

Draft Initial Environmental Examination (IEE) Report: Appendixes

Project Number: 51210-001
October 2017

IND: Kutch Wind Project

Prepared by ARCADIS India Pvt. Ltd., Uttar Pradesh, India

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APPENDIX A

MoEFCC Notification



B.M.L. Garg
Director

भारत सरकार
अपरम्परिक ऊर्जा स्रोत मंत्रालय
Government of India
MINISTRY OF NON-CONVENTIONAL ENERGY SOURCES
ब्लॉक नम्बर 14, केन्द्रीय कार्यालय परिसर, लोदी रोड, नई दिल्ली-110003
BLOCK No. 14, C.G.O. COMPLEX, LODI ROAD, NEW DELHI-110003.

D.O. 26/11/97-WZ(PG)

दिनांक 20.11.1997
Dated.....

Dear Shri Vedant,

Please refer to the discussions held on 11th November 1997 at Bangalore regarding environmental clearance for wind power projects. In this connection, the Ministry of Environment and Forest have clarified that the power projects based on non-conventional energy source, as the main feed-back, are not required to take environmental clearance as per EIA Notification, 1994. As such, you are requested to take up this matter with the concerned authorities in your State so that environmental clearances, including pollution clearance, are not insisted by them.

With regards

Yours sincerely,

B.M.L. Garg
(B.M.L. Garg)

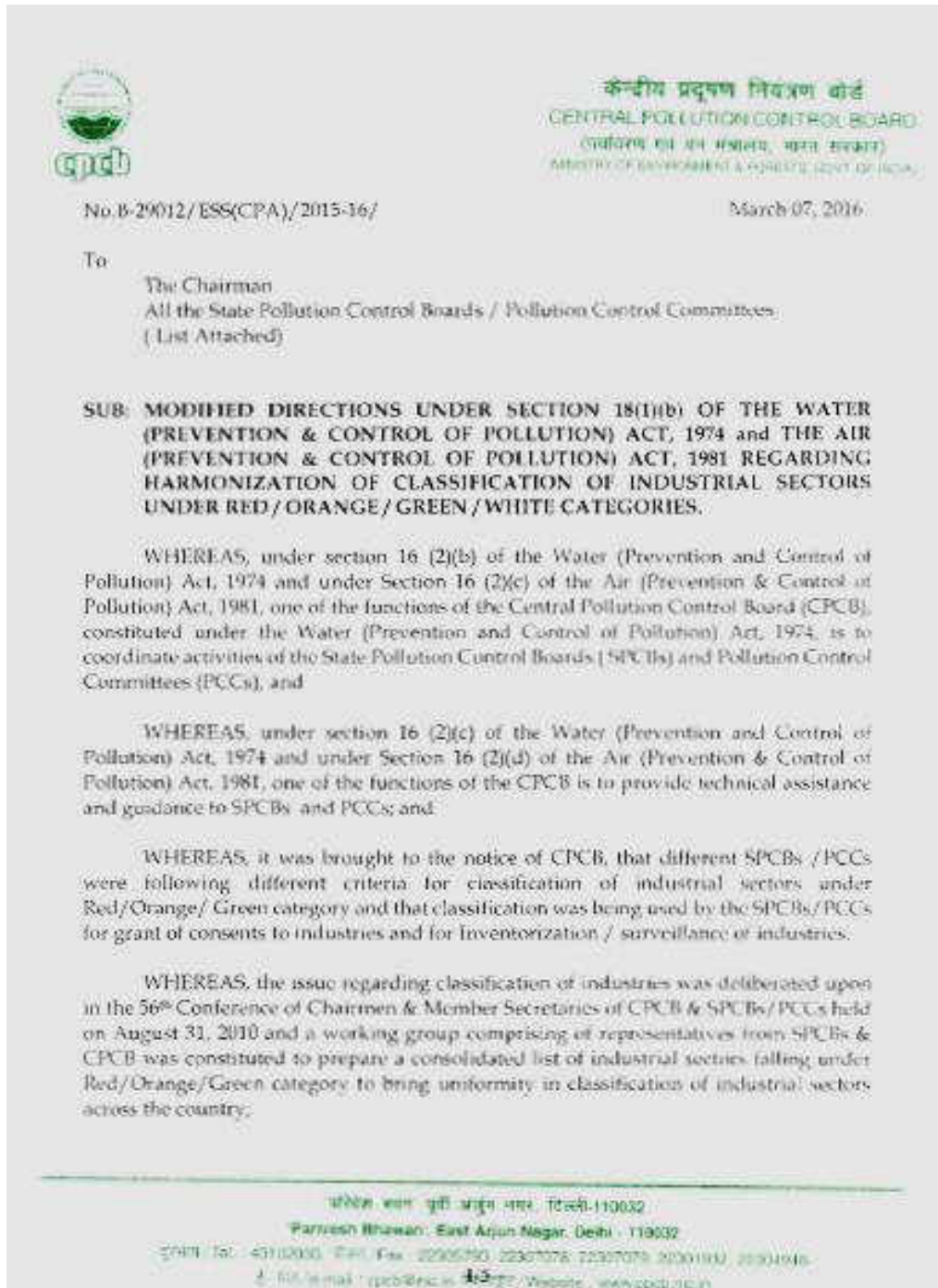
Shri C.S. Vedant
Managing Director,
Karnataka Renewable Energy Development Agency Ltd. (KREDL),
No. 1, Coffee Board Building, Dr. B.R. Ambedkar Veedhi,
Bangalore-560 001.

2391
20/11/97
[Signature]

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APPENDIX B

CPCB notification for re-classification of industries (sample pages)



of Pollution) Cess (Amendment) Act, 2003, Standards so far prescribed for various pollutants under Environment (Protection) Act, 1986 and Doon Valley Notification, 1989 issued by MoEFCC. The Pollution Index (PI) of any industrial sector is a number from 0 to 100 and the increasing value of PI denotes the increasing degree of pollution load from the industrial sector;

WHEREAS, based on the series of consultations with SPCBs, different Government / Non-government Institutions including industries and MoEFCC, the following criteria on 'Range of Pollution Index' for the purpose of categorization of industrial sectors has been finalized:

- o Industrial Sectors having Pollution Index score of 60 and above - Red category
- o Industrial Sectors having Pollution Index score of 41 to 59 -Orange category
- o Industrial Sectors having Pollution Index score of 21 to 40 -Green category
- o Industrial Sectors having Pollution Index score incl. & upto 20 -White category

WHEREAS, based on the revised criteria, the 'Final Report on Revised Categorization of Industrial Sectors under Red/Orange/Green/White' has been evolved. The 'Categorization' is based on the relative pollution potential of the industrial sectors and grouping of the industrial sectors based on the use of raw materials, manufacturing process adopted and pollutants likely to be generated;

WHEREAS, based on relative Pollution Index, the number of industries in various categories are as under :

- i. The Red category of industrial sectors: 60
- ii. The Orange category of industrial sectors: 83
- iii. The Green category of industrial sectors: 63 and
- iv. The Newly introduced White category: 36

WHEREAS, there shall be no necessity of obtaining the Consent to Operate'' for White category of industries and an intimation to concerned SPCB / PCC shall suffice.

WHEREAS, the purpose of categorization is to ensure that the industry is established in a manner consistent with the environmental objectives and to prompt industrial sectors to adopt cleaner technologies, ultimately resulting in generation of no or minimum pollutants.

WHEREAS the new categorization system shall also facilitate in self-assessment by industries;

Now, therefore, in exercise of the powers delegated to the Chairman, C/PCB under Section 18(1)(b) of the Water (Prevention & Control of Pollution) Act, 1974 and Section 18(1)(b) of the Air (Prevention & Control of Pollution), Act, 1981 the earlier Directions issued in June 2012 in the context of categorisation of industries as Red, Orange & Green are withdrawn with immediate effect and following 'Directions' are hereby issued for compliance by all SPCBs and PCCs :

1. That the SPCBs and PCCs shall adopt the Revised Criteria of categorization of industrial sectors as detailed in table nos. F1, F2, F3 and F4 and Revised Lists of Red, Orange, Green and White categories of industrial sectors, presented at table no. G2, G3, G4 and G5 respectively, in the 'Final Report' as attached herewith immediately.
2. That all pending applications for consideration of 'Consent to Establish' and 'Consent to Operate' and future such applications shall be processed as per revised criteria.
3. That the SPCBs and PCCs will provide the list of industries identified in each category existing in the State which have been considered for grant of consents. SPCBs/PCCs will forward the list of such industries before 31.05.2016 and the same will be uploaded on the websites of respective SPCB/PCC.
4. That the 'Revised Lists of Red, Orange, Green and White category of industrial sectors' shall be used by the SPCBs and PCCs for Consent Management and inventorization of industries under Red, Orange, Green and White categories. Siting of industries shall be only in conforming areas. SPCBs / PCCs shall evolve sector specific plans for control of pollution and industrial surveillance for verifying compliance.
5. That the SPCBs and PCCs shall revise /prepare the inventory of Red, Orange, Green and White categories of industries operating in their jurisdiction based on the revised criteria specified in the Final Report and submit the same to CPCB within 90 days i.e., before 30.05.2016 in hard copy as well as soft copy.
6. That the listed category of industries or those identified later-on under different categories shall not be linked to sanction of loan /finance or bank proceedings.
7. That any further addition of any new or left-over industrial sector and their categorization which is not listed in the revised list of Red, Orange, Green and White industrial sectors, shall be done at the level of concerned SPCB /PCC following revised criteria & guidelines as detailed in the attached document and no concurrence of CPCB shall normally be required. It is further clarified that while categorizing the industries, fractional numbers shall be rounded off to nearest integer.

APPENDIX C

Notification of CPCB for exemption of wind power projects from obtaining CTE and CTO



ए.बी. अकोलकर
सदस्य सचिव
A.B. AKOLKAR
Member Secretary

केन्द्रीय प्रदूषण नियंत्रण बोर्ड
पर्यावरण एवं वन मंत्रालय
(भारत सरकार)

Central Pollution Control Board
Ministry of Environment & Forests
(Government of India)
Phone: 22307078/22303655

No. B- 29012/ESS/CPA/2016-17/

January 18, 2017

To:

The Member Secretary,
All the State Pollution Control Boards / Pollution Control Committees
(List Attached)

Sub : Clarification in the matter of Revised Categorization of the industrial Sector namely "Solar power generation through solar photovoltaic cell, wind power and mini hydel power (less than 25 MW)".

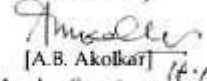
Modified Directions are issued by CPCB on 07.03.2016 u/s 18(1)(b) of the Water (P&C of Pollution) Act, 1974 and Air (P&C of Pollution) , Act, 1981 on "Revised Classification of Industrial Sectors under Red, Orange , Green and White Categories ". In this context, references are received by Central Pollution Control Board for elaboration of the activities covered under the industrial sector namely "Solar Power generation through solar photovoltaic cell, Wind Power and Mini Hydel Power (less than 25 MW) " which is placed at SL No 35 in White category of industrial sectors. The matter has been examined and it is hereby clarified that this category of industrial sector includes the following units :

1. Solar Power generation through photo-voltaic cells, Plants of all capacities.
2. Wind Power generation Plants of all capacities.
3. Mini Hydel Power Plants having capacity less than 25 MW.

Accordingly, for all future references, the entry at SL No. 35 in White category of industrial sectors namely "Solar Power generation through solar photovoltaic cell, Wind Power and Mini Hydel Power (less than 25 MW) " shall be read as "Solar Power generation through solar photovoltaic cell Plants of all capacities, Wind Power Plants of all capacities and Mini Hydel Power Plants of capacity less than 25 MW.

This is for reference of all concerned, please.

Yours faithfully


[A.B. Akolkar]
Member Secretary

Copy for kind information to :

- ✓ The Joint Secretary (AKM), CP Division, MoEFCC, New Delhi
- ✓ Incharge - IT, CPCB, Delhi, for uploading on website of CPCB.

environmental & social impact assessment

1	The Member Secretary Andhra Pradesh Pollution Control Board A-3, Prayauaraana Bhavan, Industrial Estate Sanath Nagar, Moosapet, Telangana 500018 (Hyderabad)	2	The Member Secretary Assam Pollution Control Board Bamunimaidan, Guwahati – 781 021 Assam
3	The Member Secretary Arunachal Pradesh Pollution Control Board, Department of Environment & Forests Office Complex, P-Sector, Itanagar 791 111 Arunachal Pradesh	4	The Member Secretary Bihar State Pollution Control Board 2 nd Floor, Beltron Bhavan, Jawaharlal Nehru Marg, Shastri Nagar, Patna 800 023 Bihar
5	The Member Secretary Chhatisgarh Environment Conservation Board, H.No. 1, Tilak Nagar, Shiv Mandir Chowk, Main Road, Avanti Vihar, Raipur – 421 001	6	The Member Secretary Goa State Pollution Control Board Dempo Towers, 1 st Floor EDC Plaza, Patto Panaji – 403001, Goa
7	The Member Secretary Gujarat State Pollution Control Board Paryavaran Bhavan, Sector-10-A, Gandhi Nagar-382010 Gujarat	8	The Member Secretary Haryana State Pollution Control Board Plot No. C – 11, Sector 6, Panchkula, Haryana
9	The Member Secretary Himachal Pradesh State Environmental Protection and Pollution Control Board "Paryavaran Bhavan" Phase – III, Below BCS New Shimla – 171009, Himachal Pradesh	10	The Member Secretary Jammu and Kashmir State Pollution Control Board Sheikal-ul-Alam Campus, Raj Bagh, Behind Govt. Silk Factory, Rajbagh, Srinagar 190 008
11	The Member Secretary Jharkhand State Pollution Control Board T.A. Division Building (Ground Floor) HEC Dhurwa, Ranchi – 834004, Jharkhand	12	The Member Secretary Karnataka State Pollution Control Board # 49, Parisara Bhavan 4 th and 5 th Floor, Church Street Bangalore – 560001, Karnataka
13	The Member Secretary Kerala State Pollution Control Board Plamoodu Junction Pattom Palace P.O. Thiruvananthapuram – 695004, Kerala	14	The Member Secretary Maharashtra State Pollution Control Board Kalpataru Point, 3 rd & 4 th Floor Sion Matunga Scheme, Road No. 8 Opp. Cine Planet Cinema Near Sion Circle, Sion (East) Mumbai – 400022, Maharashtra
15	The Member Secretary Manipur State Pollution Control Board, Lamphalpet Imphal – 795004, Manipur	16	The Member Secretary Madhya Pradesh State Pollution Control Board Paryavaran Parisar E – 5, Arera Colony Bhopal – 462 016, Madhya Pradesh
17	The Member Secretary Mizoram State Pollution Control Board M.G. Road, Khallia Aizwal-796 001, Mizoram	18	The Member Secretary Meghalaya State Pollution Control Board "ARDEN" Lumpyngngad Shillong – 793014, Meghalaya

19	The Member Secretary Nagaland State Pollution Control Board Signal Point, Dimapur-797112, Nagaland	20	The Member Secretary Orissa State Pollution Control Board, Panibesh Bhawan A / 118, Nilakantha Nagar Unit – VIII, Bhubaneshwar – 751012, Orissa
21	Punjab State Pollution Control Board Vatavaran Bhavan Nabha Road Patiala – 147 001 Punjab	22	The Member Secretary Rajasthan State Pollution Control Board 4, Paryavaran Marg, Institutional Area Jhalana Doongari, Jaipur – 302004, Rajasthan
23	The Member Secretary Sikkim State Pollution Control Board Department of Forest, Environment & Wildlife Management Govt. of Sikkim Deorali, Gangtok, Sikkim	24	The Member Secretary Tamil Nadu State Pollution Control Board No. 100, Anna Salai Guindy, Chennai – 600032, Tamil Nadu
25	The Member Secretary Telangana State Pollution Control Board A-3, Prayavaraana Bhavan, Industrial Estate Sanath Nagar, Moosapet, Telangana 500018 (Hyderabad)	26	The Member Secretary Tripura State Pollution Control Board Vigyan Bhavan Pandit Nehru Complex Gorkhabasti, P.O: Kunjaban, Agartala West Tripura – 799006
27	The Member Secretary Uttarakhand Environment Protection and Pollution Control Board Paryavaran Bhavan E-115, Nehru Colony Dehradun-248 001, Uttaranchal	28	The Member Secretary Uttar Pradesh State Pollution Control Board PICKUP Bhavan 3 rd Floor, B – Block Vibhuti Khand, Gomti Nagar Lucknow – 226 010, Uttar Pradesh
29	The Member Secretary West Bengal State Pollution Control Board Department of Environment, Government of West Bengal Paribesh Bhavan Building No. – 10A Block – LA, Sector – III, Salt Lake City Kolkata – 700 096, West Bengal	30	The Member Secretary Daman, Diu & Dadra & Nagar Haveli Pollution Control Committee Office of the Dy. Conservator of Forests Moti Daman, Daman - 396220
31	The Member Secretary Pondicherry Pollution Control Committee Department of Science Technology and Environment 3 rd Floor, Housing Board Building Anna Nagar, Pondicherry – 605 005	32	The Member Secretary Chandigarh Pollution Control Committee Additional Town Hall Building, 2 nd Floor Sector 17 – C Chandigarh – 160 017
33	The Member Secretary Delhi Pollution Control Committee 4 th Floor, ISBT Building, Kashmere Gate Delhi-110 006	34	The Executive Engineer Public Works Department U.T. of Lakshadweep Kavaratti – 682555 Lakshadweep

APPENDIX D

NOC from DLIR

ડી.સી.ટી.કેટ ઈ-રોપક્ટર લેન્ડ રેકોર્ડ, કુરુમ-ભુજ

છલ્લા માળખાની સેવા સદન, મુન્દ્રા રોડ, ભુજ, ૩૭૦૦૧

ફેક્ટરી/કોન નં. (૦૨/૩૨) ૨૩૦૩૧૫.

તા. ડી.એસ.આ./૩૨/અમ.આર નં. ૧/૨૧૨/૧૬-૧૩/કાનપર

તા. ૧૨/૧૨/૨૦૧૭

પ્રતી

શ્રી કલકટર સાહેબ

મોડ્યુલ શાખા

કુરુમ-ભુજ

વિષય: મોલ્ટ.કાનપર તા.ભુજ

કો.સ.નં.પાક ની કુલ જમીન નં. ૧-૦૦-૦૦ આર વિન્ડફામ પ્રોજેક્ટ હેતુ માટે મળવા બાબત.

ઓરડો ફરજિયાત પ્રા.લી.

