

# Environmental and Social Due Diligence Report

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Project Number: 47083-004  
December 2019

## INDIA: Accelerating Infrastructure Investment Facility in India – Tranche 3

Mytrah Vayu (Krishna) Private Limited (Part 3 of 10)

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	Management of Environmental and Social Risks and Impacts				
1.1	MVKPL should establish and maintain an Environmental and Social Management System (ESMS) appropriate to the nature and scale of the project and commensurate with the level of social and environmental risks and impacts.	MVKPL should establish an ESMS and implement corrective action plan based on safeguards compliance audit.	Based on Categorization of the project an ESDD during operational phase is being conducted. ESDD will be reviewed to ensure its adequacy in-line with standard requirements. Based on the ESDD outcome, ESMS will be formed to mitigate all adverse impacts.	MVKPL is committed to implement an effective ESMS based on dynamic process and through involvement of its vendor, client, employee, local communities and stakeholders.	Periodic monitoring and evaluation shall be carried out.
	Environment and Social Impact Assessment <ul style="list-style-type: none"> <li>• Management program</li> <li>• Organizational capacity</li> <li>• Training</li> <li>• Community engagement</li> <li>• Monitoring</li> <li>• Reporting</li> </ul>		Detailed ESDD is carried out to assess the potential impact and risk associated with this particular project and their processes.	ESIA study was not conducted at the inception stage of the project. At this stage, Detailed ESDD is conducted which also includes EMP.	Aspects like management programme in different criteria, training, and community engagement during the project operation, monitoring and periodic reporting of compliance should

					be carried out.
1.2	MVKPL should establish an overarching policy defining the environmental and social objectives and principles that guide the project to achieve sound environmental and social performance. MVKPL should communicate the policy to all levels of its organization.		MVKPL as part of the ESMS has established an EHS policy. As part of the ESDD, evaluation of effectiveness and communication of the policy has been studied.	The designed policy of EHS has covered all the aspects which lead towards sound and environmental performance.	Onsite training for better implementation of EHS&S. Display of same is being carried out on project site and each desk of employee.
1.3	MVKPL should establish and maintain a process for identifying the environmental and social risks and impacts of the project. The type, scale, and location of the project guide the scope and level of effort devoted to the risks and impacts identification process.	A screening process should be followed for proposed project, as early as possible to determine the appropriate extent and type of environmental assessment so that appropriate study is undertaken.	MEIL already identified risk using the tool HIRA and Aspect/ impact study using the ISO integrated system.	The proposed project falls under Category- B. ESDD study has been conducted for the same.	
1.4	The project should comply with the applicable laws and regulations of the jurisdictions in which it is being undertaken, including those laws implementing host country obligations under international law.	The project should comply with host country's social and environmental laws and regulations, including those laws implementing host country obligations under international law.		All the applicable law and regulations is being considered and should be followed for entire project cycle.	
1.5	Management programme with defined desired outcomes as	Prepare an Environmental Management Plan, Resettlement		The proposed project does not attract need of any R&R	

	measurable events to mitigate and implement improvement measures and actions that address identified social and environmental risks and impacts.	Plan, and / or Indigenous Peoples Plan to address identified environmental and social risks and impacts.		and other environmental and social risk. However, in the ESDD report the management plan is being deliberated in detail.	
1.6	MVKPL should establish, maintain and strengthen as necessary, an organizational structure that defines roles, responsibilities, and authority to implement the ESMS.	This requirement is subsumed within the ESMS or EMP		Mytrah as a whole has a well-established team of environmental and social expert.	Shall be included under corporate communication, policy implementation team and other environment and sustainable related report.
1.7	Trainings to employees and contractors with direct responsibilities for activities related to the project's social and environmental performance.	This requirement is subsumed within the ESMS or EMP		Need based training is being organized for MVKPL employee, which should be an integral part of HR policy.	
1.8	MVKPL should establish and maintain an emergency preparedness and response system so that the MVKPL shall be prepared to respond to accidental and emergency situations associated with the project in a manner appropriate to prevent and mitigate any harm to people	Please refer to Occupational and Community Health and Safety		MVKPL should follow their onsite emergency plan prepared under the EHS guidelines.	Annual monitoring and evaluation report should be submitted.

	and / or the environment.				
1.9	MVKPL should establish procedures to monitor and measure the effectiveness of the management program, as well as compliance with any related legal and / or contractual obligations and regulatory requirements participate in monitoring activities	Implement the EMP and Monitor its effectiveness, documentation of monitoring results, including the development and implementation of corrective actions, and disclose monitoring reports.		Compliance submission of the project to ensure the implementation of proper management, documentation, and implementation of corrective actions required.	
1.10	MVKPL should engage Stake holder engagements for building strong, constructive, and responsive relationships that are essential for the successful management of a project's environmental and social impacts.	Carry out meaningful consultation with affected people and facilitate their informed participation. Ensure women's participation in consultation. Involve stakeholders, including affected people and concerned nongovernment organizations, early in the project preparation process and ensure that their views and concerns are made known to and understood by decision makers and taken into account. Continue consultations with stakeholders throughout project implementation as necessary to address issues related to environmental assessment. Establish a grievance redressal mechanism to receive and facilitate resolution of the affected people's concerns and grievances regarding		Focus Group Discussion, Community Consultation, Household survey, NGOs & other stakeholder meeting has already been carried out.  A fruitful result of consultation was observed as the outcomes of primary survey.	

		the project's environmental performance.			
1.11	MVKPL should implement and maintain procedure for external communications that includes methods to: (i) receive and register external communications from the public; (ii) screen and assess the issues raised and determine how to address them. In addition, MVKPL should encourage making publicly available periodic reports on their environmental and social sustainability.	Disclose a draft Environmental assessment (including the EMP) in a timely manner, before project appraisal, in an accessible place and in a form and language(s) understandable to affected people and other stakeholders. Disclose the final environmental assessment, and its updates if any, to affected people and other stakeholders.		Primary survey in different mode was carried out and the same is deliberated in ESDD chapter.	
<b>2</b>	<b>PS 2: Labour and Working Conditions</b>	<b>ADB Environmental Safeguards</b>			
2.1	The MVKPL should adopt and implement human resource policies appropriate to its size and workforce that sets out an approach to managing workers consistent with the requirements of this performance standard and the national law.			The hiring of human resource is as per the HR policies and their guidelines.	
2.2	MVKPL should provide workers with documented information that is clear and understandable, regarding their rights under national labour and employment			During the offer letter / contract agreement should specifies all the applicable rules and regulation.	

	law and any applicable agreements.				
2.3	MVKPL will provide reasonable working conditions and terms of employment.	Right to Organize and Collective Bargaining Convention, 1949 (No.98). This Convention provides or protection against anti-union discrimination, for protection of workers and employers organizations against acts of interference by each other, and for measures to promote and encourage collective bargaining.		The working condition and terms of employment are regulated by Admin department and HR respectively.	
2.4	MVKPL should identify Migrant workers and ensure that they are engaged on substantially equivalent terms and conditions to non-migrant workers carrying out similar work.	In order to strengthen non-Discrimination in a project, ADB requires that migrant workers should be protected on an equal basis by national legislates on and that they have the same human rights as national workers.		MVKPL should provide equal opportunity and facilities to their employee.	
2.5	Where accommodation services are provided to workers covered by the scope of this performance standard, MVKPL will put in place and implement policies on the quality and management of the accommodation and provision of the basic services. This also includes the applicable requirements of the IFC guidelines on worker accommodation.			Daily wage laborers are hired from local villages, if required, through a Turnkey contractor.	



2.6	MVKPL should not make employment decisions on the basis of personal characteristics unrelated to inherent job requirements. MVKPL should base the employment relationship on the principle of equal opportunity and fair treatment, and shall not discriminate	<p>The key anti-discrimination suggestions for ethnic discrimination identified by ADB as part of their Core Labour Standards (CLS) hand book applicable are:</p> <p>Complaints committee for resolution of complaints of discrimination, harassment, or other working condition concerns.</p> <p>Challenging stereotypes of minorities to ensure equal opportunity and treatment</p> <p>Occupational health and safety for all including minorities, Health insurance and social security for all</p> <p>Encouraging minority groups/organizations to form and join groups / organizations representing their interests.</p> <p>Protecting migrant workers especially if they are members of ethnic minorities.</p>		<p>Mytrah always provide the equal opportunity of employment to job seekers. Based on requirement and relevant educational qualification with experience, the opportunity of different job is get close. Mytrah group's HR policy is being followed by MVKPL.</p> <p>The other facilities are being provided as per the HR policy.</p>	
2.7	Grievance mechanism for workers where they can raise reasonable workplace concerns	There should be a mechanism within projects for the resolution of complaints of discrimination, harassment, or other working condition concerns.		MVKPL has prepared a framework to address all the issues related to grievance mechanism.	Should be included under HR policy if not there.
2.8	MVKPL will not employ children in any manner	The ILO Minimum Age Convention, 1973 (No. 138) and its accompanying Recommendation (No. 146) set the goal of elimination of child labour,		MVKPL should comply these obligations	

		and the basic minimum age for employment or work (in developing countries at 14 years of age or the end of compulsory schooling, whichever is higher; and 15 or the end of compulsory schooling for developed countries). The Convention sets a minimum age of 2 years younger for “light work” i.e., 12 and 13 years, respectively; and a higher minimum age for dangerous or hazardous work (basically 18 years of age, but 16 in certain circumstances).			
2.9	MVKPL will not employ forced labour, which consists of any work or service not voluntarily performed that is exacted from an individual under threat of force or penalty.	Elimination of all forms of forced or compulsory labour. According the Forced Labour Convention, 1930 (No.29), the ILO defines forced labour for the purposes of international law as “all work or service which is exacted from any person under the menace of any penalty and for which the said person has not offered himself voluntarily”. The other fundamental ILO instrument, the Abolition of Forced Labour Convention, 1957 (No. 105), specifies that forced labour can never be used for the purpose of economic development or as a means of political education, discrimination,		MVKPL should comply these obligations	

		labour discipline, or punishment for having participated in strikes.			
2.10	MVKPL will provide a safe and healthy work environment, taking into account inherent risks in its particular sector and specific classes of hazards in MVKPL's work areas, including physical, chemical, biological, and radiological hazards, and specific threats to women.	<ul style="list-style-type: none"> <li>• Special care needs to be taken in projects to ensure the health and safety of all workers, including members of minorities.</li> <li>• In many cases, minority workers are unable to read safety instructions or to understand safety and health training given to other workers.</li> <li>• Provide workers with safe and healthy working conditions including easily comprehensible safety</li> <li>• Information on-site training, provisions of Personal Protective Equipment etc.</li> </ul>		The aspects involved in proposed project do not contain any hazard things which can harm the occupational health.	
2.11	With respect to contracted workers MVKPL will take commercially reasonable efforts to ascertain that the third parties who engage these workers are reputable and legitimate enterprises and have an appropriate ESMS. Impacts associated with supply chains will be considered where low labour cost is a factor in competitiveness of the item supplied.	<p>Compliance with national requirements with respect to minimum wage and other social benefits (e.g. payment of ESI, provident fund, etc.)</p> <p>MVKPL to ensure that provisions to meet ILO core labor standards are stipulated in contractors and subcontractors contracts and that these</p>		Mytrah Group always tries to give opportunity to those vendors (third party) who are fulfilling all the needful statutory requirements.	Shall be carried out as per QMS
3	<b>PS 3: Resource Efficiency and Pollution Prevention</b>	<b>ADB Environmental Safeguards</b>			

3.1	During the design, construction, operations and decommissioning of the project (project lifecycle), MVKPL is to consider ambient conditions and apply pollution prevention and control technologies and techniques.	Examine alternatives to the project's location, design, technology, and components and their potential environmental and social impacts and document the rationale for selecting the particular alternative proposed. Also consider the no project alternative.		During operational stage no such aspect is anticipated which can be harmful for nearby environment.	
3.2	MVKPL should refer to The EHS Guidelines, when evaluating and selecting resource efficiency and pollution prevention and control techniques for the project.	Apply pollution prevention and control technologies and practices consistent with international good practices as reflected in internationally recognized standards such as the World Bank Group's Environmental, Health and Safety Guidelines.		EHS guidelines include all the relevant features applicable for resource efficiency and pollution prevention.	
3.3	MVKPL will implement technically and financially feasible and cost effective measures for improving efficiency in its consumption of energy, water as well as other resources and material inputs.	Processes and good energy efficiency practices. Avoid pollution, or, when avoidance is not possible, minimize or control the intensity or load of pollutant emissions and discharges, including direct and indirect greenhouse gases emissions, waste generation, and release of hazardous materials from their production, transportation, handling and storage		The proposed project falls under white category. Very less amount of water is required during operational phase.	
3.4	MVKPL should consider alternatives and implement technically and financially feasible and cost effective options to	MVKPL should promote the reduction of project-related anthropogenic greenhouse gas emissions in a manner appropriate to the nature	Project is a renewable energy project not includes the GHG	Proposed project operation does not involve any such activities which release the GHG emissions.	

	<p>reduce project-related GHG emissions during the design and operation of the project. These options may include, but are not limited to, alternative project locations, adoption of renewable or low carbon energy sources.</p>	<p>and scale of project operations and impacts. during the development or operation of projects that are expected to or currently produce significant quantities of greenhouse gases, the MVKPL should quantify direct emissions from the facilities within the physical project boundary and indirect emissions associated with the off-site production of power used by the project. MVKPL should conduct quantification and monitoring of greenhouse gas emissions annually in accordance with internationally recognized methodologies. In addition, MVKPL will evaluate technically and financially feasible and cost-effective options to reduce or offset project-related greenhouse gas emissions during project design and operation, and pursue appropriate options.</p>	emission		
3.5	<p>MVKPL should avoid the release of pollutants to air, water and land due to routine, non-routine, and accidental circumstances with the potential for local, regional, and trans boundary impacts or, minimize and/or control the intensity and mass flow of their</p>	<p>Avoid, and where avoidance is not possible, minimize, mitigate, and / or offset adverse impacts and enhance positive impacts by means of environmental planning and management. Prepare an environmental management plan (EMP) that</p>		<p>EMP was developed to mitigate environmental measures. Impacts are not assessed at ESDD stage.</p>	

	<p>release.</p> <p>To address potential adverse project impacts on existing ambient conditions, MVKPL should consider relevant factors, including, for example existing ambient conditions, etc.</p>	<p>includes the proposed mitigation measures, environmental monitoring and reporting requirements, related institutional or organizational arrangements, capacity development and training measures, implementation schedule, cost estimates, and performance indicators. Key considerations for EMP preparation include mitigation of potential adverse impacts to the level of no significant harm to third parties, and the polluter pays principle.</p>			
3.6	<p>To avoid and minimize generation of hazardous and non-hazardous waste materials as far as practicable. Where waste generation cannot be avoided, but has been minimized, MVKPL will recover and reuse wastes, where wastes cannot be recovered or reused; MVKPL should treat, destroy and dispose of in an environmentally sound manner. If the generated waste is considered hazardous, MVKPL will explore commercially reasonable alternatives for its environmentally sound disposal,</p>	<p>MVKPL should avoid, or where avoidance is not possible, should minimize or control the generation of hazardous and non-hazardous wastes and the release of hazardous materials resulting from project activities. Where waste cannot be recovered or reused, it will be treated, destroyed, and disposed-off in an environmentally sound manner. If the generated waste is considered hazardous, MVKPL should explore reasonable alternatives for its environmentally sound disposal considering the Limitations applicable to its Trans boundary movement.</p>		<p>No such waste generation is expected due to project operation. If any hazardous waste is generated, it is stored in secured containers and disposed off to the authorized vendor.</p>	

	considering the limitations applicable to its trans-boundary movement.	When waste disposal is conducted by third parties, MVKPL should use contractors that are Reputable and legitimate enterprises licensed by the relevant regulatory agencies.			
3.7	MVKPL will avoid or, when avoidance is not possible, minimize and control the release of hazardous materials. In this context, the production, transportation, handling, storage, and use of hazardous materials for project activities should be assessed. MVKPL should consider less hazardous substitutes where hazardous materials are intended to be used in manufacturing processes or other operations.	MVKPL should avoid the manufacture, trade, and use of hazardous substances and materials subject to international bans or phase outs because of their high toxicity to living organisms, environmental persistence, potential for bioaccumulation, or potential for the ozone layer and will use of less hazardous substitutes for such chemicals and materials.		No such waste generation is expected due to project operation. The spent oil of DG set and the scrap panel is being sold to recyclers.	Should be regularly monitored by MVKPL in compliance stage
3.8	Formulate and implement an integrated pest management (IPM) and or integrated vector management (IVM) approach to pest management	The environmental assessment will ascertain that any pest and/or vector management activities related to the project are based on integrated pest management approaches and aim to reduce reliance on synthetic chemical pesticides in agricultural and public health projects. MVKPL's integrated pest / vector management program should entail coordinated use of pest and environmental information along with available pest		No use of pesticides for the project	

		/ vector control methods, including cultural practices, biological, genetic and, as a last resort, chemical means to prevent unacceptable levels of pest damage. The health & environmental risks associated with pest management should be minimized with support, as needed, to institutional capacity development, to help regulate and monitor the distribution and use of pesticides and enhance the application of integrated pest management			
4	<b>IFCPS4: Community Health &amp; Safety &amp; Security:</b>				
4.1	MVKPL should evaluate risks and impacts to the health and safety of the Affected Communities during the project life-cycle and will establish preventive and control measures.	MVKPL should identify and assess the risks to, and potential impacts on, the safety of affected communities during the design, construction, operation and decommissioning of the project, and should establish preventive measures and plans to address them in a manner commensurate with the identified risks and impacts. These measures should favour the prevention or avoidance of risks and impacts over their minimization and reduction. Consideration should be given to		No PAPs have been reported within project site. Most of the impact associated with operation of proposed project is limited to the project site only.	



		potential exposure to both accidental and natural hazards, especially where the structural elements of the project are accessible to members of the affected community or where their failure could result in injury to the community. MVKPL should avoid or minimize the exacerbation of impacts caused by natural hazards, such as landslides or floods that could result from land use changes due to project activities.			
4.2	MVKPL should avoid or minimize the potential for community exposure to hazardous materials and substances that may be released by the project.	Avoid the use of hazardous materials subject to international bans or phase outs.		No such aspect is involved in this project.	
4.3	MVKPL should document its emergency preparedness and response activities, resources, and responsibilities, and should disclose appropriate information to Affected Communities, relevant government agencies or other relevant parties.	Establish preventive and emergency preparedness and response measures to avoid, and where avoidance is not possible, to minimize, adverse impacts and risks to the health and safety of local communities.		The emergency preparedness plan has been framed by MVKPL.	
4.4	MVKPL should avoid or minimize the potential for community exposure to water-borne, water-based, water-related, and vector-borne diseases, and			No such activities is involved which can contaminate the nearby water environment.	

