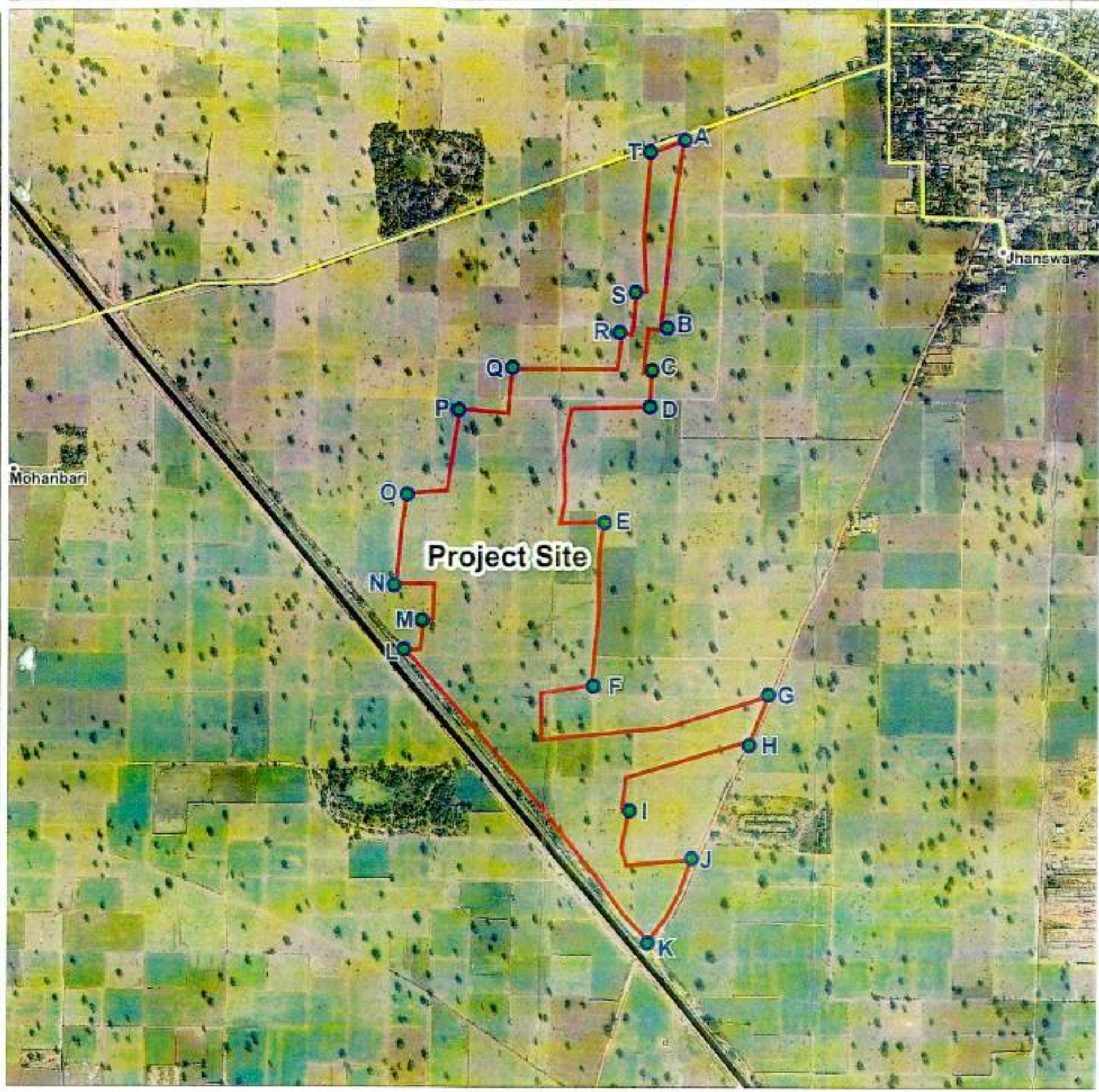
Enclosed To: CHIEF OF POLICE

1. STP Bureau

2. DTP Bureau

(Signature)
District Town Planner
Department of Public & Country Planning, Hyderabad