સંદર્ભ: આપ સાહેબ ના પત્ર નં. જમન/૨/૧થી/૨૪૨૪/૨૦૧૭ તા. ૨૪/૧૧/૨૦૧૭

સાહેબ

સવિનય ઉપરોક્ત વિષય પરત્વે જાણાવવાનુંકે સંદર્ભવાળા પત્રથી મોલ્ટ.કાનપર તા.ભુજ ના કો.સ.નં.પાક ની કુલ જમીન નં. ૧-૦૦-૦૦ આર વિન્ડફામ પ્રોજેક્ટ હેતુ માટે મળવા બાબત માંગણીવાળી જમીનના સામેલ નકશામાં દર્શાવેલ વિસ્તારની અરજદાર એકમના પ્રતિનિધિની ફળદ મા માળખાની સેવા સદને સાથે મેળવવું કરવા મોલ્ટ.કાનપર તા.ભુજ ના કસ્ટોડી કો.સ.નં.પાક પેક્ટ્રી નં. ૦૧-૦૦-૦૦ આર જમીન થાય છે. જે વિશેષ સમજુતી સાથે તૈયાર કરવામાં આવેલ માંગણીથીટ ની નકલ આ સાથે સામેલ રાખેલ છે. જે અંગે આપ સાહેબ ને જાણ થઈ યોગ્ય થવા વિનંતિ છે. બોટમ-માંગણીથીટ ની નકલ

જિલ્લા સિવિલ
જમીન દફતર, ભુજ-૩૨૭

નકલ તમામ ઓરડો ફરજિયાત પ્રા.લી. યુનિટ નં. ૩૦-૦, પ્રાક્ટિસ ફ્લોર, મૌરા કોર્પોરેટ સ્કુલ-૧ તથા ૨ ને અરજદાર મળવા શેડ ન્યુ કિલોની નં. ૧૦૦૦૫ નક્કુ જવાનું સારું

૧૨/૧૨/૧૭
જિલ્લા સિવિલ

APPENDIX E

Permission from Forest Department

મહેસાણા શાખા
ભુજ-૩૨૭

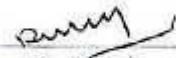
વિષય:- મોજે :- રેહા મોટા તાલુકો :- ભુજ સ.નં.૨૭૨ ની જમીન કુલ
હે.૧.૫૦.૦૦ આરે વિન્ડકાર્મ પ્રોજેક્ટ હેતુ માટે મળવા
બાબત.ઓસ્ટ્રો કચ્છ વિન્ડ પ્રા.લી.

સંદર્ભ:- (૧)આગના પત્રનં.જમન/૨/વસી/૭૬૫૬/૨૦૧૬.તા.૧૩/૧૨/૨૦૧૬.
(૨) આગના પત્ર નં.બ/જમન/૨-૯/૩૨૮૨..તા.૨૪/૦૪/૨૦૧૭.
(૩) અરજદારની તા.૧/૦૭/૨૦૧૭ ની અરજી.

સવિનય ઉપરોક્ત વિષયે આપક્રીના સંદર્ભવાળા પત્રથી બિડાણમાં સામેલ થઈ
આવેલ નકશામાં દર્શાવેલ વિસ્તાર મુજબ મોજે :- રેહા મોટા તાલુકો :- ભુજ ટા.સ.નં.૨૭૨ ની
જમીન કુલ હે.૦૧.૫૦.૦૦ આરે વિન્ડકાર્મ પ્રોજેક્ટ હેતુ માટે મળવા માંગણી કરવામાં આવેલ છે. જે
અન્વયે અરજી સાથે રજુ થયેલ આ સાથે સામેલ નકશા મુજબ રેહા મોટા ના પવનચક્રી લોકેશન નં.
રેહા મોટા લોકેશન નં.- BHO 160 માટે અગ્રેના વિભાગનો નીચે ની શરતો ને આધીન કાળવા
અભિપ્રાય આપવામાં આવે છે. જે જાણ થવા વિનંતી છે.

શરતો:-

- (૧) ઉપરોક્ત જમીન મંજૂરી મળ્યાથી નજીકના જંગલ વિસ્તાર/અભ્યારણ વિસ્તારને કોઈપણ
જાતનું નુકશાન પહોંચાડવામાં આવશે નહિ. તેવી બાંહેધરી મેળવવી.
- (૨) માંગણી વાળા વિસ્તાર માટે સ્થાનિકે હયાત જંગલ વિસ્તારથી ૫૦મીટર દુર રહીને
કામગીરી કરવાની રહેશે.
- (૩) માંગણીવાળા વિસ્તારથી મુખ્ય રસ્તા પર આવવા જવા માટે અપ્રોચ રોડ બનાવવાનો
થતો હોય, અને મુખ્ય રસ્તો પ્રોટેક્ટેડ ફોરેસ્ટ તરીકે જાહેર થયેલ હોય તો ઉપયોગમાં
લેવાનાર થતા અપ્રોચ રસ્તા માટે વન સંરક્ષણ ધારો-૧૯૮૦ ની જોગવાઈ અનુસાર
ભારત સરકારશ્રીની પુર્વ મંજૂરી મેળવવાની રહેશે અને ત્યાર બાદ રસ્તાનો ઉપયોગ
કરી શકાશે.
- (૪) અન્ય લાગુ પડતા કાયદાઓ/નિયમો અંગે મંજૂરી લેવાની રહેશે.
- (૫) નામ સર્વોચ્ચ અદાલત તથા અન્ય ના.અદાલતનો લાગુ પડતા તમામ હુકમો અન્વયે
જરૂરી અમલ કરવાનો રહેશે.
- (૬) ભારતીય વિદ્યુત અધિનિયમ ૨૦૦૩ અને જેટકો ના સ્પેશીફિકેશન મુજબ વાયર અને
વીજળીના થાંભલાઓ ઉપર તથા લાઈનો પરબર્ડ ગાર્ડસ તથા રિક્લેક્ટર્સ
લગાડવાના રહેશે.


(આર.એ.દેસીયા)
નામક વન સંરક્ષક
કચ્છ પુર્વ વન વિભાગ,ભુજ.

APPENDIX F

NOC from Mining Department

ભુસ્તરવિજ્ઞાન અને ખનિજ કમિશ્નરની કચેરી

બ્લોક નં.૧,૨/૭ મો માળ, ઉદ્યોગસવન,સેક્ટર -૧૧, ગાંધીનગર ગુજરાત

જાવક નં.સીકુલેમ/લીઝ/ટે.પ/બેનબોલી/૩૨૭ થી ૩૪૦/બોલી/કચ/૨૦૧૭-૧૮/૧૬૬૫ નંબર-૧૬૬૫

પતિ. ૧૬૬૫

કોલેક્ટરશ્રી. ૧૬૬૫

ખનિજશાખા. ૧૬૬૫

બુધ-કચ ૧૬૬૫


— વિષય- વિડ પ્રોજેક્ટ માટે જમીન ભાડાપટે મળવા માટે ના-વાંધા પ્રમણપત્ર
 બરજદાર કંપની ઓસ્ટ્રો કચા વિન્ડ પા. લી. યુનિટ નં જી-૦. ગ્રાઉંડ ફ્લોર , મીસ કોર્પોરેટર
 સ્ટુટ ૧ અને ૨, ઇન્ડસ્ટ્રીયલ એસ્ટેટ , મથુરા રોડ, ન્યુ દિલ્લી ૧૧૦૦૬૫.
 સંદર્ભ- ૧.આપની કચેરીની તારીખ ૦૮-૦૫-૨૦૧૭ની દરખાસ્તો.
 ૨. સરકારશ્રીના મહેસુલ વિકાસના પરીપત્ર નં. આરબેએમ/૧૦૨૨૦૪/૧૮૦/૯
 તા. ૨૬/૦૨/૨૦૦૪ તથા ૧૩/૦૩/૨૦૦૪
 બરજદાર કંપની ઓસ્ટ્રો કચા વિન્ડ પા. લી. યુનિટ નં જી-૦. ગ્રાઉંડ ફ્લોર , મીસ કોર્પોરેટર સ્ટુટ ૧
 અને ૨, ઇન્ડસ્ટ્રીયલ એસ્ટેટ , મથુરા રોડ, ન્યુ દિલ્લી ૧૧૦૦૬૫એ કચા જીલ્લાના નીચે મુજબના વિસ્તારમાં વિડ
 પ્રોજેક્ટ માટે જમીન ભાડાપટે મળવા માટે માંગણી કરેલ છે. જે અન્વયે બનેલી કચેરીનું
 "ના તરફના પ્રમાણપત્ર" મળવા આપની કચેરીના સંદર્ભ-૧થી બને દરખાસ્તો મોકલેલ છે.

ક્રમ	બેન. બો.લી. રજુ નં.	ગોજા	તા. લુગો	સ.નં.	જમીનનો પ્લોટ	વિસ્તાર	પોઇન્ટ નંબર
૧	૩૨૭	બધારા નામા	ભુજ	૨૮૭/૧	સરકારી	૧૫.૦૦૦૦	BHO- 105 TO 113
૨	૩૨૮	વડવા	ભુજ	૧૫૧/૧, ૮૮, ૧૧૯	સરકારી	૧૬.૫૦૦૦	BHO 54 TO BHO- 64
૩	૩૨૯	જદરા	ભુજ	૧૨૮/૧	સરકારી	૩.૦૦૦૦	BHO- 100 TO bho- 101
૪	૩૩૦	વડવા	ભુજ	૧૫૧/૧	સરકારી	૪.૫૦૦૦	BHO- 161 TO BHO- 161
૫	૩૩૧	સડરાઈ દીબ્બો	ભુજ	૯૭/૧	સરકારી	૨૪.૦૦૦૦	BHO- 67,68,70,71,72,73, BHO 76 TO 82
૬	૩૩૨	યુવડડ	ભુજ	૩૮૦/૧ પે.૧, ૩૨૭	સરકારી	૦૪.૫૦૦૦	BHO 97 TO BHO 99
૭	૩૩૩	જદરા	ભુજ	૧૨૮/૧	સરકારી	૧૨.૦૦૦૦	BHO- 28 TO bho- 35
૮	૩૩૪	જદરા	ભુજ	૧૨૮/૧	સરકારી	૧૨.૦૦૦૦	BHO- 152 TO bho- 159
૯	૩૩૫	બાવડી	ભુજ	૧૨૨/૧૭	સરકારી	૧.૫૦.૦૦	BHO- 83
૧૦	૩૩૬	હડી	ભુજ	૬૫ પેઠી	સરકારી	૩.૦૦.૦૦	BHO- 65 TO bho- 66

૧૧	૩૩૭	સેડાતપ	ભુજ	૧૫૫/૧	સરકારી	૪૦.૫૦.૦૦	BHO- 001 TO bho-014 & BHO- 024 TO bho-027
૧૨	૩૩૮	ગઢેર	ભુજ	૨૩૫/૬	સરકારી	૩.૦૦.૦૦	BHO- 114 TO bho-115
૧૩	૩૩૯	વડગર	ભુજ	૮૫, ૧૫૧/૧૩, ૧૫૧/૩૦, ૧૫૧/૨૮	સરકારી	૧૩.૫૦.૦૦	BHO-123 TO bho-126
૧૪	૩૪૦	ગઢેર	ભુજ	૧૪૦, ૨૧૧, ૧૩૨/૧, ૧૯૦, ૨૨૫, ૨૩૫/૬	સરકારી	૧૯.૫૦.૦૦	BHO- 84 TO bho-96

ઉક્ત દરખાસ્તો ધ્યાને લઈ સંદર્ભ-૨થી મળેલ સત્તાની રૂબે મે. ઓસ્કો કચ્છ વિન્ડ પ્રા. લી. યુનિટ નં. જી-૦, ગાઉડ ક્લોર , મીરા કોર્પોરેટર સ્કુટ ૧ અને ૨, ઇન્ડસ્ટ્રીયલ એસ્ટેટ , મથુરા રોડ, ન્યુ દિલ્લી ૧૧૦૦૬૫ ને સંદર્ભ-૧ થી મોકલેલ દરખાસ્તો મુજબનુ ઉક્ત વિસ્તારમાં વિંડ ફાર્મ પ્રોજેક્ટ માટે જમીન ભાડાપટે મળવા માટે અત્રેથી "ના-વાંધા પ્રમાણપત્ર " આપવામાં આવે છે.

(નોંધ કમિશનરશ્રીએ મંજૂર કરેલ છે.)






 પ્રધિક નિયોમક (વિકાસ)
 ભુક્તરવિભાગ અને પ્રમિજ કમિશનરી કચેરી
 ગાંધીનગર






નકલ રવાના-





મે. ઓસ્કો કચ્છ વિન્ડ પ્રા. લી. યુનિટ નં. જી-૦, ગાઉડ ક્લોર , મીરા કોર્પોરેટર સ્કુટ ૧ અને ૨, ઇન્ડસ્ટ્રીયલ એસ્ટેટ , મથુરા રોડ, ન્યુ દિલ્લી ૧૧૦૦૬૫




APPENDIX G






Site Surrounding of 150 WTG locations




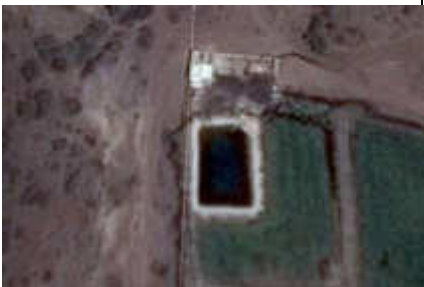
WTG Identification No.	Coordinate of WTG	Geographical coordinates of receptor	Location	Land	Name of the nearest village/House	Topography	Site Surroundings	Remarks/Observations	Photograph	
BHO 25	42Q 565727.00 2560776.00	42Q 565587.98 2560922.60	Meghpar village	Govt. land	Open scrub	Structure (One receptor) 200m NW	Undulating land	Stone Quarry: 240m west Forest Area: Bhuj Reserve Forest at a distance of 2.73 km N from WTG location	Structure identified : temporary Labour shed	
KUT 73	42Q 551097; 2566611	551270; 2566516	Nagiyari village	Govt. land	Open scrub	Structure 200 m SE	Sightly undulating	Ag. Field: 90m north Connecting road: 150m east Forest Area: Sadau Reserve Forest not within 3km from WTG location	Structure identified: House	
		42Q 551302; 2566422	Nagiyari village	Govt. land	Open scrub	Structure 280m NW	Slightly undulating	Ag. Field: 90m north Connecting road: 150m east Forest Area: Sadau Reserve Forest not within 3km from WTG location	Structure 2 identified: Identified as a house under construction, adjoining a group of houses.	
BHO160	42Q 573015.00 m E 2559433.00 m N	42Q 573224.42 2559349.26	Reha mota village	Govt. land	Open scrub	Structure (One receptor) 220m SE	Flat land	Agricultural field: 100m Connecting road 14mSW Forest Area: Bhuj Reserve Forest at a distance of 2.81 km N from WTG location	Structure identified as a single house	




WTG Identification No.	Coordinate of WTG	Geographical coordinates of receptor	Location	Land	Name of the nearest village/House	Topography	Site Surroundings	Remarks/Observations	Photograph	
KUT 35	42Q 538002; 2562484	42Q 537765; 2562563	Kurbai village	Govt. land	Open scrub	Structure (One receptor) 250m W	Undulating terrain	No forest land involved Water body: 335m north west Agricultural field: 250m west	Structure identified as a single house	
BHO 113	42Q 577898.00 m E 2550771.00 m N	577907; 2550515	Bandhara Nana	Govt. land	Open scrub	Structure (One receptor) 260 m S	Undulating land	Open scrub land in the surrounding Forest Area: Moto Tholo Reserve Forest at a distance of 0.97 km E from WTG location	Structure identified as a single house	
		0577525; 2550549	Bandhara Nana	Govt. land	Open scrub	Structures 420 m SW	Undulating land	Open scrub land in the surrounding Forest Area: Moto Tholo Reserve Forest at a distance of 0.97 km E from WTG location	Structure identified as a single house	
BHO 119	42Q 571355 2553970	42Q 571438.42 m E 2553719.30 m N	Sanosara village	Govt. land	Open scrub	Structure (One receptor) 280 m SE	Hilly undulating terrain	Agricultural field:300m South and NW Open scrubland in the surrounding Forest Area: Bandra Mota Reserve Forest at a distance of 0.67 km SE from WTG location	: Structure identified as a single house	
		571639.07 m E; 2553587.19 m N	Sanosara village	Govt. land	Open scrub	Structure 480 m SE	Hilly undulating terrain	Agricultural field:300m South and NW Open scrubland in the surrounding Forest Area: Bandra Mota Reserve Forest at a distance of 0.67	Receptor 2 for BHO 119: Structure not visited as it was inaccessible	

WTG Identification No.	Coordinate of WTG	Geographical coordinates of receptor	Location	Land	Name of the nearest village/House	Topography	Site Surroundings	Remarks/Observations	Photograph		
							km SE from WTG location				
OLD19	42Q 555123.00 m E 2555556.00 m N	42Q 555264.02 2555794.36	Meghpar village	Govt. land	Open scrub	Structure (One receptor)	280 m NE	Flat land	Connecting road: Mandvi bhuj highway 260m south Waterbody: 170m Forest Area: Kera Reserve Forest at a distance of 2.41 km SE from WTG location	Structure Identified as small house	
BHO 111	42Q 576882.00 m E 2550827.00 m N	0576975: 2550548	Bandhara Nana	Govt. land	Open scrub	Structures	290 m E	Undulating land	Open scrub land in the surrounding Agricultural field : 180m SE Forest Area: Moto Tholo Reserve Forest at a distance of 2.11 km E from WTG location	Structure identified as a single house	STRUCTURE 1 
		0577175: 2550806	Bandhara Nana	Govt. land	Open scrub	Structures	300 m SE	Undulating land		Structure identified as a single house	STRUCTURE 2 
BHO 27	42Q 565846.00 m E 2559859.00 m N	42Q 565691.00 m E 2559603.00 m N	Sedata village	Govt. land	Open scrub	Structure	300m SW	Undulating land	Agricultural field : 240m W Natural water channel : 330m east Forest Area: No Reserved Forest boundary within 3 Km from WTG location	Structure identified as farm house, cow shed and servant quarter	




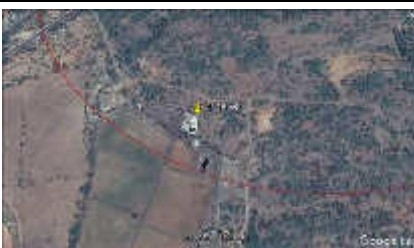

WTG Identification No.	Coordinate of WTG	Geographical coordinates of receptor	Location	Land	Name of the nearest village/House	Topography	Site Surroundings	Remarks/Observations	Photograph		
											