	communicable diseases that could result from project activities, taking into consideration differentiated exposure to and higher sensitivity of vulnerable groups.				
4.5	Where MVKPL retains direct or contracted workers to provide security to safeguard its personnel and property, its security arrangements to those within and outside the project site.			The local person may be engaged as security to safeguard the material on site.	
<b>5</b>	<b>IFC PSS: Land Acquisition and Involuntary Resettlement</b>	<b>Involuntary Resettlement Safeguards</b>			
5.1	The project will consider feasible alternative project designs to avoid or at least minimize physical or economic displacement, while balancing environmental, social, and financial costs and benefits, paying particular attention to impacts on the poor and vulnerable.	Screen the project early on to identify past, present, and future involuntary resettlement impacts and risks. Determine the scope of resettlement planning through a survey and/or census of displaced persons, including a gender analysis, specifically related to resettlement impacts and risks.		The proposed site does not have any settlement.	
5.2	MVKPL should provide unavoidable displaced PAPs with compensation for loss of assets at full replacement cost to help them restore their standards of living or livelihoods; Where livelihood is land-based or	Pay compensation and provide other resettlement entitlements before physical or economic displacement. Implement the resettlement plan under close supervision throughout project implementation		The proposed project does not involve any resettlement activities as land of the project is devoid of any commercial or residential structures.	

	collectively owned, MVKPL should offer land-based compensation where feasible; MVKPL should provide opportunities to PAPs to derive appropriate development benefits from the project.				
5.3	Facilitate informed participation of all PAFs in decision and entitlement making resettlement processes. Consultation to continue through the implementation, monitoring and evaluation of payment and resettlement.	Carry out meaningful consultations with affected persons, host communities, and concerned nongovernment organizations. Inform all displaced persons of their entitlements and resettlement options. Disclose a draft resettlement plan, including documentation of the consultation process in a timely manner, before project appraisal, in an accessible place and a form and language(s) understandable to affected persons and other stakeholders. The resettlement should elaborate upon displaced persons' entitlements, the income and livelihood restoration strategy, institutional arrangements, monitoring and reporting framework, budget, and time-bound implementation schedule.		<ul style="list-style-type: none"> <li>• The primary survey, consultation and other relevant document has been carried out.</li> <li>• No social issue has been envisaged for this project.</li> <li>• The detail about land resource and social aspect around the project area is deliberated in ESDD chapter.</li> </ul>	

		<p>Improve or at least restore, the livelihoods of all displaced persons</p> <p>Ensure that displaced persons without titles to land or any recognizable legal rights to land are eligible for resettlement assistance and compensation for loss of non-land assets</p>			
5.4	MVKPL to establish grievance redressal mechanism consistent with PS 1 to address concerns raised by PAPs	Establish a grievance redress mechanism to receive and facilitate resolution of the affected persons' concerns.		MVKPL has prepared a framework to address all the issues related to grievance mechanism.	
6	<b>PS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources</b>				
6.1	Assess significance of project impacts on all levels of biodiversity as an integral part of social and environmental assessment process.	<p>MVKPL should assess the significance of project impacts and risks on biodiversity and natural resources as an integral part of the environmental assessment process. The assessment will focus on the major threats to biodiversity, which include destruction of habitat and introduction of invasive alien species, and on the use of natural resources in an unsustainable manner.</p>		<p>The proposed site is a rocky and unproductive land. The detail inventory of flora and bird/bat carcass fauna was carried out during ESDD Stage. The major ecological impact associated with the project is the risk of bird collision which is common with Wind power projects. There is no report of the project area supporting any "Endangered" category of flora or flora. The project area and its surroundings do not fall under any major flyway or</p>	<p>It is suggested to undertake a periodic bird/bat carcass survey in the project by site personal in the core study area. Standard Operating procedure should also highlight emergency measures to be undertaken in case of bird and bat hitting to WTG or electrocution.</p>

				migratory routes.	
6.2	MVKPL should minimize impacts on modified habitat (areas managed for agriculture, forest plantations, reclaimed coastal zones and reclaimed wetlands) and implement mitigation measures as appropriate.	As above		The proposed site is a rocky, barren and unproductive land. Hence, the activities related to proposed project are not expected to change biotic habitat around the project area.  The details about biodiversity are deliberated in ESDD report.	
6.3	MVKPL should not significantly convert or degrade natural habitats, unless (i) no other viable alternatives within the region exist for development of the project on modified habitat; (ii) consultation has established the views of stakeholders, including Affected Communities, with respect to the extent of conversion and degradation; and, (iii) any conversion or degradation is mitigated.	As above		No such impact is envisaged from proposed project.	
<b>7</b>	<b>IFC PS7: Indigenous Peoples (Scheduled Tribes in Indian Context)</b>	<b>Indigenous People (Scheduled tribe)'s Safeguards</b>			
7.1	Assessment needs to be done for identification of indigenous groups (Scheduled tribes) and the	Screen early on to determine (i) whether Indigenous Peoples (Scheduled tribes) are present in, or		No indigenous people are likely to be affected by the proposed development	

	expected social, cultural and environmental impacts on them.	have collective attachment to the project area; and (ii) whether project impacts on Indigenous Peoples (Scheduled Tribes) are likely.			
7.2	The impacts on Affected Communities of Indigenous Peoples (Scheduled Tribes) should be avoided where possible. Where alternatives have been explored and adverse impacts are unavoidable, MVKPL should minimize, restore, and / or compensate for these impacts, proposed actions will be developed with the Informed consultations and Participation of the Affected Communities of Indigenous Peoples and contained in a time-bound plan, such as an Indigenous Peoples Plan	Undertake a culturally appropriate and gender-sensitive social impact assessment or use similar methods to assess potential project impacts, both positive and adverse, on Indigenous Peoples. Give full consideration to options the affected Indigenous Peoples prefer in relation to the provision of project benefits and the design of mitigation measures.		Not applicable for this project as no indigenous people are likely to be affected by the proposed development.	
7.3	MVKPL should undertake an engagement process with the Affected Communities of Indigenous Peoples as required in Performance Standard1. Ensure that the grievance mechanism established for the project, as described in PS1, is culturally appropriate and accessible.	Identify social and economic benefits for affected Indigenous Peoples that are culturally appropriate and gender and inter generationally inclusive and develop measures to avoid, minimize, and / or mitigate adverse impacts on Indigenous Peoples. Undertake meaningful consultations with affected Indigenous Peoples communities and concerned		Not applicable for this project as no indigenous people are likely to be affected by the proposed development.	

		Indigenous Peoples organizations to solicit their participation (i) in designing, implementing, and monitoring measures to avoid adverse impacts or, when avoidance is not possible, to minimize, mitigate, or compensate for such effects; and (ii) in tailoring project benefits for affected Indigenous Peoples communities in a culturally appropriate manner.			
7.4	MVKPL should prepare a plan that, may need to include where relevant; <ul style="list-style-type: none"> <li>• A description of the government- provided entitlements of affected Indigenous Peoples;</li> <li>• The measures proposed to bridge any gaps between such entitlements, and the requirements of this Performance Standard; and</li> <li>• The financial and implementation responsibilities of the government agency and / or MVKPL.</li> </ul>	Avoid, to the maximum extent possible, any restricted access to and physical displacement from protected areas and natural resources. Where avoidance is not possible, ensure that the affected Indigenous Peoples communities participate in the design, implementation, and monitoring and evaluation of management arrangements for such areas and natural resources and that their benefits are equitably shared		Need based assessment has been carried out already. With an objective to strengthen the ongoing government schemes in project area, stakeholder consultation has been completed.	
<b>8</b>	<b>IFC PS8: Cultural Heritage</b>				
8.1	MVKPL should identify and protect	MVKPL is responsible for siting and		No cultural heritage has been	

	cultural heritage by ensuring that internationally recognized practices for the protection, field-based study, and documentation of cultural heritage are implemented.	designing the project to avoid significant damage to physical cultural resources. Such resources likely to be affected by the project will be identified, and qualified and experienced experts will assess the project's potential impacts on these resources using field-based survey as an integral part of the environmental assessment process.		observed within the 10km study area.	
8.2	As part of MVKPL's ESMS, MVKPL should develop provisions for managing chance finds through a chance find procedure which will be applied in the event that cultural heritage is subsequently discovered.			Should be implemented in ESMS.	
8.3	MVKPL will consult with the Affected Communities to identify cultural heritage of importance, and to incorporate into MVKPL's decision making process the views of the Affected Communities on such cultural heritage.			The consultation was carried out to assess the local cultural heritage around the project site / consultation place.	
8.4	Where MVKPL's project site contains cultural heritage, MVKPL will, allow continued access to the cultural site or will provide an alternative access route, subject to overriding health, safety, and			Not applicable for this project as no such cultural heritage is located within the proposed site	





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	security considerations.				
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## **6 ENVIRONMENT MANAGEMENT PLAN**

An effective environmental management system is a dynamic, continuous process initiated by management and involving communication between the project proponent, the workers, and the local communities directly affected by the project. The EMP includes proposed mitigation measures, environmental monitoring and reporting requirements, training measures, implementation schedule and cost estimates.

MVKPL is committed to execute all operation related activities for the wind power project as per the best established environmental, health and safety (**Annexure IV**, MEIL' EHS Policy) standards and also it will be aligned with upcoming ESMS to be implemented at asset level. Some residual impact may however persist after the all mitigation measures are employed, the Environmental and Social Management Plan intends to delineate monitoring and management measures to minimize such impacts by allocating management responsibility and suggesting skill requirement for implementation of these measures during operational phase.

### **6.1 REGULATORY AGENCIES**

The authorities/agencies to be coordinated for ESMP implementation include the following:

- District Administration of Bijapur District;
- Land Revenue Department;
- Karnataka State Pollution Control Board;
- State Electricity Board;
- Central Electricity Authority;
- Factory Inspectorate;

### **6.2 ENVIRONMENT & SOCIAL MANAGEMENT SYSTEM (ESMS)**

An Environment & Social Management System (ESMS) is already available (MEIL) to assist MVKPL in developing a comprehensive mechanism at the asset level to lay down a rationalized procedure for assessing and managing social, environmental, health and safety issues at all stages of their activities. The corporate MEIL ESMS will guide the implementation at the project level compliance to the standards as committed by MVKPL. The Environment and Social Management Plan (ESMP) provided in the subsequent sections will be operationalized within the framework of the management system. Mytrah is already ISO 9001, ISO 14001, ISO 18001 certified company and they are in process of ESMS to be approved by ADB in compliance with IFC Performance Standards and ADB Safeguard Policies 2009.

#### **6.2.1 Organization, Roles and Responsibilities**

The usual activities of the EHS manager and his team are as following:

- Ensuring availability resources and appropriate institutional arrangements for implementation of ESMP;
  - Compliance of legislative requirements and ADB safeguards;
  - Carryout audits, and inspection of all the project activities through site engineer;
  - Preparation of necessary documents and record keeping system through site engineer;
  - Review and updating of ESMP for effective its implementation.
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### 6.2.2 *Contractors Management*

Prior to assigning any contract, MVKPL pre-qualifies each contractor according to commercial, technical, quality assurance and its past performance on EHS standards so as to satisfy MVKPL 's requirements.

MVKPL ensures that the job specific training and EHS Induction Training needs are identified based on the specific requirements of ESMP and existing capacity of site and project personnel (including the Contractors and Sub-contractors) to undertake the required actions and monitoring activities. Special emphasis is placed on traffic management and operation of cranes.

General environmental awareness is being increased among the project's team to encourage the implementation of environmentally sound practices and compliance requirements of the project activities. This has helped in minimizing adverse environmental impacts, compliance with the applicable regulations and standards, and achieving performance beyond compliance. The same level of awareness and commitment is imparted to the contractors and sub-contractors prior to the commencement of the project.

An environmental and social management training programme is being conducted to ensure effective implementation of the management and control measures during operation of the project. The training programme ensures that all concerned members of the team understand the following aspects:

- Purpose of action plan for the project activities;
- Requirements of the specific Action Plans;
- Understanding of the sensitive environmental and social features within and surrounding the project areas; and
- Aware of the potential risks from the project activities;

A basic occupational training program and specialty courses are being provided, as needed, to ensure that workers are oriented to the specific hazards of individual work assignments.

Training is being provided to management, supervisors, workers, and occasional visitors to areas of risks and hazards. Workers with rescue and first-aid duties receive dedicated training so as not to inadvertently aggravate exposures and health hazards to themselves or their coworkers.

Through appropriate contract specifications and monitoring, the employer ensures that service providers, as well as contracted and subcontracted labor, are trained adequately before assignments begin.

As part of the ADB Social Protection Requirements and IFC Performance Standard-2 requirements, MVKPL has initiated the revision of its HR Policy. The updated HR policy is reported to include:

- MVKPL's position on child labour, forced labour, as well as commitment to favorable/safe working conditions;
  - Applicability of the policy to indirect employees like contractors, contracted laborers or other stakeholders in the supply chain;
  - Provide details of recruitment, induction, leave, termination, insurance, medical facility, training and incentives;
  - Define leave policy;
  - Provide measures against discrimination on basis of caste, religion or sex;
  - Provide details of health benefits and insurance coverage;
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- Provide for measures against sexual harassment;
  - Provide for measures taken to ensure —Occupational Health and Safety is ensured for all employees on site;
  - Provide for employee forums as an alternative to collective bargaining or registration with a trade union.

Although all employee related matters are documented and monitored at the corporate level, given the limited footprint and operations of the wind power plant, management of labour and employee relations can be one of the responsibilities of the plant manager who can be assisted by the on-site field supervisor in charge of implementing the social management systems on site. It is suggested that the revised human resource systems shall be applicable to the proposed project. However, the HR management systems framework would need to take the following into account:

- Awareness of the requirements under the ADB Social Protection Requirements and IFC Performance Standards 2 on Labour and Working Conditions, particularly with respect to training of contractors and occupational health and safety provisions;
- Providing all employees and labour with an access to an alternative collective bargaining or grievance redressal forum;
- Ensuring that all contractors and sub-contractors for whom MVKPL is the —principle employer are compliant for all applicable provisions of the Indian Labour Laws, particularly with regards to child labour, working houses, minimum wages, overtime etc. during the operations phase;

#### *6.2.3 ESMP Review and Amendments*

The ESMP provided with this report is an environment management tool which needs to be reviewed periodically to address changes in the organization, process or regulatory requirements.

#### *6.2.4 Inspection, Monitoring & Audit*

In order to implement the ESMP, the on-site team has developed a time-bound and action oriented Environmental and Social Action Plan to implement the mitigation measures provided for each of the identified environmental and social impacts. This ESMP will have to be monitored on a regular basis, quarterly or half-yearly and all outcomes would need to be audited in accordance with existing EHS commitments as per Annexure IV.

The monitoring process shall cover all stakeholders including contractors, labourers, suppliers and the local community impacted by the project activities and associated facilities. Inspection and monitoring of the environmental and social impacts of operation phase activities increases the effectiveness of suggested mitigations. Through the process of inspection, audit, and monitoring MVKPL ensures that all the contractors comply with the requirements of conditions for all applicable permits including suggested action plans. The inspections and audits are done by MVKPL's trained team and external agencies/experts. The entire process of inspections and audits is documented. The inspection and audit findings are being implemented by the contractors in their respective areas.

#### *6.2.5 Reporting and Review*

MVKPL has developed and implemented a programme of reporting through all stages of the project - construction and commissioning, operation and decommissioning. Contractors are required to fully comply with the reporting requirements in terms of timely report submission with acceptable level

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of details. Reporting is being done in form of environmental, health, safety and social check list, incident record register, environmental, health, safety and social performance reports (quarterly basis).

#### *6.2.6 External Reporting and Communication*

All complaints and enquiries are appropriately dealt with and records are maintained in Complaint/Enquiry Register by EHS Officers or other delegated staff. MVKPL shall also submit annual monitoring reports to ADB on the progress of implementation of the ESMP. MVKPL shall undertake annual inspections in order to verify compliance with the ESMP and progress towards the expected outcomes. Necessary corrective actions shall be identified based on the verifications and a corrective action plan shall be formulated. MVKPL shall ensure effective implementation of these corrective actions and submit periodic monitoring reports to ADB. MVKPL shall also provide ADB with an annual report on its compliance with ADB's social protection requirements.

#### *6.2.7 Internal Reporting and Communication*

Inspection and audit observations along with their improvement program are to be regularly reported to the senior management for their consideration. The same are also to be communicated within the staff working on the project. To maintain open communication between the staff and management on EHS&S issues the following are being used:

- Team Briefings,
- On-site work group meetings;
- Work Specific Instructions; and
- Meeting with stakeholders.

#### *6.2.8 Documentation and Record Keeping*

Documentation and record keeping system is established to ensure updating and recording of requirements specified in ESMP. Responsibilities are assigned to relevant personnel for ensuring that the ESMP documentation system is maintained and that document control is ensured through access by and distribution to identified personnel in form of the following:

- Documented Environment management system;
- Legal Register;
- Operation control procedures;
- Work instructions;
- Incident reports;
- Emergency preparedness and response procedures;
- Training records;
- Monitoring reports;
- Auditing reports; and
- Complaints register and issues attended/closed.

#### *6.2.9 Proposed Environment and Social Management Plan*

An Environment and Social Management Plan has been developed following the delineation of impacts and mitigation measures. These measures are being adopted by the project proponent and imposed as conditions of contract of the sub-contractor employed for respective phases of the power project. The mitigation measures suggested during operation are made part of the regular maintenance and monitoring schedule. The ESMP includes the following:

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- Mitigations suggested for adverse environmental and social impacts and associated risks;
- Institutional arrangement - management tools and techniques for the implementation of environmental impacts and risk mitigations;
- Monitoring and reporting of requirements and mechanisms for the effective implementation of the suggested mitigations;
- Monitoring arrangements for effective implementation of suggested mitigations for the proposed project; and
- Reporting requirement to the regulatory agencies and funding institutes

### 6.3 ENVIRONMENTAL MONITORING PLAN

It is imperative that the Project Authority set up regular monitoring stations to assess the quality of the surrounding environment after the commissioning of the project. An environmental monitoring programme is important as it provides useful information and helps to:

- Verify the predictions on environmental impacts,
  - Assist in detecting the development of any unwanted environmental situation, and thus, provides opportunities for adopting appropriate control measures, and
  - Evaluate the performance and effectiveness of mitigation measures proposed in the EMP and suggest improvements in management plan, if required,
- Satisfy the legal and statutory obligations.