(Signature)
District Town Planner
Department of Public & Country Planning, Hyderabad



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Project Boundary



Road

Railway Line

Habitation

Corner Coordinates



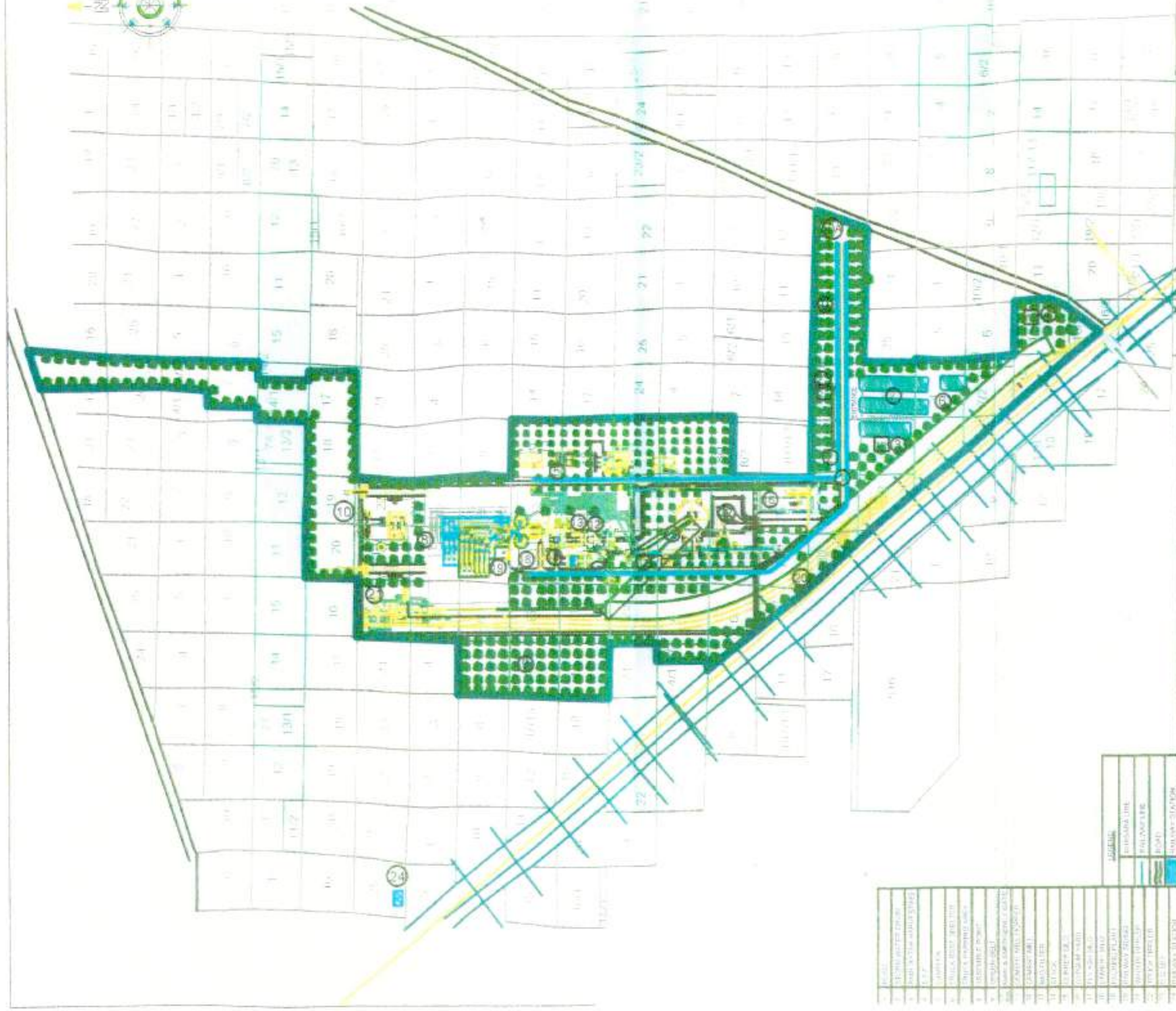
Pillar No	Latitude	Longitude	Pillar No	Latitude	Longitude
A	28°28'58.23"N	76°24'35.49"E	K	28°28'16.16"N	76°24'33.57"E
B	28°28'48.36"N	76°24'34.18"E	L	28°28'31.28"N	76°24'18.94"E
C	28°28'46.10"N	76°24'33.59"E	M	28°28'32.88"N	76°24'19.74"E
D	28°28'44.27"N	76°24'33.53"E	N	28°28'34.52"N	76°24'18.08"E
E	28°28'38.16"N	76°24'30.72"E	O	28°28'39.66"N	76°24'18.80"E
F	28°28'26.54"N	76°24'30.04"E	P	28°28'44.15"N	76°24'22.00"E
G	28°28'28.91"N	76°24'40.75"E	Q	28°28'46.22"N	76°24'25.13"E
H	28°28'26.62"N	76°24'39.74"E	R	28°28'50.30"N	76°24'32.73"E
I	28°28'20.08"N	76°24'32.20"E	S	28°28'57.55"N	76°24'33.59"E
J	28°28'20.36"N	76°24'36.02"E			