BHO 76	42Q 582534 2555943	42Q 582742.00 m E 2555909.00 m N	Sakrai Timbo village	Govt. land	Open scrub	Structure	110m south	Flat land	Forest Area; Wadli Reserve Forest is located more than 1km south from the WTG location.	Structure recognised as a Single house	
		42Q 582542.00 m E 2555819.00 m N	Sakrai Timbo village	Govt. land	Open scrub	Structure	210m SE	Flat land		Structure recognised as a Single house	
		42Q 582291.00 m E 2555737.00 m N	Sakrai Timbo village	Govt. land	Open scrub	Structure	130m NE	Flat land		Structure recognised as a Single house	
		582284.00 m E 2556046.00 m N	Sakrai Timbo village	Govt. land	Open scrub	Structure	260m NW	Flat land		Structure recognised as a Single house	
		42Q 582582; 2556059	Sakrai Timbo village	Govt. land	Open scrub	Structure	125m (N)	Flat land		Structure recognised as a Single house	
BHO 24	42Q 565681.00 m E 2561233.00 m N	42Q 565587.98 m E 2560922.60 m N	Meghpar village	Govt. land	Open scrub	Structure	220 m SW	Undulating land	Stone Quarry: 240m west Forest Area: Bhuj Reserve Forest at a distance of 2.75 km N from WTG location	RECEPTOR identified as a small temporary Labour shed (Same receptor for BHO 25)	





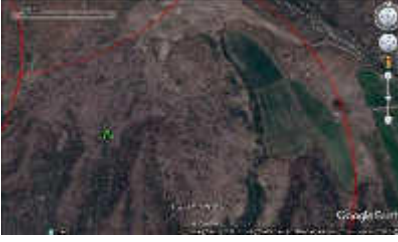
WTG Identification No.	Coordinate of WTG	Geographical coordinates of receptor	Location	Land	Name of the nearest village/House	Topography	Site Surroundings	Remarks/Observations	Photograph
KUT 73	42Q 551097 2566611	42Q 550733; 2566823	Nagiyari village	Govt. land	Open scrub	Structure 175m (NW)	Undulating land Agricultural field: 95m NW Approach road: 139m east	Receptor identified as a single house	
KUT18	42Q 542037; 2558204	42Q 542325; 2558047	Ajapaar Village	Govt. land	Open scrub	Major part of Ajapaar village Considering the Nearest house of the village 308m SE	Undulating terrain Agricultural field at the distance of 170m Forest Area: Nabhoi Reserve Forest boundary at a distance more than 2km N	Nearest house of the village	
BHO 34	42Q 570952.82 2559539.10	42Q 570495.65 m E 2559489.45 m N	Jadura village	Govt. land	Open scrub	Structure and agricultural field 460m	Hilly undulating terrain Open scrubland in the surrounding Agricultural field ; 150m SE Forest Area: Bhuj Reserve Forest at a distance of 2.63 km N from WTG location	Structure identified as a single house	
KUT 90	42Q 540871; 2562997	42Q 540591; 2562840	Kurbai village	Govt. land	Open scrub	Structure 320 m SW	Undulating terrain Forest Area: Gudkar Reserve Forest boundary at a distance more than 1.15km E Water body: 330m NW	Structure recognised as a Single house	
BHO 122	42Q 572589 2555041	42Q 572805.47 m E; 2555277.44 m N 42Q	Sanosara village	Govt. land	Open scrub	Agricultural land Structure (Rec 1 & 2) 140m East 400m N 320m NE	Hilly undulating terrain Open scrubland in the surrounding Forest Area: Nana Dhola Reserve Forest and Bandra Mota Reserved Forest at a distance of 1.64 km W and 1.41 Km SW	Structure identified as a single house	

WTG Identification No.	Coordinate of WTG	Geographical coordinates of receptor	Location	Land	Name of the nearest village/House	Topography	Site Surroundings	Remarks/Observations	Photograph		
		572646.65 m E 2555433.15 m N					respectively from WTG location				
KUT 19	42Q 541678; 2558626	42Q 542023; 2558590	Ajapar village	Govt. land	Open scrub	Structure	350 m SE	Undulating terrain	Ag. Field: 164m SE Forest Area: Nabhoi Reserve Forest boundary at a distance of 1.5km N	Structure recognised as store house	
KUT 59	42Q 547571; 2567048	42Q 547531.22, 2567414	Deshalpar village	Govt. land	Open scrub	Structure	360 m N	Flat land	Ag. Field : 220m Forest Area: No Reserve Forest boundary within 1km	• Structure identified as store house	Structure 1 
		547926.78 m E; 2567264.56 m N	Deshalpar village	Govt. land	Open scrub	Structure	420m east	Flat land	Ag. Field : 220m Forest Area: No Reserve Forest boundary within 1km	Big farm house named as Narmada Nirali Bagh	Receptor 2 
BHO 132	42Q 572763 2554703	42Q 572850.41 m E 2554450.91 m N	Bandhara Mota village	Govt. land	Open scrub	Agricultural land and small structure 270m south	Agricultural field: 370m N and 270m SE Structure: 270m SE	Hilly undulating terrain	Drain: 230NE Stone quarry: 320m E Forest Area: Bandra Mota Reserve Forest at a distance of 1.16 km SE from WTG location	Structure identified as a single house	

WTG Identification No.	Coordinate of WTG	Geographical coordinates of receptor	Location	Land	Name of the nearest village/House	Topography	Site Surroundings	Remarks/Observations	Photograph		
BHO 133	42Q 572550 2554192	42Q 572846; 2554448	Bandhara Mota village	Govt. land	Open scrub	Agricultural land and small structure	Structure: 400m NW Agricultural field: 280m east	Hilly undulating terrain	Connecting road : 290m E Open scrubland in the surrounding Forest Area: Bandra Mota Reserve Forest at a distance of 0.63 km SW from WTG location		
BHO 95	42Q 588061 2560033	42Q 588018 m E 2560383 m N	Gandher village	Govt. land	Open scrub	Structure	380m North	Plain flat land	Open scrubland in the surrounding Forest Area: Nigal Reserve Forest at a distance of 1.56 km E from WTG location	Structure identified as a single store house	
BHO83	42Q 583435.00 m E 2563132.00 m N	42Q 583238; 2563485	Vavdi village	Govt. land	Open scrub	Structure	420m NW	Undulating land	Agricultural field -260 south Forest Area: No Reserve Forest within 3 Km from WTG location	Structure identified as single house	
BHO 63	42Q 582867.00 m E 2563601.00 m N		Vadva village				390m SE		Forest Area: No Reserve Forest within 3 Km from WTG location		

environmental & social impact assessment

WTG Identification No.	Coordinate of WTG	Geographical coordinates of receptor	Location	Land	Name of the nearest village/House	Topography	Site Surroundings	Remarks/Observations	Photograph		
OLD19	42Q 555123.00 m E 2555556.00 m N	42Q 555181.79 2556021.93	Meghpar village	Govt. land	Open scrub	Structure	410 m N	Flat land	Connecting road: Mandvi bhuj highway 260m south Waterbody: 170m Forest Area: Kera Reserve Forest at a distance of 2.41 km SE from WTG location	Structure Identified as small house.	
		555561.85 2555497.11	Meghpar village	Govt. land	Open scrub	Single house	450m E	Flat land		Identified as a commercial establishment	
BHO 116	42Q 571504 2555094	42Q 571510.63 m E 2555529.20 m N	Sanosara village	Govt. land	Open scrub	Structure	420m North	Hilly undulating terrain	Natural water channel: 300m east Open scrubland in the surrounding Forest Area: Nana Dhola Reserve Forest at a distance of 0.38 km W from WTG location	Structure identified as a single house.	
KUT26	42 Q 543908; 2559605	42Q 543709; 2559229	Vadasar village	Govt. land	Open scrub	Structure	430m SW	Undulating terrain	No forest land involved Water body: Not within 500m radius Village road: 315m west	Receptor photograph not take as it was at a distance 430m SW	
BHO31	42Q 570525.00 m E 2560563.00 m N	42Q 570379.63 2560981.95	Jadura village	Govt. land	Open scrub	Structure	450m NW	Slightly undulating land	Natural water channel: 320m E Rocky terrain, open scrub land in the surrounding Forest Area: Bhuj Reserve Forest at a distance of 1.63 km N from WTG location	Structure identified as group of houses	

WTG Identification No.	Coordinate of WTG	Geographical coordinates of receptor	Location	Land	Name of the nearest village/House	Topography	Site Surroundings	Remarks/Observations	Photograph		
BHO 35	42Q 571704 2559458	571583.64 m E 2559019.50 m N	Jadura village	Govt. land	Open scrub	Group of houses	450m S	Slightly undulating land	Rocky terrain, open scrub land in the surrounding	Structure identified as group of houses	
KUT 30	42Q 537560; 2564140	42Q 537134; 2564262	Kurbai village	Govt. land	Open scrub	Structure	450m NW	Undulating terrain	Water body : Not within 500m radius Forest Area: Mangwana Reserve Forest boundary at a distance of 525m north west	Structure recognised as water treatment plant of Gujarat Water supply & Sewerage board	
BHO 87	42Q 587587 2561091	587974.33 m E 2561241.56 m N	Gandher village	Govt. land	Open scrub	Single house	410m NE	Flat land	Agricultural field: 60m SW	Identified as a single house	
BHO 121	42Q 572364 2555311	572646.00 m E 2555433.00 m N	Sanosara	Govt. land	Open scrub	Single house	310m NE	Undulating terrain		Identified as a single house	
BHO 126	42Q 569964 2553955	570447.09 m E 2554010.68 m N	Vadajar	Govt. land	Open scrub	Single house	480m E	Undulating terrain		Identified as a single house	
BHO 32	42Q 570678 2560173	NA	Jadura	Govt. land	Open scrub	NA	NA	Hilly undulating terrain	Open scrubland in the surrounding	No structure	
BHO 33	42Q 570894 2559897	NA	Jadura	Govt. land	Open scrub	NA	NA	Hilly undulating terrain	Open scrubland in the surrounding	No structure	

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WTG Identification No.	Coordinate of WTG	Geographical coordinates of receptor	Location	Land		Name of the nearest village/House		Topography	Site Surroundings	Remarks/Observations	Photograph
				Govt. land	Open scrub						
BHO 36	42Q 573148 2561301	NA	Reha Nana Village	Govt. land	Open scrub	NA	NA	Rocky terrain	Open scrubland in the surrounding	No structure	
BHO 37	42Q 573275 2560989	NA	Reha Nana Village	Govt. land	Open scrub	NA	NA	Rocky terrain	Open scrubland in the surrounding	No structure	
BHO 45	42Q 575224 2562260	NA	Reha Mota Village	Govt. land	Open scrub	NA	NA	Rocky terrain	Hilly Terrain	No structure	
BHO 46	42Q 575504 2561752	NA	Reha Mota Village	Govt. land	Open scrub	NA	NA	Rocky terrain	Hilly Terrain	No structure	
BHO 56	42Q 579923.49 2563722.97	NA	Vadva village	Govt. land	Open scrub	NA	NA	Rocky terrain	Hilly Terrain	No structure	
BHO 57	42Q 580733.57 2563686.51	NA	Vadva village	Govt. land	Open scrub	NA	NA	Rocky terrain	Hilly Terrain	No structure	
BHO 58	42Q 581451.79 2563565.02	NA	Vadva village	Govt. land	Open scrub	NA	NA	Rocky terrain	Hilly Terrain	No structure	
BHO 61	42Q 581718 2562308	NA	Vadva village	Govt. land	Open scrub	NA	NA	Rocky terrain	Hilly Terrain	No structure	
BHO 62	42Q 582487 2562318	NA	Vadva village	Govt. land	Open scrub	NA	NA	Rocky terrain	Hilly Terrain	No structure	
BHO 70	42Q 581342 2558929	NA	Sakrai Timbo village	Govt. land	Open scrub	NA	NA	Rocky terrain	Hilly Terrain	No structure	
BHO-077	42Q 582045 2558900	NA	Sakrai Timbo	Govt. land	Open scrub	NA	NA	Rocky terrain	Hilly Terrain	No structure	
BHO-078	42Q 582231 2558578	NA	Sakrai Timbo	Govt. land	Open scrub	NA	NA	Rocky terrain	Hilly Terrain	No structure	
BHO-079	42Q 582999 2558598	NA	Sakrai Timbo	Govt. land	Open scrub	NA	NA	Rocky terrain	Hilly Terrain	No structure	
BHO-080	42Q 583117 2558292	NA	Sakrai Timbo	Govt. land	Open scrub	NA	NA	Rocky terrain	Hilly Terrain	No structure	
BHO-081	42Q 583242 2558016	NA	Sakrai Timbo	Govt. land	Open scrub	NA	NA	Rocky terrain	Hilly Terrain	No structure	
BHO-082	42Q 583477 2557764	NA	Sakrai Timbo	Govt. land	Open scrub	NA	NA	Rocky terrain	Hilly Terrain	No structure	

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WTG Identification No.	Coordinate of WTG	Geographical coordinates of receptor	Location	Land		Name of the nearest village/House		Topography	Site Surroundings	Remarks/Observations	Photograph
BHO-084	42Q 585983.09 2562223.34	NA	Gandher	Govt. land	Open scrub	NA	NA	Rocky terrain	Hilly Terrain	No structure	
BHO-086	42Q 585820.27 2561853.42	NA	Gandher	Govt. land	Open scrub	NA	NA	Rocky terrain	Hilly Terrain	No structure	
BHO-100	42Q 569914 2559351	NA	Jadura	Govt. land	Open scrub	NA	NA	Rocky terrain		No structure	
BHO-102	42Q 575501 2562087	NA	Reha Mota	Govt. land	Open scrub	NA	NA	Rocky terrain		No structure	
BHO-105	42Q 576991 2551836	NA	Bandhara Nana	Govt. land	Open scrub	NA	NA	Rocky terrain		No structure	
BHO-106	42Q 577609 2551763	NA	Bandhara Nana	Govt. land	Open scrub	NA	NA	Rocky terrain		No structure	
BHO-107	42Q 577889 2551562	NA	Bandhara Nana	Govt. land	Open scrub	NA	NA	Rocky terrain		No structure	
BHO-108	42Q 578358 2551433	NA	Bandhara Nana	Govt. land	Open scrub	NA	NA	Rocky terrain		No structure	
BHO-115	42Q 586060 2561611	NA	Gandher	Govt. land	Open scrub	NA	NA	Rocky terrain		No structure	
BHO 117	42Q 571382 2554773	NA	Sanosara	Govt. land	Open scrub	NA	NA	Rocky terrain		No structure	
BHO-118	42Q 571299 2554378	NA	Sanosara	Govt. land	Open scrub	NA	NA	Rocky terrain		No structure	
BHO-120	42Q 572287 2555777	NA	Sanosara	Govt. land	Open scrub	NA	NA	Rocky terrain		No structure	
BHO-123	42Q 569671 2554588	NA	Vadajar	Govt. land	Open scrub	NA	NA	Rocky terrain		No structure	
BHO-125	42Q 569254 2554051	NA	Vadajar	Govt. land	Open scrub	NA	NA	Rocky terrain		No structure	
BHO-134	42Q 571809 2552484	NA	Bandhara Mota	Govt. land	Open scrub	NA	NA	Rocky terrain		No structure	
BHO-144	42Q 559953 2561561	NA	Naranpar Ravli	Govt. land	Open scrub	NA	NA	Rocky terrain		No structure	
BHO-146	42Q 560104 2560851	NA	Naranpar Ravli	Govt. land	Open scrub	NA	NA	Rocky terrain		No structure	





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WTG Identification No.	Coordinate of WTG	Geographical coordinates of receptor	Location	Land		Name of the nearest village/House		Topography	Site Surroundings	Remarks/Observations	Photograph
BHO-147	42Q 560091 2560442	NA	Naranpar Ravli	Govt. land	Open scrub	NA	NA	Rocky terrain		No structure	
BHO-150	42Q 559900 2561941	NA	Naranpar Ravli	Govt. land	Open scrub	NA	NA	Rocky terrain		No structure	
KUT-63	42Q 548753 2567534	NA	Kanpar	Govt. land	Open scrub	NA	NA	Rocky terrain		No structure	
KUT-48	42Q 539460 2565089	NA	Kurbai	Govt. land	Open scrub	NA	NA	Rocky terrain		No structure	
KUT-49	42Q 539484 2564618	NA	Kurbai	Govt. land	Open scrub	NA	NA	Rocky terrain		No structure	
KUT-46	42Q 540032 2562380	NA	Kurbai	Govt. land	Open scrub	NA	NA	Rocky terrain		No structure	
KUT-45	42Q 540406 2562089	NA	Kurbai	Govt. land	Open scrub	NA	NA	Rocky terrain		No structure	
KUT-44	42Q 540181 2561598	NA	Kurbai	Govt. land	Open scrub	NA	NA	Rocky terrain		No structure	
KUT-43	42Q 540050 2561028	NA	Kurbai	Govt. land	Open scrub	NA	NA	Rocky terrain		No structure	
KUT-42	42Q 539265 2560944	NA	Kurbai	Govt. land	Open scrub	NA	NA	Rocky terrain		No structure	
KUT-41	42Q 539050 2561301	NA	Kurbai	Govt. land	Open scrub	NA	NA	Rocky terrain		No structure	
KUT-38	42Q 538260 2561291	NA	Kurbai	Govt. land	Open scrub	NA	NA	Rocky terrain		No structure	
KUT-37	42Q 538121 2561689	NA	Kurbai	Govt. land	Open scrub	NA	NA	Rocky terrain		No structure	
KUT-33	42Q 537218 2562899	NA	Kurbai	Govt. land	Open scrub	NA	NA	Rocky terrain		No structure	
KUT-31	42Q 537462 2563676	NA	Kurbai	Govt. land	Open scrub	NA	NA	Rocky terrain		No structure	
KUT-27	42Q 544197 2559371	NA	Vadasar	Govt. land	Open scrub	NA	NA	Rocky terrain		No structure	
KUT-09	42Q 544344 2557070	NA	Vadasar	Govt. land	Open scrub	NA	NA	Rocky terrain		No structure	