The number and location of monitoring stations, frequency of sampling and parameters to be covered is summarized in Table 6.2.

**Table 6-1: Environmental Monitoring Plan**

Source	Monitoring Location	Parameters to be Monitored	Frequency
<b>Ambient Air Quality</b>	At 3 locations (1 inside the complex and one each in nearest two villages)	RSPM, SO <sub>2</sub> , NO <sub>x</sub>	Once in a year or as per requirement of SPCB
<b>Ambient Noise</b>	At 3 locations (1 inside the complex and one each in nearest two villages)	Day and night equivalent noise level	Once in a year or as per requirement of SPCB
<b>Surface Water</b>	One	IS 2296	Once in a year or as per requirement of SPCB
<b>Ground Water</b>	One near project site office	IS 10500	Once in a year or as per requirement of SPCB
<b>Soil</b>	One near project site office	Essential parameters	Once in a year or as per requirement of SPCB

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**6.4 ENVIRONMENTAL BUDGET**

The budget provisions have been kept for implementation of the EMP. The budgetary cost estimates for the EMP are given in Table 6.3.

**Table 6-2: EMP Budget**

Sl. no.	Item	Cost in INR (lacs) (Annual)
1.	Environmental Monitoring	1.5
2.	Municipal Solid waste storage & disposal	0.25
4.	EHSS Training for staffs	0.5
5.	EHS audit	4.0
	Total	6.25



**Table 6:3: Environment and Social Management Plan for Operation Phase**

Issue	Suggested Mitigation	Monitoring/ Training	Management Responsibility
<b>Aesthetics and Visual Impact</b>			
<ul style="list-style-type: none"> <li>Visual intrusion</li> </ul>	<ul style="list-style-type: none"> <li>Towers to be painted as per Standard Industry practice only.</li> </ul>		Head – Project
<b>Waste Disposal</b>			
<ul style="list-style-type: none"> <li>Used oil</li> <li>Transformer oil</li> </ul>	<ul style="list-style-type: none"> <li>Used oil to be securely stored and sold only to KPCB approved vendors as and when required.</li> <li>Transformer oil to be replaced and returned by the supplier of transformers</li> </ul>	<ul style="list-style-type: none"> <li>O&amp;M staff to be briefed and trained about the need for proper storage and disposal waste oil</li> </ul>	<ul style="list-style-type: none"> <li>Head – O &amp; M Operations</li> <li>Manager Deputed EHS Engineer of O &amp; M</li> </ul>
<b>Ecology</b>			
<ul style="list-style-type: none"> <li>Bird Kill</li> <li>Avian collision</li> </ul>	<ul style="list-style-type: none"> <li>The turbine layout provides adequate spaces between each turbine for movement of birds which would reduce the potential for accidental collision. The site is devoid of any migratory bird route.</li> <li>Standard practice on turbine blades shall be considered to enhance visibility.</li> </ul>	<ul style="list-style-type: none"> <li>It is suggested to undertake a periodic bird/bat carcass survey in the project by site personal in the core study area.</li> <li>Train the security staff on handling injured birds / bat and injured birds should be taken to nearest Veterinary hospital.</li> </ul>	<ul style="list-style-type: none"> <li>Standard Operating procedure should also highlight emergency measures to be undertaken in case of bird and bat hitting to WTG or electrocution.</li> </ul>
<b>Noise</b>			
<ul style="list-style-type: none"> <li>Turbine noise</li> <li>Corona Discharge</li> </ul>	<ul style="list-style-type: none"> <li>Maintenance and repair of turbines will be undertaken on annual basis/ as and when required.</li> <li>Transmission line to have Conductors designed to</li> </ul>	<ul style="list-style-type: none"> <li>Turbines certified as per IEC to be engaged.</li> <li>Monitor noise at all nearby</li> </ul>	<ul style="list-style-type: none"> <li>Head – O &amp; M</li> <li>Deputed EHS Engineer of O &amp; M</li> </ul>





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Issue	Suggested Mitigation	Monitoring/ Training	Management Responsibility
	minimize corona effects <ul style="list-style-type: none"> <li>Implement a complaint resolution procedure to assure that any complaints regarding operational noise are promptly and adequately investigated and resolved.</li> <li>Optimization of turbine speed. In high wind, blade speed is controlled as per the desired criteria to avoid blade throw.</li> <li>Provision of Noise barrier in terms of green belt near to receptor, if noise level found crossing the standards during operation phase monitoring</li> </ul>	village once a year during operation phase.	Site Manager in consultation with deputed EHS officer.
<b>Water Resource and Quality</b>			
<ul style="list-style-type: none"> <li>Water requirement for cleaning</li> </ul>	<ul style="list-style-type: none"> <li>Tanker water will be used.</li> </ul>	<ul style="list-style-type: none"> <li>Water consumption to be recorded and assessed on monthly basis for wastage</li> </ul>	<ul style="list-style-type: none"> <li>Deputed EHS Engineer of O &amp; M</li> <li>Plant Manager</li> </ul>
<b>Health and Safety</b>			
<ul style="list-style-type: none"> <li>Working at Height</li> <li>Use of Cranes</li> <li>Electrical hazards</li> <li>Accidents leading to injury/fatality</li> </ul>	<ul style="list-style-type: none"> <li>Work permit system shall be implemented of reworking at height.</li> <li>Personal protective equipment to be provided for all personnel during maintenance work</li> <li>Crane safety plan to be followed</li> <li>Workers handling electricity and related components to be provided with shock resistant gloves, shoes and other protective gears.</li> <li>Adequate training regarding health and safety to be provided to the workers.</li> <li>The switchyard building to be provided with fire</li> </ul>	<ul style="list-style-type: none"> <li>Proper training of the workers regarding health and safety procedures</li> <li>Workers to be trained for use of Personal Protection Equipment and its importance.</li> <li>Engineer/ Supervisor/ Worker (as per the applicability) are being trained- Wind Safety Specific Training.</li> </ul>	<ul style="list-style-type: none"> <li>Site Manager</li> <li>Head - O&amp;M</li> </ul>



**ESDD REPORT**

Issue	Suggested Mitigation	Monitoring/ Training	Management Responsibility
	extinguishers and sand buckets at all strategic locations to deal with any incident of fire.		
<b>Social</b>			
<ul style="list-style-type: none"> <li>Impacts on Local Economy</li> </ul>	<ul style="list-style-type: none"> <li>The project shall try and involve local enterprises for procurement of material wherever possible.</li> </ul>	-	<ul style="list-style-type: none"> <li>Procurement team</li> <li>Head – O &amp; M</li> </ul>
<ul style="list-style-type: none"> <li>Shadow Flicker</li> </ul>	<ul style="list-style-type: none"> <li>All turbines located along the edges close to habitation to have a suitable set off of to negate the spread of any distinct shadow at the village.</li> </ul>	<ul style="list-style-type: none"> <li>Fall of shadow from all turbines was observed and vegetative shield to be opted if required.</li> </ul>	<ul style="list-style-type: none"> <li>Head – O &amp; M</li> </ul>
<ul style="list-style-type: none"> <li>Upgrades to Local Infrastructure</li> <li>Grazing land</li> </ul>	<ul style="list-style-type: none"> <li>Collaborate with local government/ Non government for any community development programs to share their sources and cut cost;</li> <li>Grazing area to be retained with fencing limited to transformer areas</li> </ul>	<ul style="list-style-type: none"> <li>Any community development activity is being guided and implemented in accordance with group CSR Policy.</li> </ul>	<ul style="list-style-type: none"> <li>Head - CSR</li> <li>O &amp; M – Head</li> </ul>

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## **7 DISCLOSURE PROCESS**

Project Proponent should extend the active interaction with Stakeholders from operation phase of the project. Project team should disseminate relevant project information with stakeholders.

## **8 CONCLUSION AND RECOMMENDATIONS**

The site selection has been carefully carried out to ensure that impact on surrounding communities and land uses is minimal. Land for the project site is primarily open barren land, devoid of any physical/archeological infrastructure and do not involve any economical/residential displacement.

During the design and implementation, efforts were taken by MVKPL to minimize or avoid environmental and social impacts. The key observations of the due diligence on the social impacts are summarized as follows:

- The project is a Category B project in line with IFC framework. The site allotted for the proposed project is on a rocky, barren land and is not located in the vicinity of any protected / environmental sensitive areas;
- MVKPL has initiated compliance and has confirmed abiding to the conditions set forth in the land allotment letter by the Government;
- The anticipated impact around the project site is very minimal and do not involve any R&R issues;
- During site visit it was observed that the communities are aware of the project and have positively participated in the project activities. MVKPL official are doing regular interaction with the local stakeholders and same practice will continue.

## 9 CONSULTANT DISCLOSURE

### 9.1 VOYANTS SOLUTIONS PVT.LTD.

Voyants Solutions Pvt. Ltd. an ISO 9001:2000 certified company provides the vital function of effectively providing full range of engineering and supervision services from project conception and preliminary planning through project completion, also providing backward linkage to the project implementation function in the form of concepts, strategies, structuring, planning and designing infrastructure projects. A multi and cross disciplinary team of professionals offers solutions at each stage of the life cycle of a project.

Over the years VSPL evolved as an “End-to-End-Integrated” Solution Provider foraying into functional areas of Environmental /Social Services and Project Management, Solid, Hazardous and Biomedical waste management, Environment planning & management, Infrastructure Advisory, Marketing / Transactions (Real Estate), Investments, Planning and Architecture, Infrastructure Engineering, Integrated Infrastructure Development; Public Health Engineering (Water Supply, Sewerage & Drainage); Transportation, Roads & Bridges; Townships / Industrial Estates / SEZs / Buildings; Theme based Developments; Real Estate & Buildings; Urban Reforms & Developmental Planning.

Voyants Solutions Pvt. Ltd. is a leading ISO9001; 2008, Consulting Engineers, Architect & Scientists and Project Manager Research based Organization at Gurgaon (Haryana) India having business operation in India, Sri Lanka, Ethiopia, East Africa, Middle East and Singapore.

**VSPL** is constantly striving towards excellence in terms of value addition to the projects being handled and in this endeavour we are broadening our horizons in terms of major sectors The Company has Seven Operational Verticals:

- Infrastructure Planning & Design (IPD)
- Architecture & Project Management (APM)
- Environment Management Service (EMS)
- Rail Infrastructure Division (RID)
- Transportation, Road & Bridges (TRB)
- Energy Division (ED)
- Water & Sanitation Division (WSD)

VSPL is an accredited consultant by NABET for eight sectors.

### 9.2 PROJECT TEAM

The project team consists of environmental expert, socio-economic/ R&R expert, ecologist and experts for environmental monitoring and laboratory analysis.

**Table 9.1: Project Team**

Sl. No.	Name	Qualification	Role and Responsibilities
1.	Mr. Santoshkumar Kulkarni	Masters in Environmental Sciences	Overall responsible for coordinating the project.
2.	Ms. Laxmi Singh	B.Tech. (Biotechnology) PGD in Regulations in	Environmental due diligence

Sl. No.	Name	Qualification	Role and Responsibilities
		Environment	
3.	Mr. Bhuwan Bhaskar		Environment due diligence
4.	Dr. Arvind Prakash Dubey	Ph. D. in Sociology	Social due diligence
5.	Dr. Ashish Rawat	Ph. D. in Environmental Science (Forest Ecology)	Ecology and Bio-diversity Impact Assessment and Management Biodiversity Conservation
<b>Vison Labs, Hyderabad (NABL and MoEF &amp; CC Accredited)</b>			
6.	Mr. Laxmikanth Reddy	Overall responsible for coordinating, collecting the sampling and analysis of environmental parameters of the study area	
7.	Mr. Ashok	Responsible for collecting all samples of environmental parameters of the study area	

Third Party Laboratory was awarded the baseline work. Vison Labs, Hyderabad NABL and MoEF & CC Accredited conducted the baseline sampling as per the scope of work of the TOR.



## **ANNEXURE I : BASELINE DATA OF SOCIO ECONOMIC**

## ANNEXURE I: BASELINE DATA OF SOCIO-ECONOMIC

**Table 1: Demographic Profile of the Villages of Core Zone**

S. No.	Village	Household	HH Size	Population			
				Total	Male	Female	Sex Ratio
1.	Domanal	575	5.83	3355	1736	1619	932.60
2.	Hadalasang	486	6.16	2996	1521	1475	969.75
3.	Inchageri	797	5.24	4173	2153	2020	938.22
4.	Jigajeevani	1366	5.04	6882	3511	3371	960.12
5.	Kannur	1763	5.62	9902	5173	4729	914.16
6.	Koluragi	485	4.66	2262	1172	1090	930.03
7.	Mahaveernagar	286	5.66	1620	829	791	954.16
8.	Satalagaon[P.B.]	288	4.92	1419	714	705	987.39
9.	Savalsang	456	5.40	2461	1249	1212	970.37
<b>Total</b>		<b>6502</b>	<b>5.39</b>	<b>35070</b>	<b>18058</b>	<b>17012</b>	<b>942.08</b>

Source: Census of India, 2011

**Table 2: Demographic Profile of SC and ST of the Villages of Core Zone**

S. No.	Village	Schedule Caste (SC)			% of SC	Schedule Tribes (ST)			% of ST
		Total	Male	Female		Total	Male	Female	
1.	Domanal	1278	657	621	38.09	1	0	1	0.03
2.	Hadalasang	1826	931	895	60.95	0	0	0	0.00
3.	Inchageri	1181	600	581	28.30	3	2	1	0.07
4.	Jigajeevani	1984	997	987	28.83	0	0	0	0.00
5.	Kannur	2388	1218	1170	24.12	96	51	45	0.97
6.	Koluragi	701	384	317	30.99	19	11	8	0.84
7.	Mahaveernagar	1482	766	716	91.48	15	5	10	0.93
8.	Satalagaon[P.B.]	322	162	160	22.69	0	0	0	0.00
9.	Savalsang	1112	572	540	45.18	0	0	0	0.00
<b>Total</b>		<b>12274</b>	<b>6287</b>	<b>5987</b>	<b>35.00</b>	<b>134</b>	<b>69</b>	<b>65</b>	<b>0.38</b>

Source: Census of India, 2011

**Table 3: Literacy and Literacy Rate of the villages of Core Zone**

S. No	Village	Number of Literate			Literacy Rate			Gender Gap
		Total	Male	Female	Total	Male	Female	
1.	Domanal	1714	1023	691	60.25	70.26	49.75	20.51
2.	Hadalasang	1540	935	605	62.17	74.68	49.39	25.29
3.	Inchageri	2253	1360	893	65.38	76.15	53.80	22.35
4.	Jigajeevani	3248	1909	1339	56.86	65.65	47.75	17.89
5.	Kannur	5234	3112	2122	62.56	71.23	53.08	18.15
6.	Koluragi	1088	651	437	56.37	66.02	46.29	19.73
7.	Mahaveernagar	1027	629	398	72.43	85.81	58.10	27.71
8.	Satalagaon[P.B.]	692	404	288	59.25	68.59	49.74	18.85
9.	Savalsang	1307	811	496	62.06	74.82	48.53	26.28
<b>Total</b>		<b>18103</b>	<b>10834</b>	<b>7269</b>	<b>61.43</b>	<b>71.45</b>	<b>50.81</b>	<b>20.64</b>

Source: Census of India, 2011

**Table 4: Work Participation Rate of the Villages of Core Zone**

S. No.	Village	Total Worker			Work Participation Rate			Gender Gap in WPR
		Total	Male	Female	Total	Male	Female	
1.	Domanal	1505	903	602	44.86	52.02	37.18	14.83
2.	Hadalasang	1398	757	641	46.66	49.77	43.46	6.31
3.	Inchageri	2006	1148	858	48.07	53.32	42.48	10.85
4.	Jigajeevani	3315	1892	1423	48.17	53.89	42.21	11.67
5.	Kannur	4634	2719	1915	46.80	52.56	40.49	12.07
6.	Koluragi	1130	629	501	49.96	53.67	45.96	7.71
7.	Mahaveernagar	888	477	411	54.81	57.54	51.96	5.58
8.	Satalagaon[P.B.]	550	326	224	38.76	45.66	31.77	13.89
9.	Savalsang	1240	681	559	50.39	54.52	46.12	8.40
<b>Total</b>		<b>16666</b>	<b>9532</b>	<b>7134</b>	<b>47.52</b>	<b>52.79</b>	<b>41.94</b>	<b>10.85</b>

Source: Census of India, 2011

**Table 5: Main Worker and Marginal Worker**

S. No.	Village	Main Worker				Marginal Worker			
		Total	Male	Female	%age	Total	Male	Female	%age
1.	Domanal	772	597	175	51.30	733	306	427	48.70
2.	Hadalasang	1287	721	566	92.06	111	36	75	7.94
3.	Inchageri	1805	1103	702	89.98	201	45	156	10.02
4.	Jigajeevani	3164	1827	1337	95.44	151	65	86	4.56
5.	Kannur	4096	2498	1598	88.39	538	221	317	11.61
6.	Koluragi	1119	621	498	99.03	11	8	3	0.97
7.	Mahaveernagar	624	352	272	70.27	264	125	139	29.73
8.	Satalagaon[P.B.]	387	274	113	70.36	163	52	111	29.64
9.	Savalsang	1225	672	553	98.79	15	9	6	1.21
<b>Total</b>		<b>14479</b>	<b>8665</b>	<b>5814</b>	<b>86.88</b>	<b>2187</b>	<b>867</b>	<b>1320</b>	<b>13.12</b>

Source: Census of India, 2011

**Table 6: Categorization of Main Worker**

S. No.	Village	Categorization of Main Worker							
		Cultivators		Agricultural Labourers		Household Industrial Workers		Other Workers	
		Number	%age	Number	%age	Number	%age	Number	%age
1.	Domanal	371	48.06	210	27.20	25	3.24	166	21.50
2.	Hadalasang	419	32.56	613	47.63	9	0.70	246	19.11
3.	Inchageri	689	38.17	897	49.70	12	0.66	207	11.47
4.	Jigajeevani	1514	47.85	1388	43.87	23	0.73	239	7.55
5.	Kannur	1376	33.59	1728	42.19	97	2.37	895	21.85
6.	Koluragi	458	40.93	574	51.30	4	0.36	83	7.42
7.	Mahaveernagar	232	37.18	290	46.47	18	2.88	84	13.46
8.	Satalagaon[P.B.]	186	48.06	134	34.63	5	1.29	62	16.02
9.	Savalsang	502	40.98	633	51.67	1	0.08	89	7.27
<b>Total</b>		<b>5747</b>	<b>39.69</b>	<b>6467</b>	<b>44.66</b>	<b>194</b>	<b>1.34</b>	<b>2071</b>	<b>14.30</b>