Google Earth Map - Downloaded

**Proposed Clinker Grinding Unit with
Cement Production Capacity of 5.0 MTPA
(2.5 MTPA:Phase-I & 2.5 MTPA:Phase-II)
and D.G. Set (6.5 MW)**

M/s. Wonder Cement Ltd.

At
Village: Jhanswa, Sub Tehsil: Salhawas,
Tehsil: Maianhail, District: Jhajjar (Haryana)



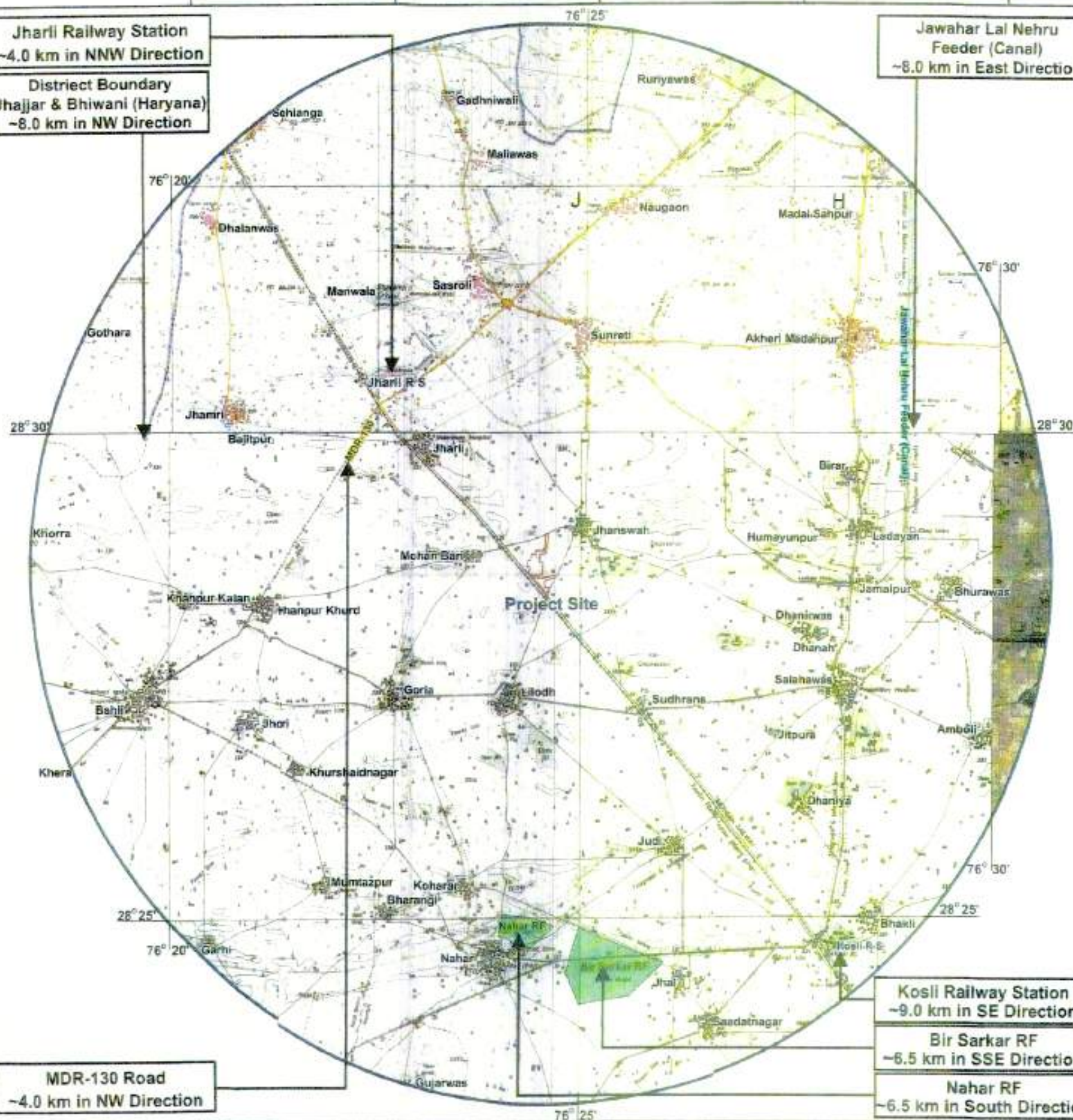
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7	10-10-10 10-10-10	
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99	10-10-10 10-10-10	
100	10-10-10 10-10-10	