WTG Identification No.	Coordinate of WTG	Geographical coordinates of receptor	Location	Land		Name of the nearest village/House		Topography	Site Surroundings	Remarks/Observations	Photograph
OLD-01	42Q 558733 2562341	NA	Naranpar Ravli	Govt. land	Open scrub	NA	NA	Rocky terrain		No structure	
OLD-02	42Q 558931 2562051	NA	Naranpar Ravli	Govt. land	Open scrub	NA	NA	Rocky terrain		No structure	
OLD-03	42Q 558491 2561170	NA	Naranpar Ravli	Govt. land	Open scrub	NA	NA	Rocky terrain		No structure	
OLD-04	42Q 558564 2560797	NA	Naranpar Ravli	Govt. land	Open scrub	NA	NA	Rocky terrain		No structure	
OLD-05	42Q 558548 2560046	NA	Naranpar Ravli	Govt. land	Open scrub	NA	NA	Rocky terrain		No structure	
OLD-06	42Q 558649 2559709	NA	Naranpar Ravli	Govt. land	Open scrub	NA	NA	Rocky terrain		No structure	
OLD-07	42Q 559760 2562256	NA	Naranpar Ravli	Govt. land	Open scrub	NA	NA	Rocky terrain		No structure	
OLD-08	42Q 558807 2559392	NA	Naranpar Ravli	Govt. land	Open scrub	NA	NA	Rocky terrain		No structure	
OLD-09	42Q 556829 2562869	NA	Bharasar	Govt. land	Open scrub	NA	NA	Rocky terrain		No structure	
OLD-10	42Q 556754 2562133	NA	Bharasar	Govt. land	Open scrub	NA	NA	Rocky terrain		No structure	
OLD-11	42Q 557268 2562774	NA	Bharasar	Govt. land	Open scrub	NA	NA	Rocky terrain		No structure	
OLD-13	42Q 555905 2559716	NA	Godpar	Govt. land	Open scrub	NA	NA	Rocky terrain		No structure	
OLD-17	42Q 556924 2558124	NA	Meghpar	Govt. land	Open scrub	NA	NA	Rocky terrain		No structure	
NEW 53 WTG LOCATIONS IDENTIFIED IN JULY 2017 BY OKWPL											
BHO 65	42Q 579740 2559083	NA	Harudi	Govt. land	Open scrub	NA	NA	Rocky terrain		New location , no structure observed via Google earth. Ground truthing required	
BHO 66	42Q 579444.66 2558707.96	NA	Harudi	Govt. land	Open scrub	NA	NA	Rocky terrain		New location , no structure observed via Google earth. Ground truthing required	

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WTG Identification No.	Coordinate of WTG	Geographical coordinates of receptor	Location	Land		Name of the nearest village/House		Topography	Site Surroundings	Remarks/Observations	Photograph
				Govt. land	Open scrub						
BHO 68	42Q 580473 2557703	NA	Sakrai Timbo	Govt. land	Open scrub	NA	NA	Rocky terrain		New location , no structure observed via Google earth. Ground truthing required	
BHO 71	42Q 581222 2558316	581233.47 2557925.09	Sakrai Timbo	Govt. land	Open scrub	Single house/store	390m S	Rocky terrain		Google earth observation shows a single structure – ground truthing required	
BHO 85	42Q 586882.39 2562513.97	NA	Gandher	Govt. land	Open scrub	NA	NA	Rocky terrain		New location , no structure observed via Google earth. Ground truthing required	
BHO 99	42Q 591885.36 2562591	592058.19, 2562779.62	Chubdak	Govt. land	Open scrub	Single structure	269m NE	Rocky terrain		Google earth observation shows a single structure – ground truthing required	
BHO 98	42Q 592046.84 2562049.41	592263.01, 2561867.94	Chubdak	Govt. land	Open scrub	Single structure	280m SE	Rocky terrain		Google earth observation shows a group of houses – ground truthing required	
BHO 97	42Q 591006.9 2562026.64	NA	Chubdak	Govt. land	Open scrub	NA	NA	Rocky terrain		New location , no structure observed via Google earth. Ground truthing required	
BHO 109	42Q 577009 2551482	NA	Bandhara Nana	Govt. land	Open scrub	NA	NA	Rocky terrain		New location , no structure observed via Google earth. Ground truthing required	
BHO 110	42Q 577046 2551146	577170.64, 2550803.1	Bandhara Nana	Govt. land	Open scrub	NA	360m SE			Google earth observation shows a single structure – ground truthing required	
BHO 112	42Q 577903 2551177	NA	Bandhara Nana	Govt. land	Open scrub	NA	NA	Rocky terrain		New location , no structure observed via Google earth. Ground truthing required	


WTG Identification No.	Coordinate of WTG	Geographical coordinates of receptor	Location	Land	Name of the nearest village/House	Topography	Site Surroundings	Remarks/Observations	Photograph	
BHO 114	42Q 587311 2562287	587680.67, 2562186.79	Gandher	Govt. land	Open scrub	Structure	370m SE		Google earth observation shows a group of houses – ground truthing required	
BHO 124	42Q 569469 2554357	NA	Vadajar	Govt. land	Open scrub	NA	NA	Rocky terrain	New location , no structure observed via Google earth. Ground truthing required	
BHO 145	42Q 560022 2561200	NA	Naranpar	Govt. land	Open scrub	NA	NA	Rocky terrain	New location , no structure observed via Google earth. Ground truthing required	
BHO 156	42Q 571369 2560854	Structure 1 : 571046.38, 2561106.27 Structure 2: 571502.02, 2561200.51	Jadura	Govt. land	Open scrub	2 Structures	400m NW 370m NE	Rocky terrain	Google earth observation shows a settlement in once direction and a group of 7-8 houses on one side – ground truthing required	
BHO 157	42Q 571610 2560590	NA	Jadura	Govt. land	Open scrub	NA	NA	Rocky terrain	New location , no structure observed via Google earth. Ground truthing required	
BHO 164	42Q 537415 2564445	537202.50 2564335.83	Kurbai	Govt. land	Open scrub	Structure	210m	Rocky terrain	Google earth observation shows a water treatment plant and an office complex – ground truthing required	
BHO 165	42 q 540226 2564037	Structure 1: 539985.15 2563947.72 Structure 2: 539808.26, 2564057.54	Kurbai	Govt. land	Open scrub	2 structures	250m SW 410m W	Rocky terrain	Google earth observation shows a settlement and a group of houses in proximity – ground truthing required	
BHO 166	42Q 538155 2562092	NA	Kurbai	Govt. land	Open scrub	NA	NA	Rocky terrain	New location , no structure observed via Google earth. Ground truthing required	

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WTG Identification No.	Coordinate of WTG	Geographical coordinates of receptor	Location	Land		Name of the nearest village/House		Topography	Site Surroundings	Remarks/Observations	Photograph
				Govt. land	Open scrub						
BHO 167	42Q 539092 2562230	538943.95 2562669.77	Kurbai	Govt. land	Open scrub	Structure	470m NW	Rocky terrain		Google earth observation shows a small structure – ground truthing required	
BHO 168	42 Q 537705 2563418	NA	Kurbai	Govt. land	Open scrub	NA	NA	Rocky terrain		New location , no structure observed via Google earth. Ground truthing required	
BHO 169	42 Q 541166 2562667	NA	Kurbai	Govt. land	Open scrub	NA	NA	Rocky terrain		New location , no structure observed via Google earth. Ground truthing required	
BHO 175	42Q 556300 2560694	NA	Godpar Sarli	Govt. land	Open scrub	NA	NA	Rocky terrain		New location , no structure observed via Google earth. Ground truthing required	
BHO 176	42Q 555846 2560057	NA	Godpar Sarli	Govt. land	Open scrub	NA	NA	Rocky terrain		New location, no structure observed via Google earth. Ground truthing required	
BHO 180	42Q 551883 2567732	NA	Nagiyari	Govt. land	Open scrub	NA	NA	Rocky terrain		New location, no structure observed via Google earth. Ground truthing required	
BHO 189	42Q 548432 2564780	Structure 1 548605.79, 2564963.19 Structure 2: 548790.28, 2564831.51	Samatra	Govt. land	Open scrub	Structure 1: 250m NE Structure 2: 370m E	NA	Rocky terrain		Google earth observation shows some houses in the NE direction and some houses along with TV tower in east – ground truthing required	
BHO 193	42Q 548328 2567036	Structure 1: 548090.03, 2567106.61 Structure 2: 547996.56, 2567282.65	Kanpar	Govt. land	Open scrub	Structure 1: 240m NW Structure 2: 410m NW	NA	Rocky terrain		Google earth observation shows some houses in the NE direction– ground truthing required	
BHO 194	42Q 548753 2567913	NA	Nagiyari	Govt. land	Open scrub	NA	NA	Rocky terrain		New location, no structure observed via Google earth. Ground truthing required	
BHO 197	42 Q 541810 2559834	NA	Ajapar	Govt. land	Open scrub	NA	NA	Rocky terrain		New location, no structure observed via Google earth. Ground truthing required	

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WTG Identification No.	Coordinate of WTG	Geographical coordinates of receptor	Location	Land		Name of the nearest village/House		Topography	Site Surroundings	Remarks/Observations	Photograph
				Govt. land	Open scrub						
BHO 198	42 Q 542953 2560371	NA	Ajapar	Govt. land	Open scrub	NA	NA	Rocky terrain		New location, no structure observed via Google earth. Ground truthing required	
BHO 199	42 Q 542333 2557510	542320.44, 2557852.90	Ajapar	Govt. land	Open scrub	Ajapar village	350m N	Rocky terrain		Google earth observation shows Ajaapar village in the north direction– ground truthing required	
BHE 08	42Q 543237 2554651	Structure 1 542933.77, 2554663.63 Structure 2: 542986.65, 2554303.03	Ludva	Govt. land	Open scrub	Two structures	290m W 430m SW	Plain land		Google earth observation shows some houses in the west and NW direction– ground truthing required	
BHE 09	42Q 543092 2555022	NA	Ajapar	Govt. land	Open scrub	NA	NA	Rocky terrain		New location, no structure observed via Google earth. Ground truthing required	
BHE 10	42Q 541495 2556282	541242.78, 2556199.24	Ludva	Govt. land	Open scrub	Structure	270m SW			Google earth observation shows a small structure in SW direction–ground truthing required	
BHE 11	42Q 540518 2557125	NA	Virani	Govt. land	Open scrub	NA	NA	Rocky terrain		New location, no structure observed via Google earth. Ground truthing required	
BHE 12	42Q 540511 2557498	NA	Virani	Govt. land	Open scrub	NA	NA	Rocky terrain		New location, no structure observed via Google earth. Ground truthing required	
BHE 13	42Q 540182 2557719	NA	Virani	Govt. land	Open scrub	NA	NA	Rocky terrain		New location, no structure observed via Google earth. Ground truthing required	
BHE 14	42Q 539914 2557966	NA	Virani	Govt. land	Open scrub	NA	NA	Rocky terrain		New location, no structure observed via Google earth. Ground truthing required	
BHE 15	42Q 540050 2558373	NA	Nabhoi Moti	Govt. land	Open scrub	NA	NA	Rocky terrain		New location, no structure observed via Google earth. Ground truthing required	

WTG Identification No.	Coordinate of WTG	Geographical coordinates of receptor	Location	Land		Name of the nearest village/House		Topography	Site Surroundings	Remarks/Observations	Photograph
BHE 16	42Q 539753 2558602	NA	Nabhoi Moti	Govt. land	Open scrub	NA	NA	Rocky terrain		New location, no structure observed via Google earth. Ground truthing required	
BHE 17	42Q 539404 2558964	NA	Nabhoi Moti	Govt. land	Open scrub	NA	NA	Rocky terrain		New location, no structure observed via Google earth. Ground truthing required	
BHE 18	42Q 539147 2559209	NA	Nabhoi Moti	Govt. land	Open scrub	NA	NA	Rocky terrain		New location, no structure observed via Google earth. Ground truthing required	
BHE 19	42Q 538982 2559498	NA	Nabhoi Moti	Govt. land	Open scrub	NA	NA	Rocky terrain		New location, no structure observed via Google earth. Ground truthing required	
BHE 20	42Q 538763 2559881	NA	Nabhoi Moti	Govt. land	Open scrub	NA	NA	Rocky terrain		New location, no structure observed via Google earth. Ground truthing required	
BHE 21	42Q 539046 2560453	NA	Nabhoi Moti	Govt. land	Open scrub	NA	NA	Rocky terrain		New location, no structure observed via Google earth. Ground truthing required	
BHE 22	42Q 540415 2559644	540581.81, 2559403.82	Nabhoi Moti	Govt. land	Open scrub	Nabhoi village	300m SE	Rocky terrain		Google earth observation shows a settlement – ground truthing required	
BHE 23	42Q 540291 2559969	NA	Nabhoi Moti	Govt. land	Open scrub	NA	NA	Rocky terrain		New location, no structure observed via Google earth. Ground truthing required	
BHE 24	42Q 540059 2560232	NA	Nabhoi Moti	Govt. land	Open scrub	NA	NA	Rocky terrain		New location, no structure observed via Google earth. Ground truthing required	
BHE 25	42Q 539939 2560542	NA	Nabhoi Moti	Govt. land	Open scrub	NA	NA	Rocky terrain		New location, no structure observed via Google earth. Ground truthing required	

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WTG Identification No.	Coordinate of WTG	Geographical coordinates of receptor	Location	Land		Name of the nearest village/House		Topography	Site Surroundings	Remarks/Observations	Photograph
BHE 26	42Q 537656 2559039	Structure1; 537431.58, 2559296.86 Structure 2: 537312.76, 2559343.52	Filon	Govt. land	Open scrub	2 structures	350m NW 460m NW	Rocky terrain		Google earth observation shows two small structures– ground truthing required	
BHE 27	42Q 537912 2558793	NA	Filon	Govt. land	Open scrub	NA	NA	Rocky terrain		New location, no structure observed via Google earth. Ground truthing required	
BHE 28	42Q 538334 2557982	NA	Filon	Govt. land	Open scrub	NA	NA	Rocky terrain		New location, no structure observed via Google earth. Ground truthing required	
BHE 29	42Q 538778 2557387	538485.78, 2557136.62	Virani	Govt. land	Open scrub	Settlement	390m SW			Google earth observation shows Virani Gadh settlement in SE direction– ground truthing required	

APPENDIX H

ILO guidelines

No.6

ILO HELPDESK

ASSISTANCE@ILO.ORG

International Labour Organization

Workers' housing

Housing provided to workers as part of the employment contract should meet certain minimum specifications in respect of the nature and standard of the accommodation and facilities to be made available.

The following guidance is based on international labour standards. National or state regulation will often set baseline specifications as part of housing, labour, health or even fire safety regulations; they should be checked and followed. National employers and workers organizations may also be a good source of information on national law, collective bargaining agreements and customs pertaining to housing for workers; or may be able to refer you to the appropriate statutory authority.

Guiding principles

➤ In providing worker¹ housing, the objective should be to ensure "adequate and decent housing accommodation and a suitable living environment"² for workers. This includes upkeep, improvement and modernisation of housing and related community facilities.³

It is "generally not desirable that employers should provide housing for their workers directly".⁴ Employers are encouraged to help their workers to obtain housing through autonomous private agencies, public housing schemes, or cooperatives.⁵ This is because workers living at the work site on property owned or controlled by the employer tend to be less integrated into the local community, and more dependent on the employer. However, certain circumstances, such as when an undertaking is located far from normal centres of population, or where the nature of the employment requires that the worker should be available at short notice may require the employer to provide housing for his or her workers.⁶

If housing is provided by the employer "the fundamental human rights of the workers, in particular freedom of association, should be recognised."⁷ Arrangements where accommodation and communal services are provided as payment for work should take care to ensure that the interests of the workers are protected. If rent is charged, it should not cost the worker more than a reasonable proportion of his or her income.⁸

Siting and construction

➤ The housing and related community facilities should be of durable construction, taking into account local conditions, such as liability to earthquakes.⁹

The location of workers' housing should ensure that workers are not affected by air pollution, surface run-off or sewage or other wastes.¹⁰

Housing Standards

➤ Housing should ensure "structural safety and reasonable levels of decency, hygiene and comfort".¹¹ The undertaking should ensure the following:

- a) a separate bed for each worker;
- b) adequate headroom, providing full and free movement, of not less than 203 centimetres;
- c) the minimum inside dimensions of a sleeping space should be at least 198 centimetres by 80 centimetres;
- d) beds should not be arranged in tiers of more than two;
- e) bedding materials should be reasonably comfortable;
- f) bedding and bedframe materials should be designed to deter vermin;
- g) separate accommodation of the sexes;
- h) adequate natural light during the daytime and adequate artificial light;
- i) a reading lamp for each bed;
- j) adequate ventilation to ensure sufficient movement of air in all conditions of weather and climate;
- k) heating where appropriate;
- l) adequate supply of safe potable water;
- m) adequate sanitary facilities (see below);
- n) adequate drainage;
- o) adequate furniture for each worker to secure his or her belongings, such as a ventilated clothes locker which can be locked by the occupant to ensure privacy;
- p) common dining rooms, canteens or mess rooms, located away from the sleeping areas;
- q) appropriately situated and furnished laundry facilities;
- r) reasonable access to telephone or other modes of communications, with any charges for the use of these services being reasonable in amount; and

¹ Workers' Housing Recommendation, 1961 (No. 175). The section entitled "Suggestions concerning methods of application," Part I, paragraph 5, encourages "equality of treatment between migrant workers and national workers"; therefore, this guidance applies equally to migrant workers and national workers.

² R. 115, General Principles, Part II, paragraph 2.

³ R. 115, paragraph 5.

⁴ R. 115, Part IV, paragraph 12(2).

⁵ R. 115, Part IV, paragraph 12(1).

⁶ R. 115, Part IV, paragraph 12(1).

⁷ R. 115, Part IV, paragraph 12(3a).

⁸ R. 115, Part II, paragraph 4, Part IV, paragraph 12(3) and (6).

⁹ R. 115, Suggestions Concerning Methods of Application, Part I, paragraphs 10-11.

¹⁰ R. 115, Suggestions Concerning Methods of Application, Part IX, paragraph 43.

¹¹ R. 115, paragraph 19.

- s) rest and recreation rooms and health facilities, where not otherwise available in the community.

In workers' sleeping rooms the floor area should not be less than 7.5 square metres in rooms accommodating two persons; 11.5 square metres in rooms accommodating three persons; or 14.5 square metres in rooms accommodating four persons. If a room accommodates more than four persons, the floor area should be at least 3.6 square metres per person. Rooms should indicate the permitted number of occupants.

As far as practicable, sleeping rooms should be arranged so that shifts are separated and that no workers working during the day share a room with workers on night shifts.

Provisions should be made for workers' physical safety and well-being, and protection of their belongings. Measures should be reasonable and not unduly restrict workers' freedom of movement. Workers should be allowed visits for social relations or business, including trade union business.¹²

Inspection of premises

➡ Premises should be inspected frequently to ensure that the accommodation is clean, decently habitable and maintained in a good state of repair. The results of each such inspection should be recorded and be available for review.

Sanitation facilities

➡ Adequate sanitary facilities should include a minimum of one toilet, one wash basin and one tub or shower for every six persons. They should be provided at a convenient location which prevents nuisances. Sanitary facilities provided should meet minimum standards of health and hygiene. They should also provide reasonable standards of comfort, including hot and cold fresh running water. There should be separate sanitary facilities provided for men and for women. Sanitary facilities should have ventilation to the open air, independently of any other part of the accommodation. Soap and hygienic paper should be adequately stocked.