Source: Census of India, 2011



**Table 7: Categorization of Marginal Worker**

S. No.	Village	Categorization of Main Worker							
		Cultivators		Agricultural Labourers		Household Industrial Workers		Other Workers	
		Number	%age	Number	%age	Number	%age	Number	%age
1.	Domanal	36	4.91	531	72.44	99	13.51	67	9.14
2.	Hadalasang	10	9.01	70	63.06	2	1.80	29	26.13
3.	Inchageri	22	10.95	156	77.61	2	1.00	21	10.45
4.	Jigajeevani	10	6.62	92	60.93	10	6.62	39	25.83
5.	Kannur	66	12.27	316	58.74	30	5.58	126	23.42
6.	Koluragi	1	9.09	9	81.82	0	0.00	1	9.09
7.	Mahaveernagar	24	9.09	42	15.91	24	9.09	174	65.91
8.	Satalagaon[P.B.]	35	21.47	119	73.01	2	1.23	7	4.29
9.	Savalsang	1	6.67	14	93.33	0	0.00	0	0.00
<b>Total</b>		<b>205</b>	<b>9.37</b>	<b>1349</b>	<b>61.68</b>	<b>169</b>	<b>7.73</b>	<b>464</b>	<b>21.22</b>

Source: Census of India, 2011

**Table 8: Health Infrastructure in the Study Area**

S. No.	Village	Primary Health Canters (Number)		Maternity And Child Welfare Centre (Numbers)		Veterinary Hospital (Numbers)	
		Hospital	Doctors	Hospital	Doctors	Hospital	Doctors
1.	Domanal	0	0	0	0	0	0
2.	Hadalasang	0	0	0	0	0	0
3.	Inchageri	1	1	1	1	1	1
4.	Jigajeevani	1	1	1	1	1	1
5.	Kannur	1	1	1	1	1	1
6.	Koluragi	0	0	0	0	0	0
7.	Mahaveernagar	0	0	0	0	0	0
8.	Satalagaon[P.B.]	0	0	0	0	1	0
9.	Savalsang	0	0	0	0	0	0
<b>Total</b>		<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>4</b>	<b>3</b>

Source: Census of India, 2011

**Table 9: Educational Infrastructure in the Study Area**

S. No.	Village	Govt. Primary School (Numbers)	Govt. Middle School (Numbers)	Govt. Secondary School (Numbers)	Govt. Sr. Secondary School (Numbers)	Govt./Private Arts and Science Degree College (Numbers)
1.	Domanal	6	3	0	0	0
2.	Hadalasang	7	2	1	0	0
3.	Inchageri	1	2	1	0	0
4.	Jigajeevani	1	3	2	0	0
5.	Kannur	11	5	2	1	0
6.	Koluragi	2	1	0	0	0
7.	Mahaveernagar	0	0	0	0	0
8.	Satalagaon[P.B.]	1	1	0	0	0

9.	Savalsang	3	1	1	0	0
<b>Total</b>		<b>32</b>	<b>18</b>	<b>7</b>	<b>1</b>	<b>0</b>

*Source: Census of India, 2011*



## **ANNEXURE II : PHOTO LOG**



CONSULTATION



CONSULTATION



HAZARDOUS WASTE STORAGE

OIL SPILL KIT



HSE NOTICE BOARD

SUB-STATION



Outside Site Office



Site



Site



Safety Room



Site office



Site office





First Aid



First Aid Kit



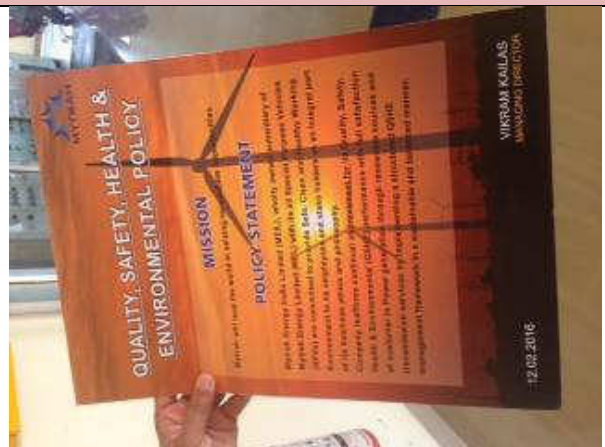
Notice Board



Notice Board



Control Room



Notice Board



Back side of Mytrah's Office



Control Room at Substation



Substation






Substation office



## **ANNEXURE III : GRIEVANCE REDRESSAL**





Site Name: Savalsang

Sl. No.	Claimants Name	Grievance date	Detail of the issue	Name of the Responsible person/Resolver	Grievance resolved date	Signature of claimant	Sign. Site incharge
1	Mr. Kannan M/s. Gamesa Operation Team	28.01.2015	SVG193 WTG access road blocked by villager Adivappa Teli for balance payment of purchased land	M/s Mytrah Energy BD team	Issue resolved 30.01.2015		
2.	M/s DL Constructions /M/s Mytrah Site Engineer	05.09.2014	Feeder6 Approach Road Land Owner Mr. Anil blocked road and demanding to make proper road water drainage system to avoid crop damages	M/s Mytrah Energy BD team and Civil Team	Issue resolved 25.09.2014		
3.	Savalsang Villagers	11.11.2015	Unaware about wind farm safety precautions asked for training	M/s Mytrah Asset Management team	Safety Training Given 07.12.2015		



## GRIEVANCE REDRESSAL FORMAT

QSHE

4	Mr. Kannan M/s. Gamesa Operation Team	04.06.2016	SVG 15 WTG access road blocked by Mr. Ramgonda Balganur demanding to make proper water drainage system to avoid crop damages	M/s Mytrah Asset Management team	Water drainage cleaned 06.06.2016	 7/6/2016
5	Mr. Sidharam Sosatti M/s Aarudhra Wind energy Ltd, SS & Line team	07.06.2016	SVG43 WTG access road blocked by Land owners (farmers) demanding to make proper water drainage system to avoid crop damages	M/s Mytrah Asset Management team	Water drainage cleaned 11.06.2016	 11/6/2016



## **ANNEXURE IV : MEIL's EHS POLICY**



**Mytrah Energy (India) Limited**  
(CIN : U40108TG2009PLC065804)  
# 8001, S.No.109, Q-City,  
Nanakramguda, Gachibowli,  
Hyderabad - 500032, India,  
Tel: +91 40 33760100,  
www.mytrah.com

## **Quality, Safety, Health & Environment Policy**

**Policy Statement:** Mytrah Energy India Limited (MEIL), wholly owned subsidiary of Mytrah Energy Limited (MEL) with its all Special Purpose Vehicles (SPVs) are committed to provide Safe, Clean and Healthy Working Environment to its employees and stake holders as an integral part of its business ethics and philosophy.

Company reaffirms continual improvement for its Quality, Safety, Health & Environment (QSHE) performance with full satisfaction of customer in Power generation through renewable sources and transmission services by implementing a structured QSHE management framework in a sustainable and balanced manner.

**Scope:** Policy applies to employees, contractors across all its operations and applicable stake holders at large in the periphery of Asset management and will be displayed visibly in office/public domain.

**Objectives:** 1) Ensure customer satisfaction with product and services offered by us with proper feedback mechanism.

2) Promote a Safe, Clean and Healthy Environment to eliminate /minimize and/or control adverse environmental impact and occupational health and safety risks arising out of our operations.

3) Establish and achieve QSHE objectives and Targets with adequate management plan and programs.

4) Adhere and comply with applicable QSHE legislations, regulations and other requirements pertaining to EHS and community at large.

5) Conserve natural resources and energy and promote waste avoidance and recycling measures in a sustainable way not impacting the nature.

6) Ensure involvement of employees, contractors, stake holders by providing appropriate training and awareness with effective communication for sound QSHE performances.

7) Focus on continual improvement of applicable process and performances through reporting, monitoring and reviewing at regular intervals.

*Vikram Kailas*

(Vikram Kailas)  
Managing Director

Date : 12.02.2016



## **ANNEXURE V : LAND DOCUMENTS**



LAND DETAILS OF SAVALSUNG							
SL.NO	LOC.NO	TYPE OF LAND	DISTRICT	TALUK	VILLAGE	SY.NO	EXTENT IN ACRE
1	88	Private	Bijapur	Indi	savalsang	273/1	1.625
2	65	Private	Bijapur	Indi	savalsang	219/2	3.750
3	66	Private	Bijapur	Indi	savalsang	219/3	
4	96	Private	Bijapur	Indi	savalsang	239/1	1.375
5	64	Private	Bijapur	Indi	savalsang	228/1	2.000
6	58	Private	Bijapur	Indi	savalsang	297/2	5.550
7	57	Private	Bijapur	Indi	savalsang		
8	15	Private	Bijapur	Indi	Jigajivanagi	371/5	3.475
9	16	Private	Bijapur	Indi	Jigajivanagi	371/5	3.475
10	22	Private	Bijapur	Indi	hadalasanga	175/2	2.000
11	25	Private	Bijapur	Indi	savalsang	71/1	1.200
12	26	Private	Bijapur	Indi	savalsang	72/1	1.750
13	27	Private	Bijapur	Indi	savalsang	74/3	1.500
14	35	Private	Bijapur	Indi	Jigajivanagi	419/3	2.000
15	40	Private	Bijapur	Indi	Jigajivanagi	389/4	1.500
16	50	Private	Bijapur	Indi	savalsang	24/4	1.650
17	85	Private	Bijapur	Indi	Inchageri	490/3	2.000
18	51	Private	Bijapur	Indi	Inchageri	479/4	1.325
19	52	Private	Bijapur	Indi	Inchageri	479/6	1.875
20	53	Private	Bijapur	Indi	savalsang	26/2	1.500
21	90	Private	Bijapur	Indi	Inchageri	116/4	3.375
22	91	Private	Bijapur	Indi	Inchageri	116/4	3.375
23	106	Private	Bijapur	Indi	Inchageri	288/2	2.100
24	107	Private	Bijapur	Indi	Inchageri	283/5	2.000
25	112	Private	Bijapur	Indi	M Nagar	275/1	3.850
26	119	Private	Bijapur	Indi	M Nagar	266/1	1.575
27	120	Private	Bijapur	Indi	M Nagar	264/2	1.750
28	103	Private	Bijapur	Indi	M Nagar	179/11	1.625
29	196	Private	Bijapur	Indi	Koluragi	65/2	0.750
30		Private	Bijapur	Indi	Koluragi	65/3	0.750
31	176	Private	Bijapur	Indi	Koluragi	77	2.000
32	41	Private	Bijapur	Indi	Jigajivanagi	389/7	3.000
33	42	Private	Bijapur	Indi			
34	110	Private	Bijapur	Indi	M Nagar	276/8	1.650
35	111	Private	Bijapur	Indi	M Nagar	276/9	2.600
36	118	Private	Bijapur	Indi	M Nagar	274/1	3.000

37	28	Private	Bijapur	Indi	savalasanga	49/7	1.850
38	34	Private	Bijapur	Indi	jigajivanagi	419/4	3.000
39	154	Private	Bijapur	Indi	savalasanga	74/4	1.250
40	83	Private	Bijapur	Indi	Inchageri	452/3	2.150
41	17	Private	Bijapur	Indi	jigajivanagi	350/3	2.625
42	31	Private	Bijapur	Indi	jigajivanagi	386/3	5.325
43	32	Private	Bijapur	Indi			
44	33	Private	Bijapur	Indi			
45	30	Private	Bijapur	Indi	Jigajivanagi	367/2	2.000
46	49	Private	Bijapur	Indi	Jigajivanagi	385/5	1.250
47	39	Private	Bijapur	Indi	Jigajivanagi	389/1	1.500
48	105	Private	Bijapur	Indi	Inchageri	499/1	1.750
49	18	Private	Bijapur	Indi	Jigajivanagi	350/4	2.000
50	63	Private	Bijapur	Indi	kolurgi	137/6	1.750
51	157	Private	Bijapur	Indi	savalsang	284/4	1.625
52	60	Private	Bijapur	Indi	savalsang	210/4	1.500
53	62	Private	Bijapur	Indi	savalsang	227/1	3.500
54	126	Private	Bijapur	Indi	Savalasang	258/2	1.250
55	19	Private	Bijapur	Indi	jigajivanagi	358/3	2.000
56	198	Private	Bijapur	Indi	Inchageri	452/7	1.500
57	197	Private	Bijapur	Indi	Inchageri	455/6	1.500
58	43	Private	Bijapur	Indi	Jigajivanagi	408/2	1.250
59	139	Private	Bijapur	Indi	Koluragi	126/1a	2.125
60	168	Private	Bijapur	Indi	M Nagar	249/2	1.750
61	97	Private	Bijapur	Indi	Savalasang	243/1	1.750
62	75	Private	Bijapur	Indi	SAVALSANG	287/1	7.100
63	76	Private	Bijapur	Indi			
64	128	Private	Bijapur	Indi	M Nagar	162/3	1.500
65		Private	Bijapur	Indi	M Nagar	162/2	0.500
66	129	Private	Bijapur	Indi	M Nagar	151/5	1.125
67		Private	Bijapur	Indi	M Nagar	151/4	1.125
68	136	Private	Bijapur	Bijapur	Kannur	515/2	1.500
69	125	Private	Bijapur	Indi	Inchageri	487/7	5.000
70	173	Private	Bijapur	Bijapur	Kannur	622/2c	1.500
71	195	Private	Bijapur	Indi	Koluragi	66/6	0.500
		Private	Bijapur	Indi	Koluragi	65/7	1.375
72		Private	Bijapur	Indi	Koluragi	65/5	0.200
73	135	Private	Bijapur	Bijapur	Kannur	512/2	1.125
74	145	Private	Bijapur	Bijapur	Kannur	653/2	1.750

75	141	Private	Bijapur	Bijapur	Kannur	645/1	1.500
76	175	Private	Bijapur	Indi	Koluragi	67/1B	3.000
77	174	Private	Bijapur	Indi	Koluragi	68/2A	2.125
78	143	Private	Bijapur	Bijapur	Kannur	648/1	1.250
79	94	Private	Bijapur	Indi	M Nagar	109/2	1.250
80	150	Private	Bijapur	Bijapur	Kannur	498/1	1.375
81	148	Private	Bijapur	Bijapur	Kannur	660/2A	1.250
82	137	Private	Bijapur	Bijapur	Kannur	516/1B	1.625
83	155	Private	Bijapur	Indi	Savalasang	308	3.500
84	156	Private	Bijapur				
85	177	Private	Bijapur	Indi	Koluragi	75/2	2.000
86	179	Private	Bijapur	Bijapur	Domnal	84/2	3.175
87	180	Private	Bijapur	Bijapur			
88	194	Private	Bijapur	Bijapur	Domnal	73/2	2.250
89	144	Private	Bijapur	Bijapur	Kannur	651/5	1.500
90	134	Private	Bijapur	Bijapur	Kannur	498/5	1.000
91	193	Private	Bijapur	Bijapur	Domnal	72/2	2.050
92	140	Private	Bijapur	Bijapur	KANNUR	643/1	1.750
93	138	Private	Bijapur	Bijapur	KANNUR	639/5	1.625
94	147	Private	Bijapur	Bijapur	KANNUR	660/1B	2.375
95	131	Private	Bijapur	Bijapur Bijapur	KANNUR	431/1	3.250
96	132	Private	Bijapur				
97	178	Private	Bijapur	Bijapur	Domnal	78/1	1.750
98	153	Private	Bijapur	Bijapur	Kannur	656	1.500
99	166	Private	Bijapur	Indi	Savalasang	263/1	1.250
100		Private	Bijapur	Indi	Savalasang	264/1b	0.500
101	108	Private	Bijapur	Indi	M Nagar	276/6	0.825
102	122	Private	Bijapur	Indi	M Nagar	176/6	6.500
103	109	Private	Bijapur	Indi	M Nagar	276/7	1.375
104	123	Private	Bijapur	Indi	M Nagar	179/14	1.200
105	29	Private	Bijapur	Indi	savalasang	49/6	0.300
106		Private	Bijapur	Indi	savalasang	42	0.125
107	54	Private	Bijapur	Indi	Jigajivanagi	416/1	1.075
108		Private	Bijapur	Indi	Jigajivanagi	416/2	1.000
109	170	Private	Bijapur	Indi	jigajivanagi	414/1a	1.500
110	23	Private	Bijapur	Indi	hadalasanga	161/1	1.500
111	101	Private	Bijapur	Indi	Inchageri	503/1	1.500
112	37	Private	Bijapur	Indi	Jigajivanagi	413/3	4.000
113	48	Private	Bijapur	Indi	hadalasanga	173/2	1.000



114		Private	Bijapur	Indi	hadalasanga	173/2	
115	68	Private	Bijapur	Indi	Inchageri	513/5	3.475
116	165	Private	Bijapur	Indi	M Nagar	109	2.000
117	47	Private	Bijapur	Indi	Savalsang	44/2	1.125
118	74	Private	Bijapur	Indi	Savalsang	299/2	1.500
119	172	Private	Bijapur	Indi	Inchageri	78/1 2 3	1.05
120	20	Private	Bijapur	Indi	jigajivanagi	357	1.500
	<b>112</b>						<b>218.850</b>



## **ANNEXURE VI : BASELINE MONITORING DATA**



## AMBIENT AIR QUALITY MONITORING & ANALYSIS TEST REPORT

<b>Issued to:</b> <b>Mytrab Vayu Krishna Pvt Ltd.</b> Savalsang, INDI, Vijayapur, Karnataka. <b>C/o. Voyants Solutions Private Limited (VSPL).</b> Gurgaon		Issued Date	13.06.2016
		Our Ref No	VL/AAQ/16061529460
		Work Order No	VSPL/EMS/06/2016-17
		Your Ref Date	18.05.2016
Sample collection date	31.05.2016	Sample condition of testing	Found Ok
Sample Registration	05.06.2016		
Monitoring conducted by <b>VISON LABS</b>			

Monitoring Station : Near Site Office  
 Ambient Temperature °C : 36 (Average)  
 Wind Direction : S  
 Weather Condition : Clear  
 Flow Rate of Gases (LPM) : 0.2

### TEST RESULTS

S.No.	Parameters	Units	Test Results	National Ambient Air Quality Standards (NAAQS)	Analysis Method
1.	Particulate Matter (PM <sub>10</sub> )	µg/m <sup>3</sup>	52.7	<100	Respirable Dust Sampler method (IS : 5182 P 23 - 2006)
2.	Particulate Matter (PM <sub>2.5</sub> )	µg/m <sup>3</sup>	25.0	<60	EPA - Quality Assurance Guidance Document 2.12
3.	Sulphur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	6.7	<80	Improved West and Geake method (IS : 5182 P II - 2001)
4.	Oxides of Nitrogen (NO <sub>2</sub> )	µg/m <sup>3</sup>	14.1	<80	Jacob and Hochheiser modified (Na-Arsenite IS : 5182 P VI - 2001)
5.	Carbon Monoxide as (CO)	mg/m <sup>3</sup>	<1.00	<2.0	CO Analyzer

Page 1 of 1

Note: -

- The results of the monitored data indicate that the ambient air quality of the region in general is conformity with respect to norms of National Ambient Air Quality standards
- Sampling & Analysis were done as per standard method prescribed by CPCB

Analyzed by

Authorized Signature

VL/QEHS/5.10/TR

H.No. 16-11-23/37/A, Flat No. 205, 2nd Floor, Opp. R.T.A. Office, Musarambagh, Ma. akpet, Hyderabad - 500 036.  
 Tel : 040-24544320 / 85792001, Mob : 98491 10019 / 94408 41338, E-mail : info@visonlabs.com, vison.labs@gmail.com

NOTE : This Report is subject to the terms and conditions mentioned overleaf.