Jharli Railway Station
~4.0 km in NNW Direction

District Boundary
Jhajjar & Bhiwani (Haryana)
~8.0 km in NW Direction

Jawahar Lal Nehru
Feeder (Canal)
~8.0 km in East Direction

TOPOSHEET NO. 53 D-6, 53 D-7 & 3 D-10



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Project Boundary

Buffer Zone Boundary

Roads: metalled, according to importance; distance stone
Roads unmetalled; do. do. bridge
Can-track, Pack-track and pass; Foot-path with bridge
Bridges: with piers; without; Causeway; Ford or Ferry
Streams: with track in bed; undrained; Canal
Dams: masonry or rock-filled; siltwork; Weir
River banks: shelving; steep; 3 to 6 metres; over 6 metres
River dry with water channel with island & rocks; Tidal river
Submerged rocks; Shoal; Swamp; Reeds
Wells: lined; unlined; Tube-well; Spring; Tanks; perennial; dry
Embankments: road or rail; tank; broken ground
Railways: broad gauge; double; single with station; under constn.
Railways: other gauges; do. do. With distance stone; do.
Mineral line or tramway; Telegraph line; Cutting with tunnel
Contours with spot-heights; Rocky slopes; Cliffs
Sand features: (1) flat (2) and hills and dunes covered (3) shifting dunes
Towns or Villages: inhabited; deserted; Fort
Hills: permanent; temporary; Tower; Antiquities
Boundary international
Boundary state; demarcated; undemarcated
Boundary district; subdivn.; taluk or basic forest

0 0.5 1 2 3 4 5 km
SCALE

Environmental Setting Map

**Proposed Clinker Grinding Unit with
Cement Production Capacity of 5.0 MTPA
(Phase-I: 2.5 MTPA & Phase-II: 2.5 MTPA)
and D.G. Set (6.5 MTPA)**

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At
Village: Jhanswa, Sub Tehsil: Sahalwas,
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