Vacating the premises upon termination of employment

➡ When a worker's contract of employment is terminated, the worker should be entitled to a reasonable period of time to vacate the premises, in accordance with national law and custom.¹³

Health and safety

➡ As far as possible, floors walls, ceilings and equipment should be constructed to minimize health risks.

The accommodations should be kept free of rats, mice, insects and vermin. In areas where mosquitoes are prevalent, workers should be provided netting.

Measures should be taken to prevent the spread of diseases. Separate facilities should be provided for sick workers to prevent the spread of transmissible diseases among the occupants. Fire safety measures should be taken, including installing and maintaining fire equipment (alarms, extinguishers, etc.). Workers should be trained in fire procedures. Bedding should not contain flammable materials. Radiators and other heating apparatus should be placed so as to avoid risk of fire, and shielded where necessary to prevent discomfort to occupants.

Safety exits should be clearly marked. Adequate means of escape should be provided and properly maintained.

Consultation

➡ In the design of housing for workers, "every effort should be made to consult those bodies representative of future occupants best able to advise on the most suitable means of meeting their housing and environmental needs."¹⁴

References

➡ Workers' Housing Recommendation, 1961 (No. 115); full text available at: <http://www.ilo.org/ilolex/english/recdisp1.htm>.

➡ For comparison, you may also wish to consult the Maritime Labour Convention (MLC), 2006, Title 3, which gives detailed guidance for workers' accommodation for seafarers; full text available at: <http://www.ilo.org/ilolex/cgi-lex/convde.pl?C186>.

¹² R. 115, Suggestions Concerning Methods of Application, Part IV, paragraph 17.

¹³ R. 115, General Principles, Part IV, paragraphs 17(3b) and Suggestions Concerning Methods of Application, Part IV, paragraph 15.

¹⁴ R. 115, Suggestions Concerning Methods of Application, Part IX, paragraph 42.

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APPENDIX I

Ostro Energy EHS Policy



HEALTH AND SAFETY POLICY

We, at Ostro, firmly believe that health & safety of our employees and contractors is of utmost importance. Ostro is committed to practice, promote and inculcate best possible standards of health and safety in its business. We believe that Safety is Everyone's Responsibility and Line Management has a leadership role in implementation of, and ensuring compliance with HSE policies and standards. In pursuit of our belief and commitment, we strive -

- *To ensure that all employees and contractors work in safe working conditions.*
- *To identify and eliminate all risks by taking adequate preventive measures.*
- *To provide health and safety training to all relevant persons.*
- *To establish, maintain and practice a certifiable occupational health and safety management system (OHSAS: 18001).*
- *To ensure that all activities are in compliance with applicable health and safety regulations.*

Ostro is committed to develop a culture of safety through active leadership at all levels and making sure that resources are made available to implement this policy.

This policy is applicable to all business and project related activities of Ostro Energy. All employees and contractors of Ostro are required to adhere to this policy.

A handwritten signature in blue ink, appearing to read "Ranjit Gupta".

Ranjit Gupta-Chief Executive Officer

Date: January 2015

Ostro Energy: Health and Safety Policy-Revision-0

APPENDIX K

Ambient Air Quality Monitoring Results

S. N	Village	Date of Sampling	1	2	3	4	5
			PM ₁₀ µg/m ³	PM _{2.5} µg/m ³	SO ₂ µg/m ³	NO ₂ µg/m ³	CO mg/m ³
1	Ler village	02/05/2017)	57.98	26.30	7.63	14.10	<0.2
2	Ajaapar Village	02/05/2017)	63.51	31.75	9.18	16.58	<0.2
3	Gandher Village	(3/05/2017)	59.55	29.17	9.06	14.82	<0.2
	CPCB limit		100	60	80	80	2

APPENDIX L

Surface water quality monitoring results

S. N.	Parameter	Unit	Surface Water	
			Ler Village Pond	Jamura Pond
1	pH	---	6.66	7.96
2	Colour		10	10
3	Odour		Objectionable	Objectionable
4	Electrical Conductivity	mS/cm	4866	4172
5	Dissolved Oxygen	mg/l	4.8	5.2
6	Biochemical Oxygen Demand	mg/l	16.0	14.5
7	Chemical Oxygen Demand	Mg/l	88.0	70.0
8	Total Dissolved Solids	mg/l	3243	2763
9	Oil & Grease	mg/l	<2.0	<2.0
10	Total Hardness	mg/l	1314	1116
11	Chloride	mg/l	987.0	795.0
12	Sulphate	mg/l	729.0	636.0
13	Nitrate	mg/l	12.6	11.3
14	Fluoride	mg/l	1.42	1.34
15	Iron	mg/l	0.30	0.26
16	Mercury	mg/l	<0.001	<0.001
17	Zinc	mg/l	0.21	0.18
18	Total Coliform	MPN/100ml	140	170
19	Faecal Coliform	---	50	80

APPENDIX M

Groundwater quality monitoring results

S.N	Parameters	Units	Test Methods	Naranpur village GW-01	Jadura village GW-02	IS 10500: 2012	
						Acceptable limit	Permissible limit
1	Temperature	°C		42	43		
2	pH Value	-	APHA 4500-H+B	7.87	7.53	6.5 – 8.5	--
3	Turbidity	NTU	APHA - 2130 - B	<1.0	<1.0	1	5
4	Total Hardness (as CaCO ₃)	mg/l	APHA 2340 - C	178.0	218.0	200	600
5	Iron (as Fe)	mg/l	APHA -3111-B	0.11	0.13	0.3	No relaxation
6	Chlorides (as Cl)	mg/l	APHA 4500-CL-B	102.0	113.0	250	1000
7	Fluorides (F)	mg/l	APHA - 4500 - F- B	0.03	0.04	1	1.5
8	TDS	mg/l	APHA -2540-C	335.0	415.0	500	2000
9	Calcium	mg/l	APHA -3111-B	42.0	47.5	75	200
10	Magnesium	mg/l	APHA -3111-B	17.2	24.0	30	100
11	Copper	mg/l	APHA -3111-B	<0.05	<0.05	0.05	1.5
12	Nitrate (as NO ₃)	mg/l	IS 3025 P-34	1.60	2.84	45	No relaxation
13	Mercury	mg/l	IS : 3025 (P-48)	<0.01	<0.01	0.001	No relaxation
14	Arsenic	mg/l	IS : 3025 (P-37)	<0.01	<0.01	0.01	0.05
15	Zinc	mg/l	APHA -3111-B	<0.05	<0.05	5	15
16	Alkalinity	mg/l	APHA -2320-B	135.0	146.0	200	600
17	Total Coliform	MPN/100ml	IS:1622 :1982	Absent	Absent	10	No relaxation
18	Fecal Coliform	MPN/100ml	IS:1622 :1982	Absent	Absent	No relaxation	No relaxation

APPENDIX N

Quadrant Analysis

Quadrant A

Date: 22.3.2017

Time: 4:45 PM

Total area: 900m²

Location: Near Godpar village

Distance from nearest settlement: 1.73 KM

Layer: Two layers, grass and shrubs

Coordinate: 555427.00 m E, 2554733.00 m N

Name of the tree	Height (average)	Number/percentage coverage
<i>Acacia nilotica</i>	1-2 meter	50
<i>Cassia sp.</i>	0.5-1meter	24
<i>Zizyphus nummularia</i>	1-1.5 meter	13
<i>Euphorbia caducifolia</i>	1.5-2 meter	110

Percentage of bare soil: 70%

Quadrant B

Date: 24.3.2017

Time: 11:00 AM

Total area: 900m²

Location: Near Ajaapar Village

Distance from nearest settlement: 2.18 km

Layer: Two layers, grass and shrubs

Coordinate: 543832.00 m E, 2559620.00 m N

Name of the tree	Height (average)	Number/percentage coverage
<i>Prosopis juliflora</i>	1-2 meter	18
<i>Acacia nilotica</i>	1-2 meter	6
<i>Euphorbia caducifolia</i>	1.5-2 meter	44

Percentage of bare soil: 95%

Quadrant C

Date: 23.3.2017

Time: 5:15 PM

Total area: 900m²

Location: Near Chakar village

Distance from nearest settlement: 2 KM

Layer: two layers, grass and shrubs

Coordinate: 573922.00 m E, 2553936.00 m N

Name of the tree	Height (average)	Number/percentage coverage
<i>Acacia nilotica</i>	1-2 meter	38

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<i>Cassia sp.</i>	1-1.5meter	57
<i>Prosopis juliflora</i>	2 meter	29
<i>Euphorbia caducifolia</i>	2-3 meter	14

Percentage of bare soil: 90%

Quadrate D

Date: 24.1.2017

Time: 10:05 AM

Total area: 900m2

Location: Near Kurbai Village

Distance from nearest settlement: 2.5 KM

Layer: Two layers, grass and shrubs

Coordinate: 539319.00 m E, 2560929.00 m N

Name of the tree	Height (average)	Number/percentage coverage
<i>Prosopis juliflora</i>	2 meter	69
<i>Euphorbia caducifolia</i>	2-3 meter	75

Percentage of bare soil: 85%

Quadrate E

Date: 24.1.2017

Time: 1:20 PM

Total area: 900m2

Location: Near Ashapura temple

Distance from nearest settlement: 4.5 KM

Layer: Two layers, grass and shrubs

Coordinate: 539319.00 m E, 2560929.00 m N

Name of the tree	Height (average)	Number/percentage coverage
<i>Prosopis juliflora</i>	2 meter	177
<i>Acacia nilotica</i>	1-1.5 meter	52
Cactus sp.	1.5 meter	19
<i>Euphorbia caducifolia</i>	2-3 meter	75

Percentage of bare soil: 40%

APPENDIX O

List of Flora Recorded in the Study Area

Sl. No.	Family	Common Name	Scientific Name
1.	▪ Amaranthaceae	▪ Apang	▪ <i>Achyranthes aspera</i>
2.	▪ Anacardiaceae	▪ Aam / Mango Tree	▪ <i>Mangifera indica</i>
3.	▪ Annonaceae	▪ Ata / Custard Apple	▪ <i>Annona reticulata</i>
4.	▪ Apocynaceae	▪ Akanda (Purple)	▪ <i>Calotropis gigantea</i>
5.	▪ Apocynaceae	▪ Akanda (Purple) Another sp.	▪ <i>Calotropis procera</i>
6.	▪ Apocynaceae	▪ Dudhaiya / Dyer's Oleander	▪ <i>Wrightia tinctoria</i>
7.	▪ Apocynaceae	▪ Karabi	▪ <i>Nerium oleander</i>
8.	▪ Apocynaceae	▪ Kath Champa / Pagoda Tree / Frangipani	▪ <i>Pumeria sp.</i>
9.	▪ Apocynaceae	▪ Kolke Ful	▪ <i>Thevetia peruviana</i>
10.	▪ Arecaceae	▪ Narkel / Coconut palm	▪ <i>Cocos nucifera</i>
11.	▪ Arecaceae	▪ Taal / Palmyra palm	▪ <i>Borassus flabellifer</i>
12.	▪ Asparagaceae	▪ Satamuli	▪ <i>Asparagus recemosus</i>
13.	▪ Asteraceae	▪ Sonchus	▪ <i>Sonchus sp.</i>
14.	▪ Bignoniaceae	▪ Roheda / Desert Teak	▪ <i>Tecomella undulata</i>
15.	▪ Boraginaceae	▪ Lasora / Indian Cherry	▪ <i>Cordia dichotoma</i>
16.	▪ Cactaceae	▪ Nagphana / Barbary Fig	▪ <i>Opuntia monocantha</i>
17.	▪ Caesalpiniaceae	▪ Tanner's Cassia	▪ <i>Cassia auriculata</i>
18.	▪ Capparaceae	▪ Capparis / Kair	▪ <i>Capparis decidua</i>
19.	▪ Capparaceae	▪ Capparis / Kaliakera	▪ <i>Capparis sepiaria</i>
20.	▪ Combretaceae	▪ Kath Badam / Indian Almond	▪ <i>Terminalia catappa</i>
21.	▪ Convolvulaceae	▪ Dhol Kolmi/ Morning Glory Tree	▪ <i>Ipomoea carnea</i>
22.	▪ Euphorbiaceae	▪ Bajbaran / antique spurge	▪ <i>Euphorbia antiquorum</i>
23.	▪ Euphorbiaceae	▪ Baro Dudhi	▪ <i>Euphorbia hirta</i>
24.	▪ Fabaceae	▪ Amaltash	▪ <i>Cassia fistula</i>
25.	▪ Fabaceae	▪ Babla/ Babool	▪ <i>Acacia nilotica</i>
26.	▪ Fabaceae	▪ Jerusalem Thorn	▪ <i>Parkinsonia aculeate</i>
27.	▪ Fabaceae	▪ Karanja / Pongam oiltree	▪ <i>Pongamea pinnata</i>
28.	▪ Fabaceae	▪ Khair / Black Catechu	▪ <i>Acacia catechu</i>
29.	▪ Fabaceae	▪ lal khair	▪ <i>Acacia chundra</i>

Sl. No.	Family	Common Name	Scientific Name
30.	▪ Fabaceae	▪ Krishnachura / Gulmohar	▪ <i>Delonix regia</i>
31.	▪ Fabaceae	▪ Palash / Flame of the Forest	▪ <i>Butea monosperma</i>
32.	▪ Fabaceae	▪ Siris	▪ <i>Albizia lebbek</i>
33.	▪ Fabaceae	▪ Sisoo / Shisham / Indian rose Wood	▪ <i>Dalbergia sisoo</i>
34.	▪ Fabaceae	▪ Tentul / Tamarind	▪ <i>Tamarindus indica</i>
35.	▪ Fabaceae	▪ Khirish	▪ <i>Albizia saman</i>
36.	▪ Fabaceae	▪ Vilaiti Keekar / Vilaiti Babool	▪ <i>Prosopis juliflora</i>
37.	▪ Malvaceae	▪ Jaba / Hibiscus	▪ <i>Hibiscus Sp.</i>
38.	▪ Malvaceae	▪ Kapas Tulo / Cotton Plant	▪ <i>Gossypium indicum</i>
39.	▪ Meliaceae	▪ Neem / Indian Lilac	▪ <i>Azadirachta indica</i>
40.	▪ Mimosaceae	▪ Safed babul / White Bark Acacia	▪ <i>Acacia leucophloea</i>
41.	▪ Moraceae	▪ Bot / Indian banyan	▪ <i>Ficus benghalensis</i>
42.	▪ Moraceae	▪ Toot / Silkworm Mulberry	▪ <i>Morus alba</i>
43.	▪ Moraceae	▪ Aswatha/ Peepal Tree	▪ <i>Ficus relogiosa</i>
44.	▪ Myrtaceae	▪ Eucalyptus	▪ <i>Eucalyptus sp.</i>
45.	▪ Myrtaceae	▪ Jam / Jamun	▪ <i>Syzygium cumini</i>
46.	▪ Poaceae	▪ Durba	▪ <i>Cynodon dactylon</i>
47.	▪ Poaceae	▪ Joar / Sorghum	▪ <i>Sorghum bicolor</i>
48.	▪ Poaceae	▪ Pothika Gaddi	▪ <i>Eragrostis tenella</i>
49.	▪ Rhamnaceae	▪	▪ <i>Zizyphus nummularia</i>
50.	▪ Rutaceae	▪ Bel/ Bilva/ Bael	▪ <i>Aegle marmelos</i>
51.	▪ Simaroubaceae	▪ Maha Neem / Maharukh / Tree of Heaven	▪ <i>Ailanthus excelsa</i>
52.	▪ Solanaceae	▪ Dhutra (Kalo) / Devil's Trumpet	▪ <i>Dotura metel</i>
53.	▪ Ulmaceae	▪ Suochakulte / Indian Elm	▪ <i>Holoptelea integrifolia</i>
54.	▪ Verbenaceae	▪ Segun / Teak	▪ <i>Tectona grandis</i>
55.	▪ Zygophyllaceae	▪ Hingot / Desert Date	▪ <i>Balanites roxburghii</i>
56.	▪ Poaceae	▪ marvel grass	▪ <i>Dicanthium annulatum</i>
57.	▪ Euphorbiaceae	▪	▪ <i>Euphorbia caducifolia</i>
58.	▪ Sapotaceae	▪ Mahua	▪ <i>Madhuca longifolia</i>
59.	▪ Apocynaceae	▪ Yellow Oleander	▪ <i>Cascabela thevetia</i>
60.	▪ Euphorbiaceae	▪ Castor	▪ <i>Ricinus communis</i>

APPENDIX P

Photo documentation of plant species in the study area



Acacia catechu



Acacia chundra



Acacia leucophloea



Acacia nilotica



Ailanthus excelsa



Butea monosperma



Calotropis procera



Castor plantation



Cocos nucifera



Dalbergia sissoo



Dlcanthium annulatum



Euphorbia caducifolia

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Ficus begalensis



Madhuca longifolia



Mangifera indica



Azadirachta indica



Parkinsonia aculeata



Prosopis juliflora



Yellow oleander















Zizyphus nummularia












Datura stramonium

APPENDIX Q












Photo documentation of bird diversity in the study area

		
<i>Ashy Crowned Sparrow Lark</i>	<i>Bay Backed Shrike</i>	<i>Baya Weaver's Nest</i>
		
<i>Black Headed Ibis</i>	<i>Black Kite</i>	<i>Citrine Wagtail</i>
		
<i>Common Babbler</i>	<i>Common Kestrel</i>	<i>Common Kingfisher</i>
		
<i>Common Pochard</i>	<i>Common Redshank</i>	<i>Common Sandpiper</i>













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<i>Common Stonechat</i>	<i>Common Teal</i>	<i>Darter</i>
		
<i>Garganey</i>	<i>Glossy Ibis</i>	<i>Green sandpiper</i>
		
<i>Grey Francolin</i>	<i>Grey Heron</i>	<i>Grey Necked Bungting</i>
		
<i>Indian Bushlark</i>	<i>Indian Cormorant</i>	<i>Indian Coursier</i>
		
<i>Indian Robin</i>	<i>Indian Silverbill</i>	<i>Lesser Whistling Duck</i>

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<i>Little Grebe</i>	<i>Little Swift</i>	<i>Long Tailed Shrike</i>
		
<i>Long Legged Buzzard</i>	<i>Montagu's Harrier</i>	<i>Oriental Honey Buzzard</i>
		
<i>Oriental Skylark</i>	<i>Paddyfeild Pipit</i>	<i>Painted Stork</i>
		
<i>Pallid Harrier</i>	<i>Pied Bushchat</i>	<i>Pied Kingfisher</i>
		

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<i>Plain Prinia</i>	<i>Purple Sunbird</i>	<i>Red Headed Bunting</i>
		