## AMBIENT AIR QUALITY MONITORING & ANALYSIS TEST REPORT

Issued to: Mytrah Vayu Krishna Pvt Ltd. Savalsang, INDI, Vijayapur, Karnataka. C/o. Voyants Solutions Private Limited (VSPL), Gurgaon		Issued Date	13.06.2016
		Our Ref No	VL/AAQ/16061529461
		Work Order No	VSPL/EMS/06/2016-17
		Your Ref Date	18.05.2016
Sample collection date	31.05.2016	Sample condition of testing	Found Ok
Sample Registration	05.06.2016		
Monitoring conducted by VISON LABS			

Monitoring Station : **CMC Building (AAQ 2)**  
 Ambient Temperature °C : **35 (Average)**  
 Wind Direction : **NE**  
 Weather Condition : **Clear**  
 Flow Rate of Gases (l.PM) : **0.2**

### TEST RESULTS

S.No.	Parameters	Units	Test Results	National Ambient Air Quality Standards (NAAQS)	Analysis Method
1.	Particulate Matter (PM <sub>10</sub> )	µg/m <sup>3</sup>	42.5	<100	Respirable Dust Sampler method (IS : 5182 P 23 - 2006)
2.	Particulate Matter (PM <sub>2.5</sub> )	µg/m <sup>3</sup>	20.5	<60	EPA - Quality Assurance Guidance Document 2.12
3.	Sulphur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	5.5	<80	Improved West and Geake method (IS : 5182 P II - 2001)
4.	Oxides of Nitrogen (NO <sub>2</sub> )	µg/m <sup>3</sup>	11.5	<80	Jacob and Hochheiser modified (Na- Arsenite IS : 5182 P VI - 2001)
5.	Carbon Monoxide as (CO)	mg/m <sup>3</sup>	<1.00	<2.0	CO Analyzer

Page 1 of 1

Note: -

- The results of the monitored data indicate that the ambient air quality of the region in general is conformity with respect to norms of National Ambient Air Quality standards
- Sampling & Analysis were done as per standard method prescribed by CPCB

Analyzed by

Determining  
 Authorized Signature  
 Hyderabad

VL/QEHS/5.10/TR

H.No. 16-11-23/37/A, Flat No. 205, 2nd Floor, Opp. R.T.A. Office, Musarambagh, Malakpet, Hyderabad - 500 036.  
 Tel : 040-24544320 / 65792001. Mob : 98491 10019 / 94408 41338. E-mail : info@visonlabs.com, vison.labs@gmail.com

NOTE : This Report is subject to the terms and conditions mentioned overleaf.





## AMBIENT AIR QUALITY MONITORING & ANALYSIS TEST REPORT

<b>Issued to:</b> <b>Mytrah Vayn Krishna Pvt Ltd.</b> Savalsang, INDL Vijayapur, Karnataka. <b>C/o. Voyants Solutions Private Limited (VSPL).</b> Gurgaon		Issued Date	13.06.2016
		Our Ref No	VL/AAQ/16061529460/01
		Work Order No	VSPL/EMS/06/2016-17
		Your Ref Date	18.05.2016
Sample collection date	01.06.2016	Sample condition of testing	Found Ok
Sample Registration	05.06.2016		
Monitoring conducted by <b>VISON LABS</b>			

Monitoring Station : **Near Site Office**  
 Ambient Temperature °C : **35 (Average)**  
 Wind Direction : **NE**  
 Weather Condition : **Clear**  
 Flow Rate of Gases (LPM) : **0.2**

### TEST RESULTS

S.No.	Parameters	Units	Test Results	National Ambient Air Quality Standards (NAAQS)	Analysis Method
1.	Particulate Matter (PM <sub>10</sub> )	µg/m <sup>3</sup>	56.2	<100	Respirable Dust Sampler method (IS : 5182 P 23 - 2006)
2.	Particulate Matter (PM <sub>2.5</sub> )	µg/m <sup>3</sup>	26.3	<60	EPA - Quality Assurance Guidance Document 2.12
3.	Sulphur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	6.3	<80	Improved West and Geake method (IS : 5182 P II - 2001)
4.	Oxides of Nitrogen (NO <sub>2</sub> )	µg/m <sup>3</sup>	15.8	<80	Jacob and Hochheiser modified (Na-Arsenite IS : 5182 P VI - 2001)
5.	Carbon Monoxide as (CO)	mg/m <sup>3</sup>	<1.00	<2.0	CO Analyzer

Page 1 of 1

Note: -

- The results of the monitored data indicate that the ambient air quality of the region in general is conformity with respect to norms of National Ambient Air Quality standards
- Sampling & Analysis were done as per standard method prescribed by CPCB

*Olaf*  
Analyzed by



VL/QEHS/5.10/TR

H.No. 16-11-23/37/A, Flat No. 205, 2nd Floor, Opp. R.T.A. Office, Musarambagh, Malakpet, Hyderabad - 500 036  
 Tel : 040-24544320 / 65792001, Mob : 98491 10019 / 94408 41338, E-mail : info@visonlabs.com, vison.labs@gmail.com

NOTE : This Report is subject to the terms and conditions mentioned overleaf.



## AMBIENT AIR QUALITY MONITORING & ANALYSIS TEST REPORT

<b>Issued to:</b> <b>Mytrah Vayu Krishna Pvt Ltd.</b> Savalsang, INDI, Vijayapur, Karnataka. <b>C/o. Voyants Solutions Private Limited (VSPL).</b> Gurgaon		Issued Date	13.06.2016
		Our Ref No	VL/AAQ/16061529461/01
		Work Order No	VSPL/EMS/06/2016-17
		Your Ref Date	18.05.2016
Sample collection date	01.06.2016	Sample condition of testing	Found Ok
Sample Registration	05.06.2016		
Monitoring conducted by <b>VISON LABS</b>			

Monitoring Station : **CMC Building (AAQ 2)**  
 Ambient Temperature °C : 36 (Average)  
 Wind Direction : N  
 Weather Condition : Clear  
 Flow Rate of Gases (LPM) : 0.2

### TEST RESULTS

S.No.	Parameters	Units	Test Results	National Ambient Air Quality Standards (NAAQS)	Analysis Method
1.	Particulate Matter (PM <sub>10</sub> )	µg/m <sup>3</sup>	40.9	<100	Respirable Dust Sampler method (IS : 5182 P 23 - 2006)
2.	Particulate Matter (PM <sub>2.5</sub> )	µg/m <sup>3</sup>	19.2	<60	EPA - Quality Assurance Guidance Document 2.12
3.	Sulphur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	5.9	<80	Improved West and Geake method (IS : 5182 P 11 - 2001)
4.	Oxides of Nitrogen (NO <sub>2</sub> )	µg/m <sup>3</sup>	12.6	<80	Jacob and Hochheiser modified (Na- Arsenite IS : 5182 P VI - 2001)
5.	Carbon Monoxide as (CO)	mg/m <sup>3</sup>	<1.00	<2.0	CO Analyzer

Page 1 of 1

**Note: -**

- The results of the monitored data indicate that the ambient air quality of the region in general is conformity with respect to norms of National Ambient Air Quality standards
- Sampling & Analysis were done as per standard method prescribed by CPCB

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VL/QEHS/5.10/TR

H.No. 16-11-23/37/A, Flat No. 205, 2nd Floor, Opp. R.T.A. Office, Musarambagh, Malakpet, Hyderabad - 500 036.  
 Tel : 040-24544320 / 65792001, Mob : 98491 10019 / 94408 41338, E-mail : info@visonlabs.com, vison.labs@gmail.com

NOTE : This Report is subject to the terms and conditions mentioned overleaf.





# VISION LABS

Environmental Consultants & Analytical Services

Recognised by NABL, NABET-QCI, MoEF&CC,  
ISO : 9001:2008, OHSAS : 18001:2007

## AMBIENT AIR QUALITY MONITORING & ANALYSIS TEST REPORT

<b>Issued to:</b> <b>Mytrah Vayu Krishna Pvt Ltd.</b> Savalsang, INDI, Vijayapur, Karnataka. <b>C/o. Voyants Solutions Private Limited (VSPL).</b> Gurgaon		Issued Date	13.06.2016
		Our Ref No	VI/AAQ/16061529462
		Work Order No	VSPL/EMS/06/2016-17
		Your Ref Date	18.05.2016
Sample collection date	02.06.2016	Sample condition of testing	Found Ok
Sample Registration	05.06.2016		
Monitoring conducted by <b>VISION LABS</b>			

Monitoring Station : **Kannur Village (AAQ 3)**  
 Ambient Temperature °C : 35 (Average)  
 Wind Direction : N  
 Weather Condition : Clear  
 Flow Rate of Gases (LPM) : 0.2

### TEST RESULTS

S.No.	Parameters	Units	Test Results	National Ambient Air Quality Standards (NAAQS)	Analysis Method
1.	Particulate Matter (PM <sub>10</sub> )	µg/m <sup>3</sup>	47.4	<100	Respirable Dust Sampler method (IS : 5182 P 23 - 2006)
2.	Particulate Matter (PM <sub>2.5</sub> )	µg/m <sup>3</sup>	22.2	<60	EPA - Quality Assurance Guidance Document 2.12
3.	Sulphur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	6.5	<80	Improved West and Geake method (IS : 5182 P II - 2001)
4.	Oxides of Nitrogen (NO <sub>2</sub> )	µg/m <sup>3</sup>	12.3	<80	Jacob and Hochheiser modified (Na- Arsenite IS : 5182 P VI - 2001)
5.	Carbon Monoxide as (CO)	mg/m <sup>3</sup>	<1.00	<2.0	CO Analyzer

Note: -

- The results of the monitored data indicate that the ambient air quality of the region in general is conformity with respect to norms of National Ambient Air Quality standards
- Sampling & Analysis were done as per standard method prescribed by CPCB

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## AMBIENT AIR QUALITY MONITORING & ANALYSIS TEST REPORT

<b>Issued to:</b> <b>Mytrah Vayu Krishna Pvt Ltd.</b> Savalsang,INDI,Vijayapur, Karnataka. <b>C/o. Voyants Solutions Private Limited (VSPL).</b> Gurgaon		Issued Date	13.06.2016
		Our Ref No	VL/AAQ/16061529462/01
		Work Order No	VSPL/EMS/06/2016-17
		Your Ref Date	18.05.2016
Sample collection date	03.06.2016	Sample condition of testing	Found Ok
Sample Registration	05.06.2016		
Monitoring conducted by <b>VISON LABS</b>			

Monitoring Station : **Kannur Village (AAQ 3)**  
 Ambient Temperature °C : **35 (Average)**  
 Wind Direction : **NE**  
 Weather Condition : **Clear**  
 Flow Rate of Gases (LPM) : **0.2**

### TEST RESULTS

S.No.	Parameters	Units	Test Results	National Ambient Air Quality Standards (NAAQS)	Analysis Method
1.	Particulate Matter (PM <sub>10</sub> )	µg/m <sup>3</sup>	48.6	<100	Respirable Dust Sampler method (IS : 5182 P 23 - 2006)
2.	Particulate Matter (PM <sub>2.5</sub> )	µg/m <sup>3</sup>	24.6	<60	EPA - Quality Assurance Guidance Document 2.12
3.	Sulphur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	6.0	<80	Improved West and Geake method (IS : 5182 P II - 2001)
4.	Oxides of Nitrogen (NO <sub>x</sub> )	µg/m <sup>3</sup>	13.2	<80	Jacob and Hochheiser modified (Na-Arsenite IS : 5182 P VI - 2001)
5.	Carbon Monoxide as (CO)	mg/m <sup>3</sup>	<1.00	<2.0	CO Analyzer

Note: -

- The results of the monitored data indicate that the ambient air quality of the region in general is conformity with respect to norms of National Ambient Air Quality standards.
- Sampling & Analysis were done as per standard method prescribed by CPCB

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# VISION LABS

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ISO : 9001:2008, OHSAS : 18001:2007

## AMBIENT NOISE QUALITY MONITORING LEVELS

<b>Issued to:</b> <b>Mytrah Vayu Krishna Pvt Ltd,</b> Savalsang, INDI, Vijayapur, Karnataka. <b>C/o. Voyants Solutions Private Limited (VSPL),</b> Gurgaon	Issued Date	13.06.2016
	Our Ref No	VL/ANAQ/16061529463
	Work Order No	VSPL/EMS/06/2016-17
	Your Ref Date	18.05.2016
Monitoring conducted by <b>VISION LABS</b>		

### Total Average Results Units: dB (A)

S.NO	Monitoring Time	Site Office 31.05.2016 to 01.06.2016	CMC Building 01.06.2016 to 02.06.2016	Kannur Village 02.06.2016 to 03.06.2016	Inchageri Village 03.06.2016 to 04.06.2016
1	06.00	46.3	45.4	50.7	49.7
2	07.00	50.3	49.3	55.8	54.7
3	08.00	53.5	52.5	57.1	56.0
4	09.00	51.5	50.5	52.3	51.3
5	10.00	55.7	54.6	59.0	57.8
6	11.00	50.7	49.7	51.7	50.7
7	12.00	49.9	48.9	50.5	49.5
8	13.00	48.3	47.4	49.8	48.8
9	14.00	45.9	45.0	46.3	45.4
10	15.00	50.3	49.3	50.6	49.6
11	16.00	54.6	53.5	55.8	54.7
12	17.00	56.0	54.9	55.4	54.5
13	18.00	53.9	52.8	54.2	53.1
14	19.00	50.9	49.9	51.7	50.7
15	20.00	47.5	46.6	47.4	46.5
16	21.00	39.5	38.7	38.8	38.0
17	22.00	38.2	37.5	40.4	39.6
18	23.00	37.4	36.7	37.8	37.1
19	24.00	37.5	36.8	38.3	37.5
20	01.00	36.8	36.1	38.8	38.0
21	02.00	37.8	37.1	40.8	40.0
22	03.00	38.4	37.6	39.9	39.1
23	04.00	39.8	39.0	43.3	42.5
24	05.00	42.1	41.3	45.9	45.0

### Summary of the results

Name of location	Leq day dB(A)	Leq Night dB(A)	Leq Day Night dB(A)
Site Office	51.8	37.4	50.8
CMS Building	50.8	36.7	49.8
Kannur Village	53.7	38.8	52.6
Inchageri Village	52.6	38.0	51.5

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NOTE : This Report is subject to the terms and conditions mentioned overleaf





## TEST REPORT

<b>Issued to:</b> <b>Mytrab Vayu Krishna Pvt Ltd.</b> Savalsang, INDI, Vijayapur, Karnataka. <b>C/o. Voyants Solutions Private Limited (VSPL),</b> Gurgaon		Issued Date	13.06.2016
		Our Ref No	VL/ VSPL/W/16061529464
		Work Order No	VSPL/EMS/06/2016-17
		Your Ref Date	18.05.2016
Sample description	Site Office Bore Well Water	Mode of Packing	Pet bottle
Appearance of the Sample	Clear Liquid	Sample condition of testing	Found Ok
Sample collection date	03.06.2016	Sample Quantity	1 ltr
Sample Collection Time	10.20 am	Analysis starting date	05.06.2016
Sample Registration date	05.06.2016	Analysis Completion date	10.06.2016
Sample collected by VISON LABS			

## TEST RESULTS PHYSICAL PARAMETERS

PHYSICAL PARAMETERS					
S.No		Test Method	Units	Test Results	Drinking Water Limits As per IS: 10500:2012
1.	pH at 25 <sup>o</sup> C	IS:3025 part 11 1983 RA-2012	--	8.2	6.5 - 8.5
2.	Turbidity	IS: 3025 Part 10 1984 RA-2002	NTU	<1.0	5 - 10
3.	Conductivity at 25 <sup>o</sup> C	IS: 3025 Part 14 1984 RA-2013	µMho/cm	454	--
4.	Total Suspended Solids	IS: 3025 Part 17 1984 RA-2012	mg/L	2.2	--
5.	Total Dissolved Solids	IS: 3025 Part 16 1984 RA-2006	mg/L	280	--
6.	Colour	IS: 3025 Part 4 1983 RA-2006	Hazen	<01	5.00
7.	Taste	IS:3025 part 08 1984 RA-2002	-	Agreeable	Agreeable
8.	Odor	IS:3025 part 05 1983	-	Unobjectionable	Unobjectionable

## CHEMICAL PARAMETERS

9.	Total Alkalinity as CaCO <sub>3</sub>	IS: 3025 Part 23 1986, RA-2003	mg/L	110	--
10.	Chlorides as Cl <sup>-</sup>	IS: 3025 Part 32 1988, RA-2009	mg/L	55	250 - 1000
11.	Sulphates as SO <sub>4</sub> <sup>-2</sup>	IS: 3025 Part 24 1986, RA-2003	mg/L	31.2	200 - 400
12.	Nitrates as NO <sub>3</sub>	IS: 3025 Part 34 1988, RA-2003	mg/L	3.8	40 - 100
13.	Phosphates as PO <sub>4</sub>	IS: 3025 Part 31 1988, RA-2003	mg/L	<0.02	--
14.	Total Hardness as CaCO <sub>3</sub>	IS: 3025 Part 21 2009	mg/L	40	200 - 600
15.	Calcium as Ca	IS: 3025 Part 40 1991, RA-2009	mg/L	12	75 - 200
16.	Magnesium as Mg	IS: 3025 Part 46 1994, RA-2003	mg/L	2.4	30 - 100
17.	Sodium as Na	IS: 3025 Part 45 1993, RA-2009	mg/L	82.8	--
18.	Potassium as K	IS: 3025 Part 45 1993, RA-2009	mg/L	1.9	--
19.	Fluorides as F <sup>-</sup>	IS: 3025 Part 60 2008	mg/L	0.3	1 - 1.5
20.	Iron as Fe	IS: 3025 Part 53 2003, RA-2003	mg/L	0.08	0.3 - 1
21.	Phenolic Compounds	APHA 22nd Edition 5330D	mg/L	<0.001	0.001 - 0.002
22.	Cyanide as CN <sup>-</sup>	IS 3025 Part 27 1986	mg/L	<0.001	0.005
23.	Residual Chlorine as Cl <sup>-</sup>	IS 3025 Part 26 1986	mg/L	<0.001	0.2
24.	Cadmium as Cd	IS 3025 Part 41 1992	mg/L	<0.001	0.01
25.	Total Chromium as Cr	IS 3025 Part 52 2003	mg/L	<0.001	0.05
26.	Lead as Pb	IS 3025 Part 47 1994	mg/L	<0.02	0.05

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# VISON LABS

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ISO : 9001:2008, OHSAS : 18001:2007

Sample description	Site Office Bore Well Water
Our Ref No	VL/ VSPL/W/16061529464

S.No		Test Method	Units	Test Results	Drinking Water Limits As per IS: 10500:2012
27.	Zinc as Zn	IS 3025 Part 49 1994	mg/L	0.008	5 - 15
28.	Manganese as Mn	IS: 3025 Part 24 2006	mg/L	<0.001	30 - 100
29.	Copper as Cu	IS 3025 Part 42 1992	mg/l.	0.01	0.05 - 1.5
30.	Nickel as Ni	IS 3025 Part 54 2003	mg/l.	<0.001	3.0 - 5.0
31.	Boron	IS 3025 Part 57 2005	mg/l.	<0.001	1.00
32.	Anionic Detergents	IS 13428 Annex K	mg/L	<0.001	0.20
33.	Mineral Oil	APHA 22 <sup>nd</sup> Edition 2012	mg/L	<0.001	0.01
34.	Aluminium as Al	IS 3025 Part 55 2003	mg/L	<0.001	0.03
35.	Mercury as Hg	IS 3025 Part 48 1994	mg/L	<0.0002	0.00
36.	Pesticides	USEPA	µg/L	<0.001	Absent

Note: Sampling & Analysis were done as per standard methods prescribed by BIS.