<i>Red Rumped Swallow</i>	<i>Rufous Tailed Lark</i>	<i>Scaly Breasted Munia</i>
		
<i>Shikra</i>	<i>Small Minivet</i>	<i>Eurasian Spoonbill</i>
		
<i>Spot Billed Duck</i>	<i>Spotted Owlet</i>	<i>Tawny Pipit</i>
		
<i>White Throated Kingfisher</i>	<i>Wood Sandpiper</i>	<i>Yellow Wagtail</i>

APPENDIX R

Socio economic questionnaire

Name of the village					Panchayat				
Tehsil/Block					District				
Respondent					Date:				
Total Population			Total Male			Total Female	HH No.		
Religion	Name		%	Name		%			
Caste/Group	Name		%	Name		%			
	Name		%	Name		%			
Education Level	Illiterate %		Primary %	Secondary %		H.S. %	Graduate %		
Occupation	Agriculture %		Business %	Service %		Labour %	Other %		
Source Drinking water facility	Tube well		Dug well	Stream		Piped water	Hand pumps		
Sanitation facility	Pit latrine %		Sanitary latrine %	Open defecation %		Other %			
Electricity (Available %)					Electricity availability in HH				
Village road type/transport facility									
Schools (distance)	Primary		Middle	H. S.		College	Anganwadi		
Health Facility (distance)	Health sub Centre		Primary	Hospital		Others			
Major diseases									
Major crops cultivated	Name	Period	Yield (q/acr)	Rate/q	Name	Period	Yield (q/acr)	Rate/q	
Irrigation Facility	Ponds		River	Groundwater		Others			

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<i>Average land holding size</i>					
<i>Land rights</i>					
<i>Livestock</i>	<i>Cow</i>	<i>Buffalo</i>	<i>Goat</i>	<i>Pig</i>	<i>Fowl</i>
	<i>Duck</i>	<i>Others</i>			
<i>Grazing areas</i>					
<i>Cooking medium and source</i>	<i>Fuel Wood</i>	<i>Kerosene</i>	<i>Cow Dung cake</i>	<i>Crop Residue</i>	<i>LPG</i>
	<i>Others</i>				
<i>Common property Resources(CPR)</i>	<i>Religious and cultural places</i>	<i>Sacred places</i>	<i>Community hall</i>	<i>community Ponds</i>	<i>Cremation ground</i>
	<i>Streams</i>	<i>canal</i>	<i>river</i>	<i>Others</i>	
<i>Major rituals and festivals</i>	<i>Name</i>	<i>Period</i>	<i>Name</i>	<i>Period</i>	
<i>Fishing area</i>		<i>Name of the</i>			
<i>Forest</i>	<i>Wood</i>	<i>Timber</i>	<i>NTFP</i>	<i>Others</i>	
<i>Any Vulnerable Groups like- landless/homeless- people, Women headed HH, Orphans etc.</i>					
<i>Any program related to child / women health care program</i>					
<i>Any employment generation program</i>					
<i>HH & Cottage industries in the village / area</i>					
<i>Any proposed Scheme / Program related infrastructure / any amenities</i>					
<i>Occurrence any Natural Calamities / industrial / anthropogenic Hazard</i>					

APPENDIX S

World bank chance find procedure

These procedures were developed in accordance with the Lebanese regulations and the World Bank Guidelines - OP 4.11 of August 1999.

These procedures are included as standard provisions in construction contracts to ensure the protection of cultural heritage.

A clause for **'Protection of Archaeological and Historical Sites'** was added to all bidding documents for the works contract which explains the steps to follow whenever new archaeological remains, antiquity or any other object of cultural or archaeological importance are encountered during construction.

'Protection of Archaeological and Historical Sites'

- 1- Excavation in sites of known archaeological interest should be avoided. Where this is unavoidable, prior discussions must be held with the Directorate of Antiquities in order to undertake pre-construction excavation or assign an archaeologist to log discoveries as construction proceeds. Where historical remains, antiquity or any other object of cultural or archaeological importance are unexpectedly discovered during construction in an area not previously known for its archaeological interest, the following procedures should be applied:
 - a) Stop construction activities.
 - b) Delineate the discovered site area.
 - c) Secure the site to prevent any damage or loss of removable objects. In case of removable antiquities or sensitive remains, a night guard should be present until the responsible authority takes over.
 - d) Notify the responsible foreman/archaeologist. Who in turn should notify the responsible authorities, the General Directorate of Antiquities and local authorities (within less than 24 hours).
 - e) Responsible authorities would be in charge of protecting and preserving the site before deciding on the proper procedures to be carried out.
 - f) An evaluation of the finding will be performed by the General Directorate of Antiquities. The significance and importance of the findings will be assessed according to various criteria relevant to cultural heritage including aesthetic, historic, scientific or research, social and economic values.
 - g) Decision on how to handle the finding will be reached based on the above assessment and could include changes in the project layout (in case of finding an irrevocable remain of cultural or archaeological importance), conservation, preservation, restoration or salvage.
 - h) Implementation of the authority decision concerning the management of the finding.
 - i) Construction work could resume only when permission is given from the General Directorate of Antiquities after the decision concerning the safeguard of the heritage is fully executed.

APPENDIX T

MOM of stakeholder consultations

Agenda	Stakeholder meeting for proposed 250 MW Wind Power Project in Kutch district, Gujarat	
Date of Meeting	24/03/2017 and 25/03/2017	
Venue	Panchayat office	
List of participants	Panchayat Members	Arcadis official
	<p>Krishna Ben, Village, Naranpar Pasayati</p> <p>Gobin Teja, • Village Reha Mota</p> <p>Md. Kesar, Ahmad Prah, • Village Chubdak</p> <p>JainendraSingh, • Village Bandara Mota</p> <p>Lakha Bhai, • Village Jadura</p>	Alok Chandra Adhikari
	Issues Discussed	Findings
	<p>Socio-Economic condition in the study area Villages, available infrastructural facilities and their utilization by the local community</p> <p>Agricultural scenario and major Crops cultivated in study area villages (also the Irrigation Facility in study area villages)</p> <p>Health facilities in study area villages</p> <p>Sanitation facilities in study area villages</p> <p>The circle rate of district and study area villages</p> <p>Market rates (Land) in study area villages</p> <p>Average land holding Size in the study area villages</p> <p>NOC from Panchayat</p> <p>Ongoing Govt. schemes and programmes</p>	<ul style="list-style-type: none"> • Area is majorly dependent on agriculture, cattle rearing and allied activities for livelihood. Few agricultural activity which involves cultivation of Wheat, cotton, castor oil, pomegranate and groundnut is common. • Agriculture practiced is both Rain-fed as well as irrigated through pumps. • It was informed on an average the ground water depth is more than 500-1000 ft. in the study area villages. However as per CGWB, the depth to water level in general varies from 5 mbgl to 10mbgl in the area. • Sanitation facilities are inadequate in the villages and some of households practice open defecation. • Health facility is not adequate in the village, which was also confirmed during field visit observations.

	<ul style="list-style-type: none"> • The process is NOC not yet Initiated
Agenda	Stakeholder meeting for proposed 250 MW Wind Power Project in Kutch district, Gujarat
Date of Meeting	22/03/2017
Venue	Champa dala dargah, Sedata
List of participants	Dargah Member
	Md Muzawar, (Priest) ,Alok Chandra Adhikari Menka Thakur
Issues Discussed	Findings
<ul style="list-style-type: none"> • Ancient Dargah “Champa dala” located in Sedata Village 	<ul style="list-style-type: none"> • More than 400 year old Muslim Dargah “Champa dala” is located in the project area. • Main festival during August-September during which more than 2000 pilgrim visit the dargah. • It was observed that the dargah is very popular and hold strong religious importance amongst local communities.

Agenda	Stakeholder meeting for proposed 250 MW Wind Power Project in Kutch district, Gujarat	
Date of Meeting	22/03/2017	
Venue	Health Centre, Sedata	
List of participants	Health Staff	Arcadis official
	Daya Ben, Staff Nurse	Alok Chandra Adhikari
	Pramila Ben, Staff Nurse	
Issues Discussed	Findings	
<ul style="list-style-type: none"> • Health facilities at Sedata PHC • Common diseases • Emergency plan (Ambulance facility) 	<p>Consultation with the Auxiliary Nurse and Midwives (ANMs) was held to develop understanding of the disease profile which exists in the project villages. The discussion also tried to identify the special health concerns in these villages. The key findings of the discussion are as follows:</p> <p>The Sedata village has only one Community Health Centre. Basic facilities like generic medicines, ORS, weighing machine, BP machine, thermometer etc. are available in Health Centre.</p>	

	<p>The Health Assistant maintains sufficient stock of medicines and provides it to the villagers. The common diseases reported from the study area are urinary tract infection, cough, cold and malaria resulting from mosquito bites.</p> <p>In the emergency situation patients travel to Bhuj Town approx. 11 km away from the study area villages.</p> <p>Child birth facilities are also available in CMC.</p> <p>In an emergency situation Ambulance Service is available which take patients to District Hospital approx. 11 km away.</p> <p>RO water facilities are available in community health centre.</p> <p>Covered more than 25 villages.</p>
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Agenda	Stakeholder meeting for proposed 250 MW Wind Power Project in Kutch district, Gujarat	
Date of Meeting	25/03/2017	
Venue	Anganwadi, Naranpur village	
List of participants	ICDS Worker	Arcadis official
	Mrs. Mohan ba jee Soda Mrs. Yashwant ba Permar	Alok Chandra Adhikari
	Issues Discussed	Findings
	<ul style="list-style-type: none"> • Infrastructure of ICDS centre • Facility available of ICDS centre 	<p>The enrolment rate in the AWC is upto 25 children.</p> <p>Children, in the Anganwadi centres normally sit on chair.</p> <p>AWCs do not have exclusive arrangements for drinking water and playground at their centre.</p> <p>Anganwadi has inadequate space to accommodate higher number of children.</p>
Agenda	Stakeholder meeting for proposed 250 MW Wind Power Project in Kutch district, Gujarat	
Date of Meeting	24/03/2017	
Venue	Govt. Primary School, Reha Nana Village	
List of participants	School Teacher	Arcadis official
	R.J Vaghielu, Headmaster	Alok Chandra Adhikari

	<p>D.B Rathod, Teacher Smt. B.L Soni. Teacher G.J Parmar, Teacher Smt. S.M Chaudhury, Teacher Smt. U.N Mistri</p>	
Issues Discussed		Findings
<ul style="list-style-type: none"> • The basic infrastructure facilities of School • Present education status of School • Present facility available of School 		<p>It was observed that the basic infrastructure facilities such as benches, electricity, RO drinking water facilities, fan and school building etc. are adequate and in good condition in the school.</p> <p>Adequate sanitation facilities (separate for male and female) was observed.</p> <p>Total 233 (Male: 112 and Female: 121) student come from the nearby villages.</p> <p>Drinking water supply from panchayat.</p>

Agenda	Stakeholder meeting for proposed 250 MW Wind Power Project in Kutch district, Gujarat	
Date of Meeting	22/03/2017	
Venue	Community Consultation, Godpar Village	
List of participants	Community	Arcadis official
	<p>Kasan Ramji Mauji Veghi Walgi mavji Patel Lal jee Vhimji Dhanji Arjan</p>	Alok Chandra Adhikari
Issues Discussed		Findings
<ul style="list-style-type: none"> • Socio-Economic condition in the study area Villages, available infrastructural facilities and their utilization by the local community • Agricultural scenario and major Crops cultivated in study area villages (also the Irrigation Facility in study area villages) • Health facilities in study area villages • Sanitation facilities in study area villages • Market rates (Land) in study area villages 		<p>Bore/dug well are the source for irrigation in this region.</p> <p>Piped water supply system through reservoirs exists in all panchayat.</p> <p>In some of the villages drinking water is supplied to individual households against charges Rs. 60-100 per month/ household.</p>

<ul style="list-style-type: none">• Average land holding Size in the study area villages• Ongoing Govt. schemes and programmes	<p>Sanitation facilities are inadequate in the villages and some of the locals resort to open defecation.</p> <p>Health facility is not adequate in the village. Nearest Health Care facilities are also far away.</p> <p>Alternate livelihood in this area is trading livestock.</p> <p>Rain-fed as well as irrigational agriculture pattern is practiced in proposed project area.</p> <p>There is no big industry nearby in the proposed project area.</p> <p>Lack of Higher educational institutions in the study villages, hence girls do not continue their education.</p> <p>Villages have a good number of cattle's but veterinary hospital and doctor is not within the reach. Villagers of Godpad village have contributed to construct a community RO Water Filter with a 1000 lt. capacity above ground storage tank.</p> <p>At present the RO water filter is maintained by the Panchayat. Rs. 100/ household / year is charged for maintenance of the RO water filter.</p>
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APPENDIX U

CSR Policy



CORPORATE SOCIAL RESPONSIBILITY (CSR) POLICY

We, at Ostro, believe that communities in which we operate, are one of the important stakeholders in our business. Through CSR activities, we intend to contribute to their socio-economic development and enhance their quality of life. This policy demonstrates Ostro's commitment to undertake CSR activities. Ostro will participate in CSR activities, directly or indirectly, in the following manner-

- Consult proactively with communities to identify issues and grievances and design CSR activities accordingly.
- Undertake projects with due care to activities and sensitivities of local people.
- Strategize and execute CSR activities with a clear focus on capacity building in areas of basic education, health care and drinking water.
- Monitor, review and evaluate CSR programs on a periodic basis.

This policy is applicable to all project related activities of Ostro. Ostro is committed to deploy appropriate resources to fulfil its CSR obligation.

A handwritten signature in blue ink, appearing to read "Ranjit Gupta".

Ranjit Gupta
Chief Executive Officer

Date: May 2015

APPENDIX V

ADB checklist for physical environment

Physical Environment Risk Zones	Natural Hazards and Climate Change Impacts	Score
Arid/Semi-Arid & desert environments	Low erratic rainfall of up to 500 mm rainfall per annum with periodic droughts and high rainfall variability. Low vegetative cover. Resilient ecosystems & complex pastoral and systems, but medium certainty that 10–20% of drylands degraded; 10-30% projected decrease in water availability in next 40 years; projected increase in drought duration and severity under climate change. Increased mobilization of sand dunes and other soils as vegetation cover declines; likely overall decrease in agricultural productivity, with rain-fed agriculture yield reduced by 30% or more by 2020. Earthquakes and other geophysical hazards may also occur in these environments.	1 or 2
Humid and sub-humid plains, foothills and hill country	More than 500 mm precipitation/yr. Resilient ecosystems & complex human pastoral and cropping systems. 10-30% projected decrease in water availability in next 40 years; projected increase in droughts, heatwaves and floods; increased erosion of loess-mantled landscapes by wind and water; increased gully erosion; landslides likely on steeper slopes. Likely overall decrease in agricultural productivity & compromised food production from variability, with rain-fed agriculture yield reduced by 30% or more by 2020. Increased incidence of forest and agriculture-based insect infestations. Earthquakes and other geophysical hazards may also occur in these environments.	1
River valleys/deltas and estuaries and other low-lying coastal areas	River basins, deltas and estuaries in low-lying areas are vulnerable to riverine floods, storm surges associated with tropical cyclones/typhoons and sea level rise; natural (and human-induced) subsidence resulting from sediment compaction and ground water extraction; liquefaction of soft sediments as result of earthquake ground shaking. Tsunami possible/likely on some coasts. Lowland agri-business and subsistence farming in these regions at significant risk.	2
Small islands	Small islands generally have land areas of less than 10,000km ² in area, though Papua New Guinea and Timor with much larger land areas are commonly included in lists of small island developing states. Low-lying islands are especially vulnerable to storm surge, tsunami and sea-level rise and, frequently, coastal erosion, with coral reefs threatened by ocean warming in some areas. Sea level rise is likely to threaten the limited ground water resources. High islands often experience high rainfall intensities, frequent landslides and tectonic environments in which landslides and earthquakes are not uncommon with (occasional) volcanic eruptions. Small islands may have low adaptive capacity and high adaptation costs relative to GDP.	3

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Physical Environment Risk Zones	Natural Hazards and Climate Change Impacts	Score
Mountain ecosystems	Accelerated glacial melting, rockfalls/landslides and glacial lake outburst floods, leading to increased debris flows, river bank erosion and floods and more extensive outwash plains and, possibly, more frequent wind erosion in intermontane valleys. Enhanced snow melt and fluctuating stream flows may produce seasonal floods and droughts. Melting of permafrost in some environments. Faunal and floral species migration. Earthquakes, landslides and other geophysical hazards may also occur in these environments.	3
Volcanic environments	Recently active volcanoes (erupted in last 10,000 years – see www.volcano.si.edu). Often fertile soils with intensive agriculture and landslides on steep slopes. Subject to earthquakes and volcanic eruptions including pyroclastic flows and mudflows/lahars and/or gas emissions and occasionally widespread ashfall.	2

APPENDIX W

Risk by Sector

PROJECT SECTORS	RISKS (Selected examples only. If the project is likely to be affected by any of the risks listed below, use the score suggested. If it will not be affected, a lower score may be used at your discretion.)	Estimated. RISK LEVEL
1. Agriculture & Natural Resources	Impacts on crop production or yield resulting from drought, hail, floods, tropical cyclone/depression winds and rains, storms, heatwaves, wildfires, insect infestations, widespread volcanic ash fall.	Very High (3)
	Possible changes in diversity resulting from changing precipitation and/or temperature regimes Impacts on water availability for agricultural sector from El Niño, Indian Ocean Dipole and similar hemispheric weather influences Impacts from glacial melt flooding, or estuarine or delta-based flooding from storm surges or tsunami	
	Impacts from salinization of soils by drought, storm surge or tsunami Impacts of changes to ocean currents, and on physical & chemical regime of oceans	
	Impacts on land-sea interactions affecting sensitive habitats of marine species through changing water temperatures, increased incidents of marine pollution, greater incidents of coastal erosion, or incidents of algae blooms from warming of ocean areas Impacts on fisheries as a result of changes in migration patterns, fish size and availability	
2. Water Supply, and other municipal infrastructure and services	Decrease in freshwater availability or adverse effects on quality due to drought or heatwaves, algal blooms, salinization by storm surge or tsunami, ground water rise or sea level rise. Contamination of or interruption to water supply (or electricity) resulting from flood, storm surge, landslide, tsunami or earthquake, Adverse effects on treatment plants from volcanic ash fall. Accelerated glacier melt likely to cause increase in the number and severity of glacial melt-related floods, slope and river bank destabilisation and a decrease in river flows as glaciers recede	

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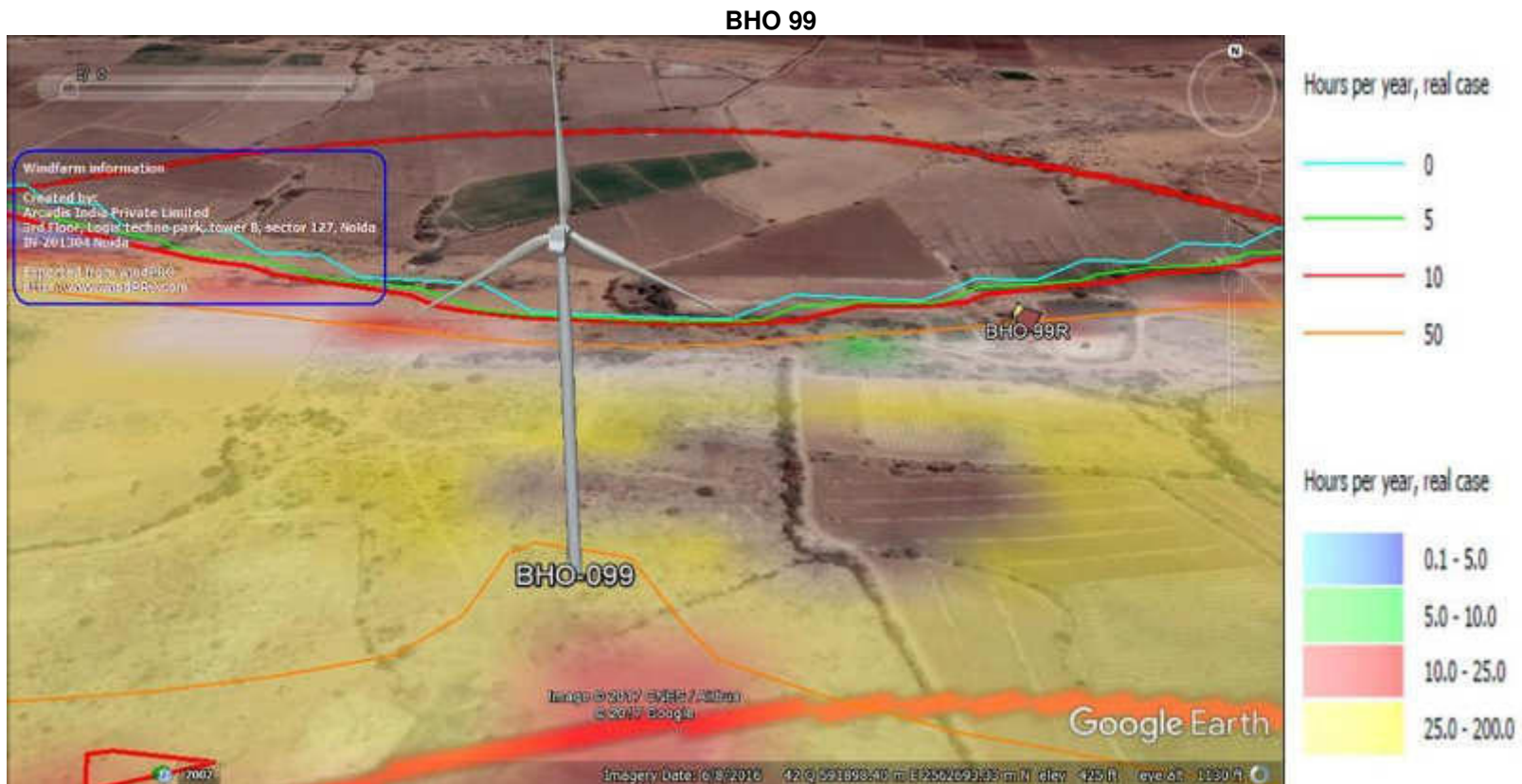
PROJECT SECTORS	RISKS (Selected examples only. If the project is likely to be affected by any of the risks listed below, use the score suggested. If it will not be affected, a lower score may be used at your discretion.)	Estimated. RISK LEVEL
3. Education	School infrastructure is used for emergency shelter in most countries and should conform to the highest building codes and be sited as safely as possible with respect to all risks.	
4. Health and Social Protection	Health infrastructure should conform to the highest possible building codes and be sited as safely as possible with respect to all risks. Morbidity/mortality (e.g., fractures or severe trauma, burns, malnutrition, diarrhoeal, cardio-respiratory, or infectious diseases) from earthquakes, tsunamis, heatwaves, floods, storms, cyclones, fires and droughts. Changes in the distribution, frequency & burden of some vector-borne and water-borne diseases	
5. Transport & Communications	Damage to transport infrastructure due to earthquakes, volcanic eruption, landslides, sea-level rise, storm surge, or tsunami Port operations affected by sea-level rise, storms, storm surge, tsunami, wave action, strong winds, or floods, Overhead lines exposed to wind, ground shaking and liquefaction particularly in coastal areas, high country and on soft soils.	
6. Energy	Rainfall variability, floods, droughts, landslides, earthquakes, or glacial meltwater floods impacting surface water flow and/or downstream water recharge Risk to oil and gas sector infrastructure in coastal locations from tropical cyclone winds and storm surge, floods, tsunamis, earthquakes, or sea level rise Overhead transmission and distribution lines exposed to wind, ground shaking and liquefaction particularly in coastal areas, high country and on soft soils. Pipelines subject to ground shaking, liquefaction, subsidence, erosion.	High (2)
7. Multi-sector	Subject to multiple risks similar to examples given throughout this table	
8. Housing Finance & Micro-finance	Housing infrastructure and small businesses are vulnerable to all risks listed in Table 1 or elsewhere in this Appendix (may require higher Risk Level for specific projects). All property can be affected by a range of the risks listed in this table	Medium (1)
9. Industry & Trade	Diverse sector investment subject to risks and market interruptions (e.g. procurement delays, merchandise transfer disruption)	
10. Technical, vocational training & skills development	Limited direct exposure to the types of risks discussed here	Negligible Risk (0)

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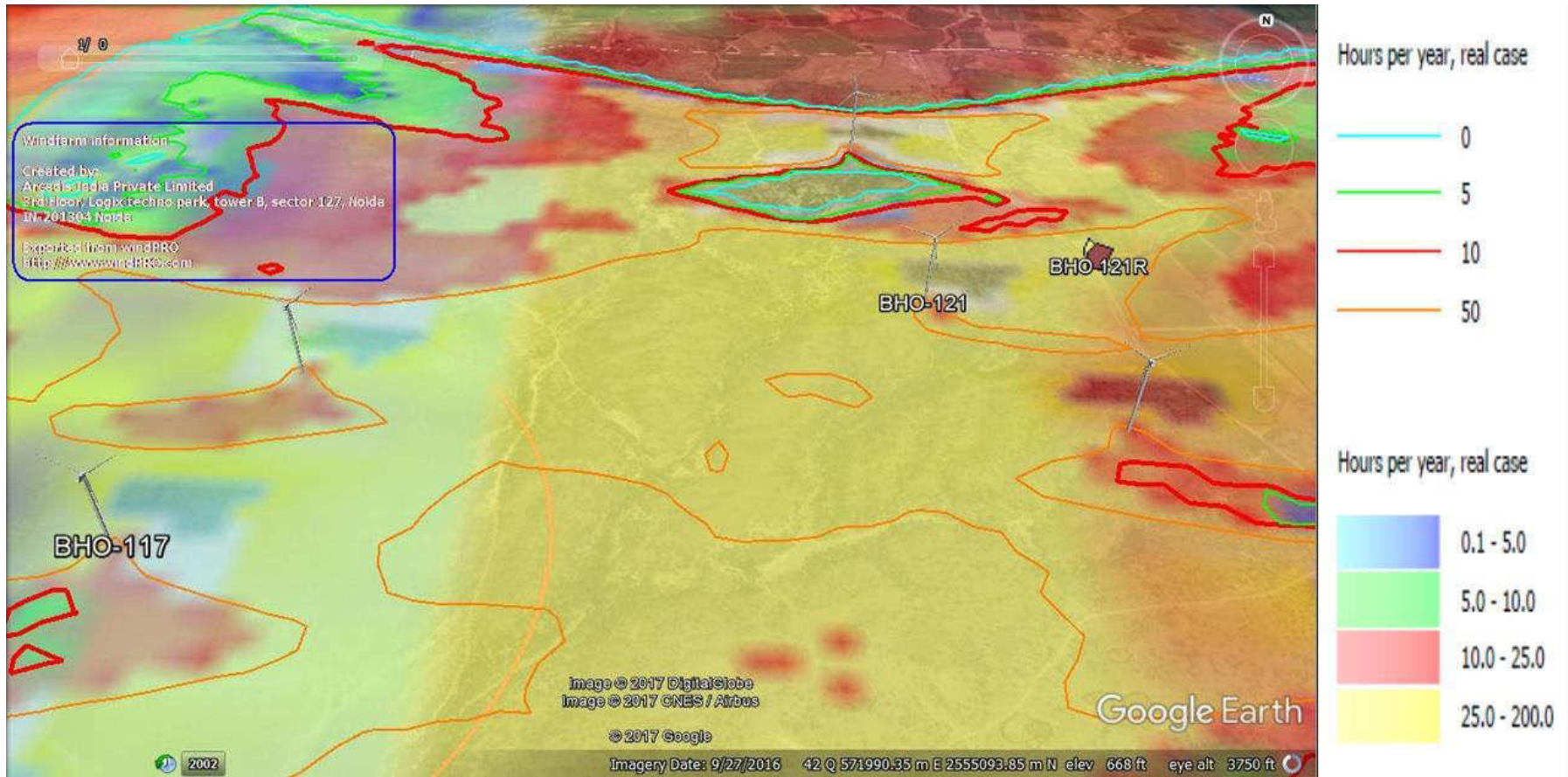
PROJECT SECTORS	RISKS (Selected examples only. If the project is likely to be affected by any of the risks listed below, use the score suggested. If it will not be affected, a lower score may be used at your discretion.)	Estimated RISK LEVEL
1. Finance		
2. Public Sector Management		
Source: adapted from <i>ADB Portfolio at Risk</i> , (updated to 2009 Sector classification)		