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ISO : 9001:2008, OHSAS : 18001:2007

## TEST REPORT

<b>Issued to:</b> <b>M/S. Mytrah Energy India Ltd.</b> <b>Vajrakarur, Anantapur (Dist),</b> <b>Andhra Pradesh</b> <b>C/o. Voyants Solutions Private Limited (VSPL)</b>		Issued Date	13.06.2016
		Our Ref No	VL/SW/16061529465
		Work Order No	VSPL/EME/03/2016-17
		Your Ref Date	18.05.2016
Sample description	<b>Jigtevangi Lake Water</b>	Mode of Packing	Pet bottle
Appearance of the Sample	Clear Liquid	Sample condition of testing	Found Ok
Sample collection date	03.06.2016	Sample Quantity	1 ltr
Sample Collection Time	12.20 PM	Analysis starting date	05.06.2016
Sample Registration date	05.06.2016	Analysis Completion date	10.06.2016
Sample collected by VISON LABS			

## TEST RESULTS PHYSICAL PARAMETERS

PHYSICAL PARAMETERS					
S.No		Test Method	Units	Test Results	IS: 2296 Class C Specifications
1.	pH at 25 deg C	IS:3025 part 11 1983 RA-2012	-	8.30	6.5 – 8.5
2.	Color	IS: 3025 Part 4 1983 RA-2006	Hazen units	3.6	300
3.	Conductivity at 25 deg C	IS: 3025 Part 14 1984 RA-2013	mS/cm	1164	--
4.	Dissolved Oxygen	IS: 3025 Part 38 1989 RA-2003	mg/L	5.1	4 min
5.	Total Dissolved Solids	IS: 3025 Part 16 1984 RA-2006	mg/L	556	3
6.	BOD ( 3 days at 27°C)	IS: 3025 Part 44 1993 RA-2009	mg/L	24	1500
7.	Total Hardness	IS: 3025 Part 21 2009	mg/L	140	--
8.	Chloride as Cl	IS: 3025 Part 32 1988, RA-2009	mg/L	70	600
9.	Fluorides as F <sup>-</sup>	IS: 3025 Part 60 2008	mg/L	0.5	1.5
10.	Sulphate as SO <sub>4</sub> <sup>2-</sup>	IS: 3025 Part 24 1986, RA-2003	mg/L	95.1	400
11.	Alkalinity	IS: 3025 Part 23 1986, RA-2003	mg/L	380	--
12.	Nitrates as NO <sub>3</sub>	IS: 3025 Part 34 1988, RA-2003	mg/L	4.6	--
13.	Cyanides as CN	IS: 3025 Part 27 1986, RA-2009	mg/L	<0.001	0.05
14.	Calcium as Ca	IS: 3025 Part 40 1991, RA-2009	mg/L	32	--
15.	Magnesium as Mg	IS: 3025 Part 46 1994, RA-2003	mg/L	14.4	--
16.	Sodium as Na	IS: 3025 Part 45 1993, RA-2009	mg/L	199.4	--
17.	Potassium as K	IS: 3025 Part 45 1993, RA-2009	mg/L	2.5	--
18.	Iron as Fe	IS: 3025 Part 53 2003, RA-2003	mg/L	0.12	50
19.	Chromium as Cr	IS 3025 Part 52 2003	mg/L	0.012	0.05
20.	Cadmium as Cd	IS 3025 Part 41 1992	mg/L	0.02	0.01
21.	Lead as Pb	IS 3025 Part 47 1994	mg/L	0.004	0.1
22.	Copper as Cu	IS 3025 Part 42 1992	mg/L	0.072	1.5
23.	Arsenic as As	IS: 3025 Part 37 1988, RA-2003	mg/L	<0.001	0.2
24.	Selenium as Se	IS: 3025 Part 56 2003	mg/L	<0.001	0.05
25.	Phenolics as C <sub>6</sub> H <sub>5</sub> Oh	IS: 3025 Part 43 1992, RA-2003	mg/L	0.02	0.005

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Environmental Consultants & Analytical Services

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ISO : 9001:2008, OHSAS : 18001:2007

Sample description	Jigjeevangi Lake Water
Our Ref No	VL/SW/16061529465

S.No		Test Method	Units	Test Results	IS: 2296 Class C Specifications
26.	Zinc as Zn	IS 3025 Part 49 1994	mg/L	1.1	5
27.	Mercury as Hg	IS 3025 Part 48 1994	mg/L	<0.0002	--
28.	Aluminium as Al	IS 3025 Part 55 2003	mg/L	<0.001	--
29.	Anionic detergents as MBAS	--	mg/l.	0.04	0.12
30.	Oil and grease	IS 3025 Part 39 1991	mg/L	1.2	0.3
31.	Sodium Absorption Ratio	--	meq/L	3.8	--
32.	Insecticides	--	Present/Absent	Absent	Absent
33.	Coliform Organisms	IS 15185 : 2002	MPN/100 ml	180	Should not exceed 5000

Note: Sampling & Analysis were done as per standard methods prescribed by BIS.

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## TEST REPORT

<b>Issued to:</b> <b>Mytrah Vayu Krishna Pvt Ltd.</b> Savalsang, INDI, Vijayapur, Karnataka. <b>C/o. Voyants Solutions Private Limited (VSPL).</b> Gurgaon		Issued Date	13.06.2016
		Our Ref No	VL/TML/W/16061529466
		Work Order No	VSPL/FMS/06/2016-17
		Your Ref Date	18.05.2016
Sample description	Soil Sample collected at Near Site Office	Mode of Packing	Self lock cover
Appearance of the Sample	Light Brown Color Particles	Sample condition of testing	Found Ok
Sample collection date	03.06.2016	Sample Quantity	1kg
Sample Collection Time	12.00 PM	Analysis starting date	06.06.2016
Sample Registration date	05.06.2016	Analysis Completion date	10.06.2016
Sample collected by VISON LABS			

## TEST RESULTS

S.No	Parameters	Units	Test results
1.	Texture	-	Clay
	Sand	%	20
	Silt	%	24
	Clay	%	56
2.	pH (10% Slurry)	-	8.12
3.	Conductivity	µmhos/cm	220
4.	Moisture	%	6.2
5.	Organic Matter	%	3.8
6.	Bulk density	gram/cc	1.46
7.	Porosity	% v/v	46
8.	S.A.R	meq/kg	0.12
9.	Infiltration capacity	mm/h	38.4
10.	Carbonates	mg/kg	5
11.	Sodium as Na	mg/kg	1.1
12.	Potassium as K	%	2.2
13.	Phosphorus as P	%	0.84
14.	Chloride as Cl	mg/kg	3.2
15.	Zinc as Zn	mg/kg	4.2
16.	Copper as Cu.	mg/kg	0.13
17.	Iron as I/e	mg/kg	0.08
18.	Nitrogen as N	%	5.1
19.	Sulphate as SO <sub>4</sub>	mg/kg	0.25
20.	Boron as B	mg/kg	0.09

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VOYANTS SOLUTIONS PVT. LTD.  
403, 4th Floor, BPTP Park Centra,  
Sector - 30, NH-8, Gurgaon - 122001  
Phone - 0124-4598 200, Telefax - 0124-4019051  
E-mail – [info@voyants.in](mailto:info@voyants.in), [www.voyants.in](http://www.voyants.in)



GOVERNMENT OF ANDHRA PRADESH  
ABSTRACT

ENERGY, INFRASTRUCTURE & INVESTMENT DEPARTMENT - Development of Wind Power in Andhra Pradesh – Andhra Pradesh Wind Power Policy, 2015 - Orders – Issued.

---

ENERGY, INFRASTRUCTURE & INVESTMENT (PR.II) DEPARTMENT

G.O.MS.No. 9

Dated:13.02.2015

Read the following:

1. G.O.Ms.No.48, Energy (Res) Deptt., dated 11.04.2008.
2. G.O.Ms.No.99, Energy (Res) Deptt., dated 09.08.2008.
3. From the VC&MD, NREDCAP, Hyderabad Lr.No.NREDCAP / WE/Govt./2014, dated 25.09.2014.

\*\*\*\*

**ORDER :**

In order to promote Wind Power Projects, the Government of Andhra Pradesh have issued orders formulating Andhra Pradesh Wind Power Policy, 2012 vide references 1<sup>st</sup> and 2<sup>nd</sup> read above. The operative period of policy was 5 years and it expired in April, 2013, Considering, the good wind power potential existing in the State and to achieve 4000 MW capacity addition through wind power during the next 5 years period, there is a need to bring out comprehensive wind power policy.

2. Government, after detailed discussions on the proposal vide reference 3<sup>rd</sup> cited with various stakeholders viz., APTRANSCO., APDISCOMs, NREDCAP Wind Power Developers and Associations etc., hereby issue the Wind Power Policy, 2015 as mentioned below:

**PREAMBLE**

India is amongst the largest wind power markets in the world. Wind power is already economical in comparison to conventional power sources and Andhra Pradesh has a huge wind power potential that is yet to be harnessed. The wind power potential in the combined state of Andhra Pradesh as estimated by the National Institute of Wind Energy (NIWE) , formerly known as Centre for Wind Energy Technology (C-WET) is around 14,497 MW at 80 m level with maximum potential existing in the districts of Ananthapur, Kadapa, Kurnool, Chittoor and Nellore districts.

The Government of Andhra Pradesh has earlier issued “Wind Power Policy”, vide G.O.Ms.No.48 dated 11.04.2008 and G.O.Ms.No.99 dated 09.09.2008, to promote wind power projects. Since the policy operative period was for five (5) years, the policy expired in April, 2013. Taking into consideration the rising power requirements of the State post bifurcation and clean energy considerations, the government of Andhra Pradesh is keen to promote wind power generation in a big way.

**OBJECTIVES:**

1. To encourage, develop and promote wind power generation in the State with a view to meet the growing demand for power in an environmentally and economically sustainable manner.
2. To attract private investment to the State for the establishment of large wind power projects.
3. To promote investments for setting up manufacturing facilities in the State, which can generate gainful local employment.

... Contd 2..



## 1 Operative Period

The policy shall come into operation with effect from the date of issuance and shall remain applicable for a period of five (5) years and/ or shall remain in force till such time a new policy is issued.

Wind power projects that are commissioned during the operative period shall be eligible for the incentives declared under this policy, for a period of ten (10) years from the date of commissioning – unless the period is specifically mentioned for any incentive.

## 2 Eligible Developers

All registered companies, Joint Venture Companies, Central and State power generation/ distribution companies and public / private sector wind power developers will be eligible for setting up of wind power projects, either for the purpose of captive/group captive use and/or for selling of electricity to the utilities or third parties, in accordance with the Electricity Act-2003, as amended from time to time.

The entity desiring to set up wind power project(s), either for sale of power and/ or for captive use/group captive use of power within or outside the State, shall inform the Nodal Agency as per the para (9) of this policy.

## 3 Category of Wind Power Projects

Category I	Projects set up in government/revenue lands or forest areas or assigned lands and also in private lands selling power within the state.
Category II	Projects set up for captive use or group captive use /3 <sup>rd</sup> party sale within or outside the state.
Category III	Sale of power at average power purchase cost and availing Renewable Energy Certificate (REC)

### **Category I: Projects set up in government / revenue lands or forest areas or assigned lands and also in private lands selling power within the State**

Power generated from the wind power projects installed entirely or partly on government/ revenue land or forest areas shall be for sale within the State only.

The Govt. of A.P. may consider proposals for allotment of revenue land if available - at the wind power potential areas on first come first serve basis- based on recommendation of NREDCAP, as per the provisions of New Land Allotment Policy announced by the Government vide G.O. Ms. No: 571, Dt: 14-09-2012 of Revenue (Assignment-I) Dept.

To facilitate faster execution of projects, the district collector shall handover advance possession of land including pathways to NREDCAP and the land shall be allotted in the joint name of NREDCAP and the Developer. The concerned district collector after taking into account all the necessary undertakings of land proposal shall permit the developer to start the construction. NREDCAP shall withdraw its rights from the land once the project gets commissioned.

In case of forest areas, the developers shall submit the application through the Nodal Agency to the forest department, to consider for allotment as per the guidelines/regulations laid down by the forest department from time to time.

If the wind farm is set up in private land then the Eligible Developer shall procure the land from the landholder on their own.

**Category II: Captive use or group captive use /direct sale to 3rd party sale within the State/States other than A.P. State**

The State will promote wind power producers to set up wind power projects with no cap on capacity for captive use/group captive or sale of power to 3<sup>rd</sup> party within the State/States other than Andhra Pradesh. These projects will also qualify for Renewable Energy Certificates (RECs) subject to applicable regulations/ guidelines issued by the appropriate commission.

**Category III: Projects under Renewable Energy Certificate Mechanism**

The State will promote wind power producers to set up wind power projects with no cap on capacity for sale through Renewable Energy Certificate (REC) mechanism. The wind power producers will be required to apply for accreditation to the State Accreditation Agency and thereafter to Central Agency for registration and issuance of RE certificate under REC mechanism as per order/regulations of the appropriate commission. The power generated from these power projects shall be purchased by APDiscoms at pooled cost of power purchase as determined by APERC from time to time.

**4 Capacity Allotment**

The wind power projects shall be allowed in the areas notified by MNRE or in the areas where wind monitoring studies have been undertaken by MNRE/NIWE/NREDCAP/GoAP. In case wind resource assessment studies are proposed to be undertaken by the private developers, the capacity allotment will be considered only on submission of the wind data validation report of NIWE. The area applied for development of wind farm shall be clearly marked on a topo-sheet and google Map with the proposed capacity to be developed in that area.

NREDCAP shall be responsible for capacity allotment for upto 40 MW and to recommend capacity allotment beyond 40 MW to Government of AP.

**5 Wind Resource Assessment studies in Private Sector**

Permission for carrying out Wind Resource Assessment (WRA) and subsequent development at self-identified locations by the private entities will be given by the Nodal Agency on a **first come first serve basis** and will be governed by MNRE circular no. 51/9/2007-WE dated 20.06.2008 for wind measurement & subsequent development by private sector.

The applicant needs to clearly demarcate the project boundaries in a topo-sheet (scale 1:50000) where it is proposed to conduct the WRA study. All applications received will be scrutinised to ensure that the site identified has not been allotted to any other entity for WRA study as on the application date or is not within 5km radius from NIWE/NREDCAP proven or on-going wind masts as on the application date. Such WRA studies shall be completed within 24 months from date of signing of MoU with NREDCAP.

After completion of wind monitoring exercise, the applicant will be provided an exclusive period of 180 days from the expiry date of MOU to get the data authenticated by NIWE and make an application for capacity allotment. If the project is not applied for capacity allotment, the permission granted for private WRA study shall be cancelled. The applicant is also required to provide an undertaking to NREDCAP, with a copy to NIWE, indicating that NIWE can share the data to NREDCAP for subsequent/additional capacity allotments in the proposed (or balance) area.

## **6 Solar and Wind Hybrid Power Projects**

To enable better utilization of common infrastructure and related facilities, solar and wind hybrid power projects shall be encouraged in the State. The tariff for such solar projects shall be as determined by APERC.

## **7 Repowering**

The wind power developers will be encouraged to install higher capacity and improved technology Wind Electric Generators (WEGs) by undertaking appropriate micro-siting studies in order to optimally utilize the available wind resource potential at the project sites.

In respect of projects where lower capacity and lower hub height WEGs were installed and which have completed more than 15 years of life, proposals will be considered for replacing older turbines with higher capacity WEGs. In such cases, approval will be granted - subject to amendment of Power Purchase Agreement (PPA) with extension of time period for another 25 years.

The tariff payable for energy corresponding to the additional capacity available due to repowering of such projects shall be as per the applicable tariff determined by APERC from time to time.

## **8 GoAP Incentives**

To enable wind power capacity addition in the State, following incentives shall be provided for Eligible Developers for those projects setting during the operative period mentioned in the para one (1).