APPENDIX X

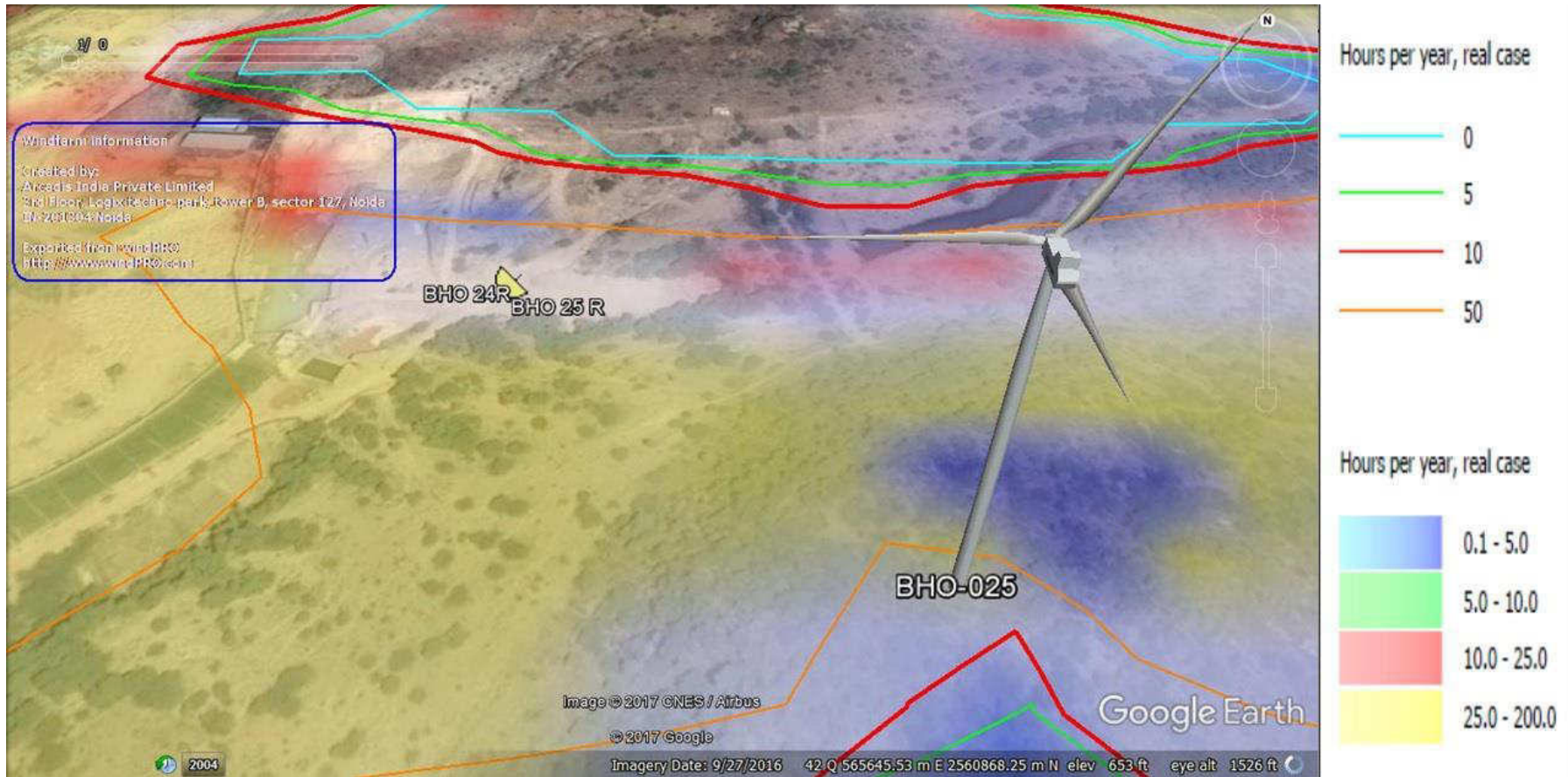
Shadow flicker map



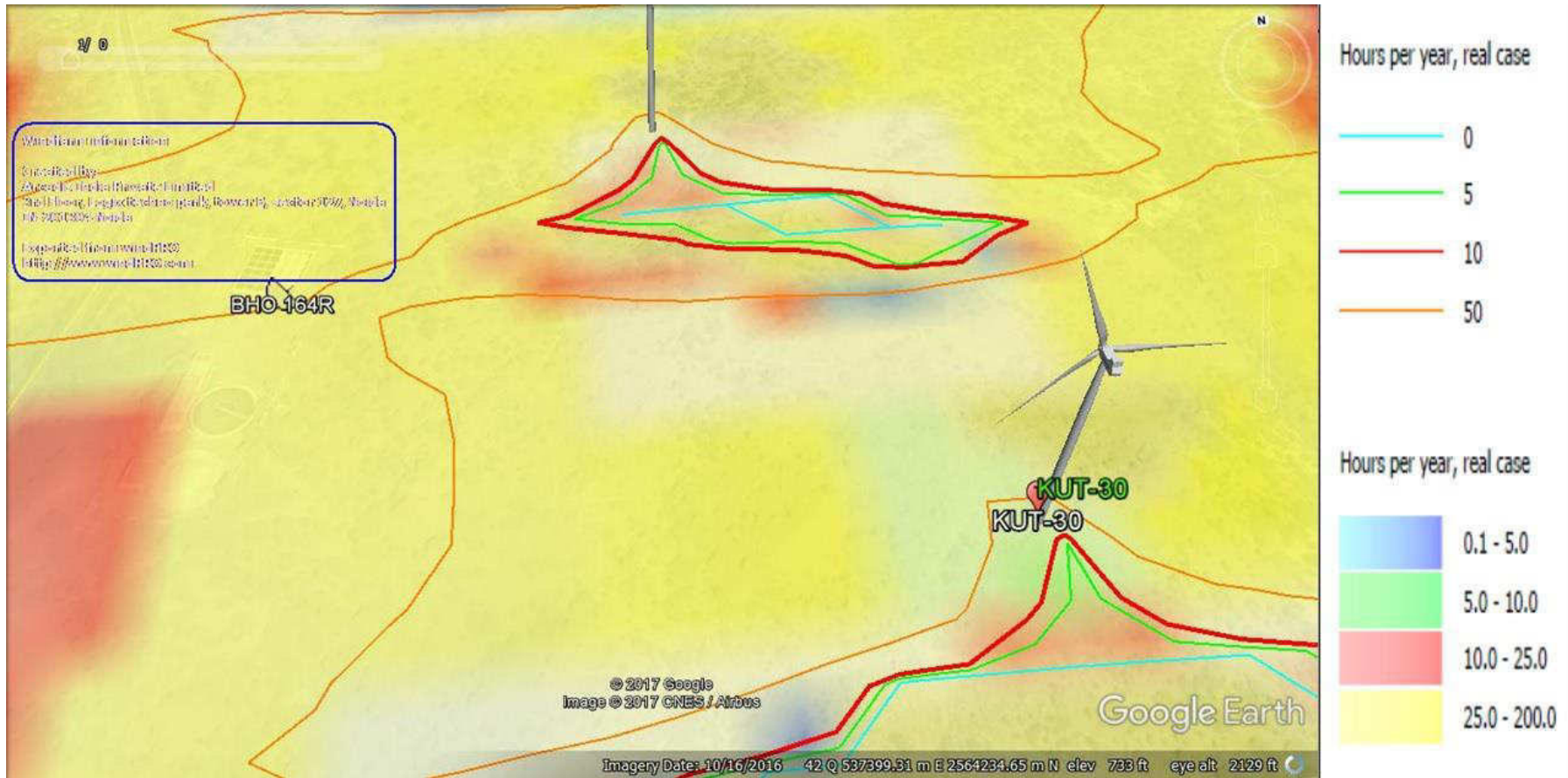
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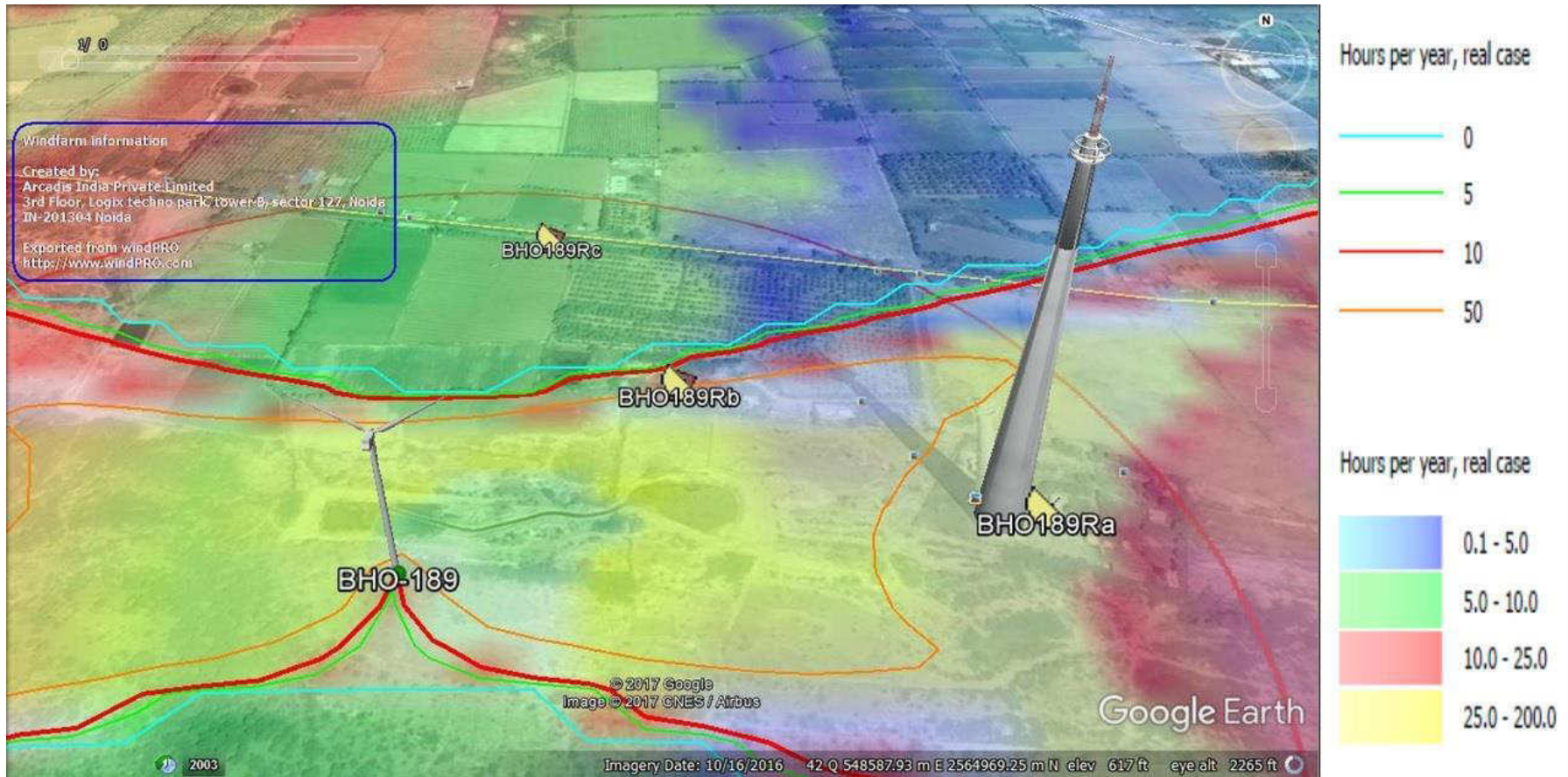
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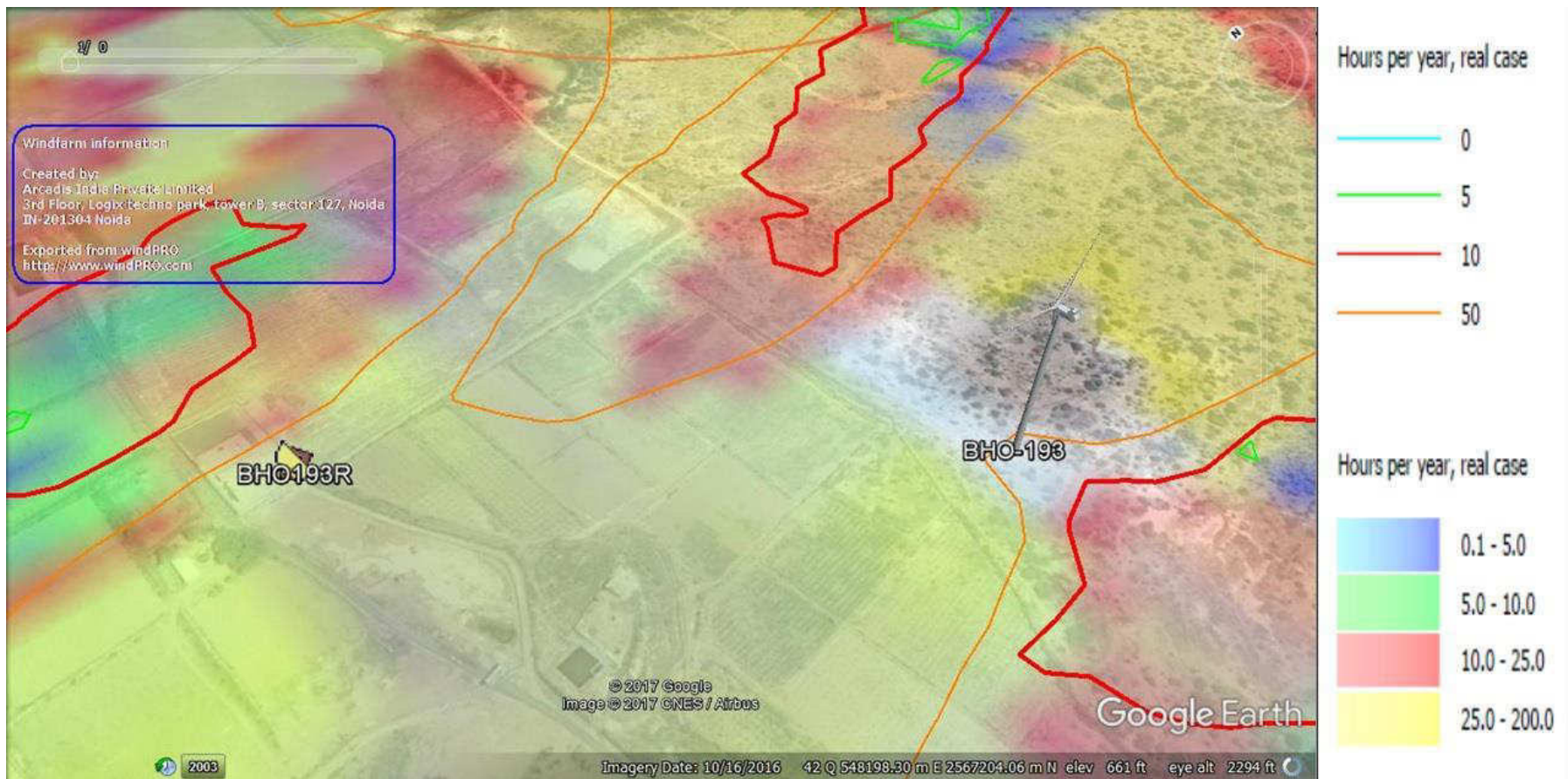
KUT 30

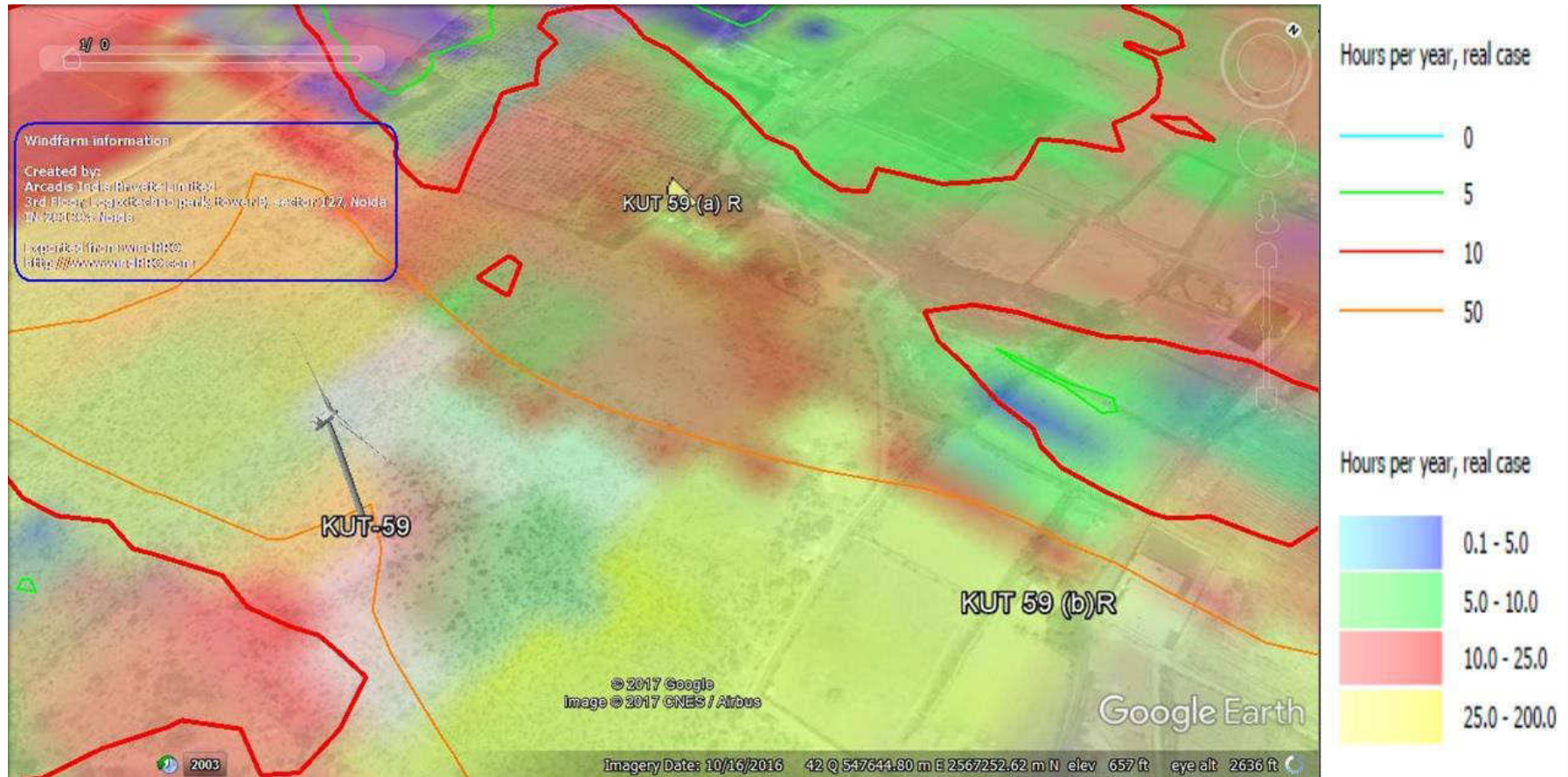


BHO 189



BHO-193





APPENDIX Y

Health and Safety plan

Labour camp assessment checklist – Construction phase

Project		Duration of work of Contractor	
Location		Total Number of Labourers residing in the Labour Camp	
Date of inspection		Type of Accommodation and Number of dwelling units	
Name of Contractor/s		Due Date of Inspection	
Nature of Work			

Checklist Questions

SN.	Standards for Workers Accommodation	Satisfaction Levels		Remarks/ Gaps Observed		Expected Date of Completion of identified gaps
		High	Medium	Low		
A	Labour Camp – General Requirements					
1.	Is the location of the labour camp designed to avoid flooding or other natural hazards?					
2.	Is the labour camp location at significant					

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	distance from the nearby residential locality?					
3.	Is the project site adequately drained?					
4.	Is the labour camp designed as per approved plan ?					
5.	Is the building material used for the construction is safe and non-hazardous ?					
6.	Does labour camp provide sufficient thermal projection					
7.	Does labour camps are having proper access roads?					
B	Sanitation Facilities					
8.	Does the labour camp have adequate sanitary and toilet facilities? If yes, are the number of toilets sufficient to suffice the number of labours.					
9.	Is the toilet facility provided with adequate supply of water is					

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	available?					
10.	Is the overall hygiene and cleanliness satisfactory ?					
C.	Water, Wastewater and Waste Requirements					
11.	Are potable drinking water facilities available and provided to the labour camps? If yes, is it adequate for meeting domestic needs like bathing, washing and sanitation purpose?					
12.	Is the drinking water storage covered to prevent water stored therein from becoming polluted or contaminated?					
13.	Is adequate storage capacity available to store water for domestic purposes (storage of 48 hours reserve supply is adequate)?					
14.	Are their separate arrangements for sanitation and bathing facilities for men and					

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	women (in case of engagement of women workforce)?					
15.	Are the sanitation facilities maintained in good condition?					
16.	Does the site have a proper drainage system?					
17.	Are all streams of wastewater generated from the camps leading to treatment and disposal facility (septic tanks and soak pits etc.)?					
18.	Do the labour camps have adequate number of dustbins for waste collection and disposal?					
19.	Are wastewater, sewage, food and any other waste material adequately discharged and disposed in compliance with local standards and without causing any significant impacts on camp residents, the environment or					

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	surrounding communities?					
D.	Living Conditions					
20.	Do the worker camps have adequate spacing inside to accommodate allotted number of individuals?					
21.	Are the labor camps properly illuminated?					
22.	Is labour camp designed considering safety from rain ?					
23.	Are the labour camps equipped to provide proper thermal comfort during winter seasons?					
24.	Are the labour camps provided with proper facility to keep valuables such as cloak room etc .?					
25.	Are the labor camps properly ventilated ?					
26.	Have separate area for cooking being constructed/allocated for workers and proper hygienic conditions being maintained?					

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27.	Have the workers been provided or allocated with proper sleeping arrangement like cots, mattresses, blankets etc.?					
E.	Health and Safety					
28.	Is the cooking facility separate from the living quarters to avoid any fire hazards and is the LPG cylinders (if used) stored in well-ventilated area?					
29.	Is the fire extinguisher been provided at the camps (If necessary)?					
30.	Are there adequate first aid facilities present at the camp and is it readily accessible at all times?					
31.	Are emergency contact numbers displayed prominently at the labour camp. The emergency contacts should include at least one number of principle employer?					

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32.	Is a housekeeping register being maintained for the camps?					
33.	Are the workers sensitized on communicable diseases?					
34.	General House Keeping and staff?					
35.	Vector Born/ communicable Disease control?					
36.	Are the workers provided with adequate personal protective equipments?					
F	Community Related					
37.	Is the nearby community anyway getting affected by the labour camps and its activities?					
38.	What are the types of such activities?					
39.	Are there any sources through which there is a possibility of a disease spreading to the nearby					

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	community because of the unhygienic conditions at the labour camps? Has there been any? If yes, please specify and provide reasons.					
40.	Is the community getting affected due to the operation of the construction machinery?					

APPENDIX Z

Incident and Accident Reporting

INCIDENT REPORTING STANDARD

The purpose of this Standard is to guide on:

- How the incidents should be categorised as Catastrophic (C), Major (M), Serious (S), and Light (L).
 - At what level and within what timeframe different categories of incidents has to be reported at Ostro Head office.
 - How to record information in incident report format in a consistent and comparable manner.
- This standard is applicable for Loss time incidents, non-loss time incident
 - **Lost-time injuries (LTI)** - those occurrences that resulted in a fatality, permanent disability or time lost from work of one day or more.
 - **No lost-time injuries** - those occurrences which were not lost-time injuries and for which first aid and/or medical treatment was administered.
 - First communication of any incident to concerned people at Ostro Head office should happen at the earliest through a phone call, sms or through an email. Concerned people at Ostro HO includes, CEO, COO, Project Head, and ESG.
 - After communicating the incident occurrence, site head has to gather more details and make Incident report in Ostro's Incident Report Format within 24 hours from the date of incident.
 - Before making the incident report, the site head must meet the injured person/s (if any) due to the incident and get details of their condition and medical treatment.
 - Incident report must have at least 3 photographs related to incident.

INCIDENT CATEGORIES AND REPORTING

	Catastrophic (C)	Major (M)	Serious (S)	Light (L)
Loss	1. Fatality 2. Loss of Laptop 3. Asset Damage > 1 crore	1. Loss time Incident > 1 month 2. Permanent disability to a person 3. Asset Damage > 50 lakhs	1. Loss time Incident > 1 day 2. Asset Damage > 10 lakhs	1. LTI requiring worker to stop work and be given first aid but can return to work next day. 2. Asset Damage < 10 lakhs
Reporting by Site Head to	CEO, COO, ESG, Head of Projects, Head of O&M, Admin Head	COO, ESG, Head of Projects, Head of O&M, Admin Head	Head of O&M, Head of Projects, ESG, Admin	ESG, Head of Projects, Head of O&M
Time limit for first intimation	At the earliest	Within 1 hour	Within 3 hours	Within 4 hours
Time for incident investigation and submitting the Incident Report	Within 15 days from the date of incident	Within 7 days from the date of incident	Within 7 days from the date of incident	Within 3 days from the date of incident

Person/s Responsible for Investigation & Closure	CEO	COO	Head of O&M Head of Projects	Site Head
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Immediate Actions to be taken in case of all Categories of Incident (C, M, S, L)

- In case of fatality, first inform all concerned in Ostro HO. Admin Head is responsible to inform the family of affected person.
- In case of road accidents and other accidents at site, give first aid to the injured person/s, go to nearest hospital if required and take medication as recommended by doctor. Inform all concerned in Ostro HO.
- In case of fire/explosion, call nearest fire station.
- In case of civil disturbance and serious situations call local police and inform Ostro Admin Head and other concerned in HO.

Notes for making Incident Report

- The Incident report should have a structured narrative with details mentioned below:
- When and Where did the incident occur, date, time and place of incident occurrence.
- What was the worker(s)/employee doing at the time just before the incident (for example, driving, walking, standing, lifting etc)
- What happened unexpectedly (for example, brakes failed, animal suddenly came in front of vehicle, slipped on wet floor, scaffolding collapsed, etc)?
- How exactly the worker got injured, Nature of injury, Bodily location of injury.

INCIDENT REPORT FORMAT

INCIDENT REPORT FORMAT

Highlight the category of incident in yellow

Project:	Catastrophic	Major	Serious	Light	LTI: (Yes/No)
Incident No:	1. Fatality 2. Loss of Laptop 3. Asset Damage > 1 crore	1. Loss time Incident > 1 month 2. Permanent disability to a person 3. Asset Damage > 50 lakhs	1. Loss time Incident > 1 day 2. Asset Damage > 10 lakhs	1. LTI requiring worker to stop work and be given first aid but can return to work next day. 2. Asset Damage < 10 lakhs	Loss Time: (in days)
DATE:					Loss: (Person/Asset)

Describe the Incident/Accident (what happened, how and events leading to incident):

Asset Damage:

What immediate action was taken?

Name of Injured person		What was the root cause of the Incident/Accident?
Age		
Address:		
Contact Number		
Working Company/ Contractor		What preventive actions are recommended to prevent reoccurrence of the Incident/Accident?
Designation		
Has the injured person resumed work?		

Put incident related photographs on next page.

Name of Person Reporting Incident

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