### **a) Power Evacuation**

- i. The Eligible Developer shall bear the entire cost of power evacuation facilities for interconnecting the wind farm with the grid.
- ii. The Eligible Developer shall abide by the orders, rules, regulations and terms and conditions as approved by APERC from time to time for operation of wind farms, power evacuation, transmission and wheeling of energy.
- iii. Wind power projects will be exempted from paying the supervision charges to APTransco/Discom towards the internal evacuation infrastructure within the wind farm site and upto pooling sub-station. All electrical installations within wind farm site and upto pooling sub-station shall be as per the statutory requirements and shall be certified by the Chief Electrical Inspector General (CEIG) or any other statutory authority.
- iv. APTransco/Discom will dispose the proposals for the technical feasibility for evacuation **within 14 days** from the date of receipt of application. Any upstream system strengthening requirement shall be borne by APTransco/Discom on a priority basis.

**b) Transmission and Distribution charges for wheeling of power**

There will be no Transmission and Distribution charges for wheeling of power generated from wind power projects, to the desired location/s for captive use/third party sale within the State through grid. However, the Transmission and Distribution charges for wheeling of power generated from the wind power projects for sale outside the State shall be as per regulations of APERC.

The 3<sup>rd</sup> party sale by Eligible Developers under this policy will be permitted only to HT – I category consumers as categorized in Tariff Orders and as per the regulations issued by APERC from time to time.

**c) Energy Banking**

Banking of 100% of energy shall be permitted during all 12 months of the year. Banking charges shall be adjusted in kind @ 2% of the energy delivered at the point of drawal. The banking year shall be from April to March.

Drawals from banked energy shall not be permitted during five (5) month period from 1<sup>st</sup> April to 30<sup>th</sup> June and 1<sup>st</sup> February to 31<sup>st</sup> March of each financial year. In addition, drawls of banked energy during the Time of the Day (ToD) applicable during the peak hours, as specified in the respective Retail Supply Tariff Order, shall also not be permitted throughout the year. However, the provisions on banking pertaining to drawal restrictions shall be reviewed based on the power supply position in the State.

Energy injected into the grid from date of synchronization to Commercial Operation Date (COD) will be considered as deemed energy banking.

The unutilized banked energy shall be considered as deemed purchase by Discoms at the pooled power purchase cost as determined by the APERC for the applicable year. Energy settlement shall be done on monthly basis.

**d) Open Access**

Intra-state Open Access clearance for the whole tenure of the project or 25 years whichever is earlier will be granted as per the APERC Regulations amended from time to time. In absence of any response or intimation from the Nodal Agency to the generator within 21 days, then such application shall be considered to be deemed open access.

**e) Electricity Duty**

All wind power projects are exempted from paying Electricity Duty in case of sale of power to APDiscom.

**f) Deemed Public Private Partnership (PPP) Status**

Deemed PPP status shall be provided for projects coming up under Category I and have entered into a PPA with APDiscom for sale of power.

**g) Non Agriculture Status**

Deemed Non-Agricultural (NA) status for the land where wind power projects will be accorded, on payment of applicable statutory fees.

#### **h) Deemed Industry Status**

Generation of electricity from wind power projects shall be treated as eligible industry under the schemes administered by the Industries Department and incentives available to industrial units under such schemes shall be available to the wind power producers.

#### **i) Must run status**

Injection from wind power projects shall be considered to be deemed scheduled subject to prevailing regulations/grid code of appropriate commission.

#### **j) Pollution Clearance**

Wind power projects will be exempted from obtaining any NOC/Consent for establishment under pollution control laws from AP Pollution Control Board.

### **9 Nodal Agency**

New and Renewable Energy Development Corporation of A.P. Ltd (NREDCAP) shall act as a Nodal Agency under this policy and as decided by the government from time to time.

The Nodal Agency and/or designated offices by the Nodal Agency shall be responsible for facilitating single window clearance of the projects for the following activities:

- a) Registration of projects
- b) Allotment of capacity of projects
- c) Processing of proposals for allotment of revenue land or Forest land.
- d) Arranging approval for power evacuation plan and open access.
- e) Arranging other statutory clearances/approvals if any.
- f) Co-ordination with MNRE/SECI/APTransco/APDiscoms and other central and state agencies.

An online system will be established by the Nodal Agency for acceptance of applications and for providing status updates. The developers will be given a login access for tracking the status updates. All approvals/clearances shall be disposed within 30 days from the date of registration.

### **10 Time Lines for Project Completion**

The Eligible Developers should enter into a project agreement along with the applicable fees and bank guarantees with the Nodal Agency within two (2) months from the date of sanction of the capacity allotment.

In case of wind power projects allotted in revenue lands, the project shall be commissioned within 18 months from the date of possession of revenue lands and/ or issue of power evacuation clearance, whichever is later. In case of wind power projects allotted in private lands, the projects shall be commissioned within 18 months from the date of issue of power evacuation clearance.

In case of revenue and private lands, if there is no development at the site, even after three (3) years from the date of sanction, the site may be offered to any other developer by the Nodal Agency. The Nodal Agency would be at liberty to invite bids for setting up wind power projects in such sites, where no development is taken up within prescribed period. In such cases, the Government may resume the lands so allotted or acquire the land purchased by the developers at the same price at which the sale deeds were registered and offer the lands to other developers by inviting bids.

## **11 Manufacturing**

The Government intends to promote wind turbine manufacturing facilities that can contribute towards wind sector development in the State. The following incentives shall be applicable for new manufacturing facilities and equipment's, ancillaries related to wind power projects only.

- Priority allotment of Government land on long term lease basis
- Exemption from electricity duty for a period of ten (10) years for consumption of electricity from the first year of operation.

## **12 Applicability of this Policy for wind power projects approved under earlier Policy**

This policy is applicable in respect of all wind power projects which are not commissioned as on date of notification of this policy in the State of Andhra Pradesh.

## **13 Project Monitoring**

A "High Level Committee" constituted with the following members will monitor the progress of implementation of the Wind Power Policy:

1. Secretary, Energy Department
2. Chairman and Managing Director, APTRANSCO
3. CMD of APDISCOMs
4. V.C.& Managing Director, NREDCAP( Member-Convener)
5. Representative of Indian Wind Turbine Manufacturers Association (IWTMA)
6. Representative of Indian Wind Power Association (IWPA)

If any difficulty arises in giving effect to this policy, the High Level Committee is authorized to issue clarification as well as interpretation to such provisions, as may appear to be necessary for removing the difficulty either on its own motion or after hearing those parties who have represented.

## **14 Mid-term Review**

State Govt. may undertake a Mid-term Review of this policy after a period of two years or as and when need arises in view of any technological breakthrough or to remove any inconsistency with Electricity Act 2003, rules and regulations made there under or any Govt. of India policy.

## **15 Power to remove difficulties**

If any difficulty arises in giving effect to this policy, energy department is authorized to issue clarification as well as interpretation to such provisions, as may appear to be necessary for removing the difficulty either on its own motion or after hearing those parties who have represented for change in any provision.

(BY ORDER AND IN THE NAME OF THE GOVERNOR OF ANDHRA PRADESH)

**AJAY JAIN**  
SECRETARY TO GOVERNMENT

To

The Vice Chairman & Managing Director, NREDCAP, Hyderabad.

The Chairman & Managing Director, APTRANSCO, Hyderabad

The Managing Director, APGENCO, Hyderabad.

The Secretary, APERC, Hyderabad

The CMDs, of APSPDCL, Tirupathi / APEPDCL, Visakhapatnam.

All Collectors & District Magistrates in the state.

The Principal Secretary to Government, EFS&T Department.

The Principal Secretary to Government, Revenue Department.

The Principal Secretary to Govt., Finance (PF.I) Department.

Copy to:

The Secretary to Hon'ble C.M.

The P.S. to Hon'ble Dy. Chief Minister, Revenue, Stamps & Registrations.

The P.S. to Hon'ble Minister for Finance, Planning, Commercial Taxes & Legislature Affairs.

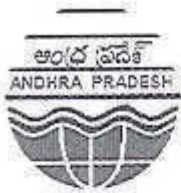
The P.S. to Secretary, Energy, I&I Department.

SF/SC.

//FORWARDED BY ORDER//

SECTION OFFICER





**ANDHRA PRADESH POLLUTION CONTROL BOARD**  
Paryavarana Bhavan, A-III, Industrial Estate,  
Sanathnagar, Hyderabad-500 018  
Phone : 040-23887500, Website: [www.appcb.ap.nic.in](http://www.appcb.ap.nic.in)

**Circular Memo No. 7 /APPCB/HO/CFO - UH:IV/2016 -**

**Date: 21.03.2016**

<b>Sub:</b>	APPCB - UH-IV - CFO - CPCB directions under section 18(1) (b) of the Water (Prevention & Control of Pollution) Act, 1974 and the Air (Prevention & Control of Pollution) Act, 1981 regarding harmonization of classification of industrial sectors under Red / Orange / Green / White Categories.- Instructions - Issued - Reg.
<b>Ref:</b>	1. CPCB directions vide F.No. B-29012/1/2012/ESS-1526, dt. 04.06.2012. 2. BO Circular No. PCB/METF/5/2002, dated 04.07.2012 3. CPCB directions vide B-29012/ESS(CPA)/2015/16, dt. 07.03.2016. 4. Member Secretary's Endorsement dt. 14.03.2016.

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It is to inform that vide reference 2<sup>nd</sup> cited above, the Central Pollution Control Board issued directions under Sector 18(1) (b) of Water Act, 1974 regarding classification of industrial sectors. The CPCB has communicated the Revised Classification of Industrial Sectors under **Red, Orange, Green and White** categories. The CPCB issued the following directions on 07.03.2016 while withdrawing earlier directions issued in June 2012 on categorisation of industries:

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 as table no G2, G3, G4 and G5 respectively.
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 white categorization the industries, fractional numbers shall be rounded off to nearest integer.

The CPCB has also directed to submit Action Taken Report on the compliance of above directions within one month from the date of receipt.

In view of the above, all the Unit Heads, Zonal Officers and Regional Officers are directed to follow the CPCB directions with immediate effect from the date of issue of directions i.e. 07.03.2016.

All the Zonal Officers and Regional officers are directed to submit within 15 days revised lists of industries of Red, Orange, Green and White categories duly following the revised classification of CPCB. There shall be no necessity of obtaining any consent for white category of industries and an intimation to the APPCB shall be sufficient.

All the ROs shall appraise the GMs of District Industries Centres along with CPCB directions about the reclassification of industries for taking action on submission of applications of consent application as per the revised criteria.

The ROs shall also inform the Industry Associations about the revised criteria.

The ROs/ZOs shall consult concerned units heads for any clarification on the directions of CPCB.

Treat this as top priority.



MEMBER SECRETARY

Enclosure: CPCB directions dated 07.03.2016.

To

1. The Chief Environmental Engineer.
2. All the Unit Heads at Head Office.
3. All the Zonal Officers at Zonal Offices
4. All the Regional Officers at Regional Offices.
5. IT Section to upload in the Website.

<b>ANDHRA PRADESH POLLUTION CONTROL BOARD</b>	
<b>LIST OF RED CATEGORY OF INDUSTRIAL SECTORS AS PER REVISED CATEGORISATION OF CPCB EFFECTIVE FROM</b>	
<b>SI No.</b>	<b>Industry Sector</b>
1	Isolated storage of hazardous chemicals (as per schedule of manufacturing, storage of hazardous chemicals rules, 1989 as amended)
2	Automobile Manufacturing (integrated facilities) i. Such types of plants are having either one or combinations of polluting activities viz. washing, metal surface finishing operations, pickling, plating, electro-plating, phosphating, painting, heat treatment etc. ii. Some of such plants may outsource some/all of the polluting activities. In such cases, after thorough inspection of such units by concerned SPCB, re-categorization of the industry shall be made accordingly.
3	Industries engaged in recycling / reprocessing/ recovery/reuse of Hazardous Waste under schedule iv of HW( M, H& TBM) rules, 2008 - Items namely - Spent cleared metal catalyst containing copper,, Spent cleared metal catalyst containing zinc,,
4	Manufacturing of lubricating oils, grease petroleum based products
5	DG Set of capacity > 5 MVA
6	Industrial carbon including electrodes and graphite blocks, activated carbon, carbon black
7	Lead acid battery manufacturing(excluding assembling and charging of lead-acid battery in micro scale)
8	Phosphate rock processing plant
9	Power generation plant [except Wind and Solar renewable power plants of all capacities and Mini Hydel power plant of capacity <25MW]
10	Industries engaged in recycling / reprocessing/ recovery/reuse of Hazardous Waste under schedule iv of HW( M, H& TBM) rules, 2008 - Items namely - Spent catalyst containing nickel, cadmium, Zinc, copper, arsenic, vanadium and cobalt,
11	Processes involving chlorinated hydrocarbons
12	Sugar ( excluding Khandsari)
13	Fibre glass production and processing (excluding moulding)
14	Fire crackers manufacturing and bulk storage facilities
15	Industries engaged in recycling / reprocessing/ recovery/reuse of Hazardous Waste under schedule iv of HW( M, H& TBM) rules, 2008 - Items namely – Dismantlers Recycling Plants -- Components of waste electrical and electronic assemblies comprising accumulators and other batteries included on list A, mercury-switches, activated glass cullets from cathode-ray tubes and other activated glass and PCB-capacitors, or any other component contaminated with Schedule 2 constituents (e.g. cadmium, mercury, lead, polychlorinated biphenyl) to an extent that they exhibit hazard characteristics indicated in part C of this Schedule.
16	Milk processes and dairy products(integrated project)
17	Phosphorous and its compounds
18	Pulp & Paper ( waste paper based without bleaching process to manufacture Kraft paper)
19	Coke making , liquefaction, coal tar distillation or fuel gas making
20	Manufacturing of explosives, detonators, fuses including management and handling activities
21	Manufacturing of paints varnishes, pigments and intermediate (excluding blending/mixing)
22	Organic Chemicals manufacturing
23	Airports and Commercial Air Strips
24	Asbestos and asbestos based industries
26	Cement
27	Chlorates, per-chlorates & peroxides
28	Chlorine, fluorine, bromine, iodine and their compounds
29	Dyes and Dye- Intermediates
30	Health-care Establishment ( as defined in BMW Rules) i. Mainly water polluting. ii. The water pollution score is normalized to 100 & valid for Hospitals having total waste-water generation > 100 KLD. iii. The hospitals with incinerator will be categorized as Red irrespective of the quantity of the waste -water generation. iv. The hospitals having Total waste-water generation less than 100 KLD and without incinerator, the normalized water pollution score will be 50 and will be categorized as Orange category

31	Hotels having overall waste- water generation @ 100 KLD and more. i. Mainly water polluting. Small boiler may be installed. ii. The water pollution score is normalized to 100 & valid for Hotels having waste-water generation > 100 KLD. iii. The hotels having more than 20 rooms and waste-water generation less than 100 KLD and having a coal / oil fired boiler, the pollution score will be 35/40 & are categorized as Orange. iv. The hotels having more than 20 rooms and waste-water generation less than 10 KLD and having no-boiler & no hazardous waste generation, the pollution score will be 20 & are categorized as Green.
32	Industries engaged in recycling / reprocessing/ recovery/reuse of Hazardous Waste under schedule iv of HW( M, H& TBM) rules, 2008 – Items namely - Lead acid battery plates and other lead scrap/ashes/residues not covered under Batteries (Management and Handling) Rules, 2001. [ * Battery scrap, namely: Lead battery plates covered by ISRI, Code word “Rails” Battery lugs covered by ISRI, Code word “Rakes”. Scrap drained/dry while intact, lead batteries covered by ISRI, Code word “rains”.
33	Industries engaged in recycling / reprocessing/ recovery/reuse of Hazardous Waste under schedule iv of HW( M, H& TBM) rules, 2008 – Items namely – Integrated Recycling Plants -- Components of waste electrical and electronic assemblies comprising accumulators and other batteries included on list A, mercury- switches, activated glass cullets from cathode-ray tubes and other activated glass and PCB-capacitors, or any other component contaminated with Schedule 2 constituents (e.g. cadmium, mercury, lead, polychlorinated biphenyl) to an extent that they exhibit hazard characteristics indicated in part C of this Schedule.
34	Manufacturing of glue and gelatin
35	Mining and ore beneficiation
36	Nuclear power plant
37	Pesticides (technical) (excluding formulation)
38	Photographic film and its chemicals
39	Railway locomotive work shop/Integrated road transport workshop/Authorized service centers
40	Yarn / Textile processing involving any effluent/emission generating processes including bleaching, dyeing, printing and colouring
41	Chlor Alkali
42	Ship Breaking Industries
43	Oil and gas extraction including CBM (offshore & on-shore extraction through drilling wells)
44	Industry or process involving metal surface treatment or process such as pickling/ electroplating/paint stripping/ heat treatment using cyanide bath/ phosphating or finishing and anodizing / enamellings/ galvanizing
45	Tanneries
46	Ports and harbour, jetties and dredging operations
47	Synthetic fibers including rayon ,tyre cord, polyester filament yarn
48	Thermal Power Plants
49	Slaughter house (as per notification S.O.270(E)dated 26.03.2001) and meat processing industries, bone mill, processing of animal horn, hoofs and other body parts
50	Aluminium Smelter
51	Copper Smelter
52	Fertilizer (basic) (excluding formulation)
53	Iron & Steel (involving processing from ore/ integrated steel plants) and or Sponge Iron units
54	Pulp & Paper ( waste paper based units with bleaching process to manufacture writing & printing paper)
55	Zinc Smelter
56	Oil Refinery (mineral Oil or Petro Refineries)
57	Petrochemicals Manufacturing (including processing of Emulsions of oil and water )
58	Pharmaceuticals
59	Pulp & Paper ( Large-Agro + wood), Small Pulp & Paper (agro based- heat straw/rice husk)
60	Distillery ( molasses / grain / yeast based)

**LIST OF ORANGE CATEGORY OF INDUSTRIAL SECTORS AS PER REVISED CATEGORISATION OF CPCB EFFECTIVE FROM 07.03.2016**

Sl. No.	Industry Sector
1	Dismantling of rolling stocks ( wagons/ coaches)
2	Bakery and confectionery units with production capacity > 1 TPD. ( With ovens / furnaces)
3	Chanachur and laddoo from puffed and beaten rice( muri and shira) using husk fired oven
4	Coated electrode manufacturing
5	Compact disc computer floppy and cassette manufacturing / Reel manufacturing

6	Flakes from rejected PET bottle
7	Food and food processing including fruits and vegetable processing
8	Jute processing without dyeing
9	Manufacturing of silica gel
10	Manufacturing of tooth powder, toothpaste, talcum powder and other cosmetic items
11	Printing or etching of glass sheet using hydrofluoric acid
12	Silk screen printing, sari printing by wooden blocks
13	Synthetic detergents and soaps(excluding formulation)
14	Thermometer manufacturing
15	Cotton spinning and weaving (medium and large scale)
16	Almirah, Grill Manufacturing (Dry Mechanical Process )
17	Aluminium & copper extraction from scrap using oil fired furnace (dry process only)
18	Automobile servicing, repairing and painting (excluding only fuel dispensing)
19	Ayurvedic and homeopathic medicine
20	Brickfields ( excluding fly ash brick manufacturing using lime process)
21	Building and construction project more than 20,000 sq. m built up area
22	Ceramics and Refractories
23	Coal washeries
24	Dairy and dairy products ( small scale)
25	DG set of capacity >1MVA but < 5MVA
26	Dry coal processing, mineral processing, industries involving ore sintering, pelletising, grinding & pulverization
27	Fermentation industry including manufacture of yeast, beer, distillation of alcohol (Extra Neutral Alcohol)
28	Ferrous and Non- ferrous metal extraction involving different furnaces through melting, refining, re-processing, casting and alloy-
29	Fertilizer (granulation / formulation / blending only)
30	Fish feed, poultry feed and cattle feed
31	Fish processing and packing (excluding chilling of fishes)
32	Forging of ferrous and non- ferrous metals ( using oil and gas fired furnaces)
33	Formulation/pelletization of camphor tablets, naphthalene balls from camphor/ naphthalene powders.
34	Glass ceramics, earthen potteries and tile manufacturing using oil and gas fired kilns, coating on glasses using cerium fluorides and
35	Gravure printing, digital printing on flex, vinyl
36	Heat treatment using oil fired furnace ( without cyaniding)
37	Hot mix plants
38	Hotels (< 3 star) or hotels having > 20 rooms and less than 100 rooms.
39	Ice cream
40	Industries engaged in recycling / reprocessing/ recovery/reuse of Hazardous Waste under schedule iv of HW( M, H& TBM) rules,
41	Industries engaged in recycling / reprocessing/recovery/reuse of Hazardous Waste under schedule iv of HW( M, H& TBM) rules,
42	Industry or processes involving foundry operations
43	Lime manufacturing (using lime kiln)
44	Liquid floor cleaner, black phenyl, liquid soap, glycerol mono-stearate manufacturing
45	Manufacturing of glass
46	Manufacturing of iodized salt from crude/ raw salt
47	Manufacturing of mirror from sheet glass
48	Manufacturing of mosquito repellent coil
49	Manufacturing of Starch/Sago
50	Mechanized laundry using oil fired boiler
51	Modular wooden furniture from particle board, MDF< swan timber etc, Ceiling tiles/ partition board from saw dust, wood chips
52	New highway construction project
53	Non-alcoholic beverages(soft drink) & bottling of alcohol/non alcoholic products
54	Paint blending and mixing (Ball mill)
55	Paints and varnishes (mixing and blending)
56	Ply-board manufacturing( including Veneer and laminate) with oil fired boiler/ thermic fluid heater(without resin plant)
57	Potable alcohol ( IMFL) by blending, bottling of alcohol products
58	Printing ink manufacturing
59	Printing press
60	Reprocessing of waste plastic including PVC
61	Rolling mill (oil or coal fired) and cold rolling mill
62	Spray painting, paint baking, paint shipping
63	Steel and steel products using various furnaces like blast furnace /open hearth furnace/induction furnace/arc
64	Stone crushers
65	Surgical and medical products including prophylactics and latex
66	Teflon based products
67	Thermocol manufacturing ( with boiler)

68	Tobacco products including cigarettes and tobacco/opium processes
69	Transformer repairing/ manufacturing ( dry process only)
70	Tyres and tubes vulcanization/ hot retreating
71	Vegetable oil manufacturing including solvent extraction and refinery /hydrogenated oils
72	Wire drawing and wire netting
73	Dry cell battery ( excluding manufacturing of electrodes) and assembling & charging of acid lead battery on micro scale
74	Pharmaceutical formulation and for R & D purpose ( For sustained release/ extended release of drugs only and not for commercial
75	Synthetic resins
76	Synthetic rubber excluding molding
77	Cashew nut processing
78	Coffee seed processing
79	Parboiled Rice Mills
80	Foam manufacturing
81	Industries engaged in recycling / reprocessing/ recovery/reuse of Hazardous Waste under schedule iv of HW( M, H& TBM) rules,
82	Industries engaged in recycling / reprocessing/ recovery/reuse of Hazardous Waste under schedule iv of HW( M, H& TBM) rules,
83	Producer gas plant using conventional up drift coal gasification ( linked to rolling mills glass and ceramic industry refectories for

**LIST OF GREEN CATEGORY OF INDUSTRIAL SECTORS AS PER REVISED CATEGORISATION OF CPCB EFFECTIVE FROM 07.03.2016**

Sl. No.	Industry Sector
1	Aluminium utensils from aluminium circles by pressing only (dry mechanical operation)
2	Ayurvedic and homeopathic medicines (without boiler)
3	Bakery /confectionery /sweets products (with production capacity 1 tpd (with gas or electrical oven)
4	Bi-axially oriented PP film along with metalizing operations
5	Biomass briquettes (sun drying) without using toxic hazardous wastes
6	Blending of mela mine resins & different powder, additives by physical mixing
7	Brass and bell metal utensils manufacturing from circles(dry mechanical operation without re-rolling facility)
8	Candy
9	Cardboard or corrugated box and paper products (excluding paper or pulp manufacturing and without using boilers)
10	Carpentry & wooden furniture manufacturing (excluding saw mill) with the help of electrical (motorized) machines such as electrical wood planner, steel saw cutting circular blade, etc.
11	Cement products (without using asbestos / boiler / steam curing) like pipe ,pillar, jafri, well ring, block/tiles etc.(should be done in closed covered shed to control fugitive emissions)
12	Ceramic colour manufacturing by mixing & blending only (not using boiler and wastewater recycling process)
13	Chilling plant, cold storage and ice making
14	Coke briquetting (sun drying)
15	Cotton spinning and weaving (small scale)
16	Dal Mills
17	Decoration of ceramic cups and plates by electric furnace
18	Digital printing on PVC clothes
19	Facility of handling, storage and transportation of food grains in bulk
20	Flour mills (dry process)
21	Glass , ceramic, earthen potteries, tile and tile manufacturing using electrical kiln or not involving fossil fuel kiln
22	Glue from starch (physical mixing) with gas / electrically operated oven /boiler.
23	Gold and silver smithy (purification with acid smelting operation and sulphuric acid polishing operation) (using less or equal to 1 litre of sulphuric acid/ nitric acid per month)
24	Heat treatment with any of the new technology like ultrasound probe , induction hardening , ionization beam, gas carburizing etc .
25	Insulation and other coated papers (excluding paper or pipe manufacturing)
26	Leather foot wear and leather products (excluding tanning and hide processing except cottage scale)
27	Lubricating oil, greases or petroleum based products (only blending at normal temperature)
28	Manufacturing of pasted veneers using gas fired boiler or thermic fluid heater and by sun drying
29	Oil mill Ghani and extraction (no hydrogenation / refining)
30	Packing materials manufacturing from non asbestos fibre, vegetable fibre yarn
31	Phenyl/toilet cleaner formulation and bottling
32	Polythene and plastic processed products manufacturing (virgin plastic)
33	Poultry, Hatchery and Piggery



34	Power looms (without dye and bleaching)
35	Puffed rice (muri) (using gas or electrical heating system)
36	Pulverization of bamboo and scrap wood
37	Ready mix cement concrete
38	Reprocessing of waste cotton
39	Rice mill (Rice hullers only)
40	Rolling mill ( gas fired) and cold rolling mill
41	Rubber goods industry (with gas operated baby boiler)
42	Saw mills
43	Soap manufacturing (hand made without steam boiling / boiler)
44	Spice grinding (upto-20 HP motor)
45	Spice grinding (>20 hp motor)
46	Steel furniture without spray painting
47	Steeping and processing of grains
48	Tyres and tube retreating (without boilers)
49	Chilling plant and ice making without using ammonia
50	CO2 recovery
51	Distilled water (without boiler) with electricity as source of heat
52	Hotels (up to 20 rooms and without boilers)
53	Manufacturing of optical lenses (using electrical furnace)
54	Mineralized water
55	Tamarind powder manufacturing
56	Cutting, sizing and polishing of marble stone
57	Emery powder ( fine dust of sand) manufacturing
58	Flyash export, transport & disposal facilities
59	Mineral stack yard / Railway sidings
60	Oil and gas transportation pipeline
61	Seasoning of wood in steam heated chamber
62	Synthetic detergent formulation
63	Tea processing ( with boiler) With boiler, it is an orange category industry. Without boiler, it will be green category industry.

LIST OF WHITE CATEGORY OF INDUSTRIAL SECTORS AS PER REVISED CATEGORISATION OF CPCB EFFECTIVE FROM 07.03.2016	
Sl. No.	Industry Sector
1	Assembly of air coolers /conditioners ,repairing and servicing
2	Assembly of bicycles ,baby carriages and other small non motorizing vehicles
3	Bailing (hydraulic press)of waste papers
4	Bio fertilizer and bio-pesticides without using inorganic chemicals
5	Biscuits trays etc from rolled PVC sheet (using automatic vacuum forming machines)
6	Blending and packing of tea
7	Block making of printing without foundry (excluding wooden block making)
8	Chalk making from plaster of Paris ( only casting without boilers etc. ( sun drying / electrical oven)
9	Compressed oxygen gas from crude liquid oxygen ( without use of any solvents and by maintaining pressure & temperature only for separation of other gases)
10	Cotton and woolen hosiery making ( Dry process only without any dyeing / washing operation)
11	Diesel pump repairing and servicing (complete mechanical dry process)
12	Electric lamp ( bulb) and CFL manufacturing by assembling only
13	Electrical and electronic item assembling (completely dry process)
14	Engineering and fabrication units (dry process without any heat treatment / metal surface finishing operations / painting)
15	Flavoured betel nuts production/ grinding (completely dry mechanical operations)
16	Fly ash bricks/ block manufacturing
17	Fountain pen manufacturing by assembling only
18	Glass ampoules and vials making from glass tubes
19	Glass putty and sealant ( by mixing with machine only)
20	Ground nut decorticating
21	Handloom/ carpet weaving ( without dyeing and bleaching operation)
22	Leather cutting and stitching (more than 10 machine and using motor)
23	Manufacturing of coir items from coconut husks
24	Manufacturing of metal caps containers etc
25	Manufacturing of shoe brush and wire brush

26	Medical oxygen
27	Organic and inorganic nutrients ( by physical mixing)
28	Organic manure (manual mixing)
29	Packing of powdered milk
30	Paper pins and u clips
31	Repairing of electric motors and generators (dry mechanical process)
32	Rope (plastic and cotton)
33	Scientific and mathematical instrument manufacturing
34	Solar module non conventional energy apparatus manufacturing unit
35	Solar power generation through solar photovoltaic cell, wind power and mini hydel power (less than 25 MW)
36	Surgical and medical products assembling only (not involving effluent / emission generating processes)

## FORM 10

[See Rule 19 (1)]

1067

## MANIFEST FOR HAZARDOUS AND OTHER WASTE

1.	Sender's name and mailing address (including Phone No. and e-mail)	SIEMENS GAMESA RENEWABLE TGP-II PVT LTD
2.	Sender's authorisation No.	
3.	Manifest Document No.	
4.	Transporter's name and address (including Phone No. and e-mail)	
5.	Type of Vehicle	(Truck/Tanker/Special Vehicle)
6.	Transporter's registration No.	
7.	Vehicle registration No.	TN19D 3273
8.	Receiver's name and mailing address (including Phone No. and e-mail)	LAKSHMI & CO. Plot No.99, Sidco Industrial Estate, Ammanur Village, Arakkonam T.K., Vellore Dist-631 001.
9.	Receiver's authorisation No.	TS [Handwritten signature]
10.	Waste description	Used oil/oil solvent waste/used oil
11.	Total quantity No. of Containers	5 Barrel 7.300 kg. m <sup>3</sup> or MT 230 Nos
12.	Physical form	(Solid/Semi-Solid/Sludge/Oily Tarry/Slurry/Liquid)
13.	Special handling instructions and additional information	HANDLE WITH CARE
14.	Sender's Certificate	I hereby declare that the contents of the consignment are fully and accurately described above by proper shipping name and are categorised, packed, marked, and labelled, and are in all respects in proper conditions for transport by road according to applicable national government regulations.
Name and stamp:		Signature: Month Day Year 05 29 2018
15.	Transporter acknowledgement of receipt of wastes	
Name and stamp:		Signature: Month Day Year 05 29 2018
16.	Receiver's certification for receipt of hazardous and other waste	
Name and stamp:		Signature: Month Day Year 05 29 2018



## FORM 10

[See Rule 19 (1)]

1066

## MANIFEST FOR HAZARDOUS AND OTHER WASTE

1.	Sender's name and mailing address (including Phone No. and e-mail)	SIEMENS GAMESA RENEWABLE MOLAGAVALLI PVT LTD
2.	Sender's authorisation No.	
3.	Manifest Document No.	
4.	Transporter's name and address (including Phone No. and e-mail)	
5.	Type of Vehicle	(Truck/Tanker/Special Vehicle)
6.	Transporter's registration No.	
7.	Vehicle registration No.	TN19D3273
8.	Receiver's name and mailing address (including Phone No. and e-mail)	LAKSHMI & CO. Plot No.99, Sidco Industrial Estate, Ammanur Village, Arakkonam T.K., Vellore Dist-631 001.
9.	Receiver's authorisation No.	TS/HW/used oil/Arakkonam/2018-03-03
10.	Waste description	Oil soaked waste used filter
11.	Total quantity No. of Containers	2000 kgs m or MT 280 Nos
12.	Physical form	(Solid/Semi-Solid/Sludge/Oily/Tarry/Slurry/Liquid)
13.	Special handing instructions and additional information	HANDLE WITH CARE
14.	Sender's Certificate	I hereby declare that the contents of the consignment are fully and accurately described above by proper shipping name and are categorised, packed, marked, and labelled, and are in all respects in proper conditions for transport by road according to applicable national government regulations.
Name and stamp:		Signature: Month Day Year 05 28 2018
15.	Transporter's acknowledgement of receipt of wastes	
Name and stamp:		Signature: Month Day Year 05 28 2018
16.	Receiver's certification for receipt of hazardous and other waste	
Name and stamp:		Signature: Month Day Year 05 28 2018

## MANIFEST FOR HAZARDOUS AND OTHER WASTE

1.	Sender's name and mailing address (including Phone No. and e-mail)	SIEMENS GAMESA RENEWABLE THALRICHERY Pvt Ltd		
2.	Sender's authorisation No.			
3.	Manifest Document No.			
4.	Transporter's name and address (including Phone No. and e-mail)			
5.	Type of Vehicle	(Truck/Tanker/Special Vehicle)		
6.	Transporter's registration No.			
7.	Vehicle registration No.	TN 19 D 3273		
8.	Receiver's name and mailing address (including Phone No. and e-mail)	LAKSHMI & CO. Plot No.99, Sidco Industrial Estate, Ammanur Village, Arakkonam T.K., Vellore Dist-631 001.		
9.	Receiver's authorisation No.	TS/HW/USEC/Oil/Reg/Amn/2018-3-3		
10.	Waste description	oil soaked waste		
11.	Total quantity No. of Containers	150 kgs m <sup>3</sup> or MT Nos		
12.	Physical form	(Solid/Semi-Solid/Sludge/Oily/Tarry/Slurry/Liquid)		
13.	Special handing instructions and additional information	HANDLE WITH CARE		
14.	Sender's Certificate	I hereby declare that the contents of the consignment are fully and accurately described above by proper shipping name and are catagorised, packed, marked, and labelled, and are in all respects in proper conditions for transport by road accordind to applicable national government regulations.		
Name and stamp:		Signature:	Month Day Year 05 27 2018	
15.	Transporter acknowledgement of receipt of wastes			
Name and stamp:		Signature:	Month Day Year 05 27 2018	
16.	Receiver's certification for receipt of hazardous and other waste			
Name and stamp:		Signature:	Month Day Year 05 27 2018	



## MANIFEST FOR HAZARDOUS AND OTHER WASTE

1.	Sender's name and mailing address (including Phone No. and e-mail)	SIEMENS GAMESA RENEWABLE BURGULA PVT LTD
2.	Sender's authorisation No.	
3.	Manifest Document No.	
4.	Transporter's name and address (including Phone No. and e-mail)	
5.	Type of Vehicle	(Truck/Tanker/Special Vehicle)
6.	Transporter's registration No.	
7.	Vehicle registration No.	TN 19D 3273
8.	Receiver's name and mailing address (including Phone No. and e-mail)	LAKSHMI & CO. Plot No.99, Sidco Industrial Estate, Ammanur Village, Arakkonam T.K., Vellore Dist-631 001.
9.	Receiver's authorisation No.	TST/HM/Used oil/reg/Lakshmi/2018-8-25
10.	Waste description	Used oil / oil soaked waste
11.	Total quantity No. of Containers	10 Bore / 300 kg. m <sup>3</sup> or MT Nos
12.	Physical form	(Solid/Semi-Solid/Sludge/Oily/Tarry/Slurry/Liquid)
13.	Special handling instructions and additional information	HANDLE WITH CARE
14.	Sender's Certificate	I hereby declare that the contents of the consignment are fully and accurately described above by proper shipping name and are categorised, packed, marked, and labelled, and are in all respects in proper conditions for transport by road according to applicable national government regulations.
Name and stamp:		Signature: Month Day Year 05 27 2018
15.	Transporter acknowledgement of receipt of wastes	
Name and stamp:		Signature: Month Day Year 05 27 2018
16.	Receiver's certification for receipt of hazardous and other waste	
Name and stamp:		Signature: Month Day Year 05 27 2018

PROSTIGER



GST NO. 57AACUG6027C1ZY

**SIEMENS Gamesa**

**Consignee Details :**

GST NO : 33AABFP7835KIZI

DATE : 1-Oct-2018

Cont. No: 99430 38580

S.No	PART NO.	PART NAME	UOM	QTY.	UNIT VALUE	Remarks
1		OIL SOAKED COTTON WASTE	KGS	1500.00	10.00	15,000.00
<b>Total QTY &amp; Value</b>				<b>1500</b>		<b>15,000.00</b>

VEHICLE NO.:

IN72-BA 2505

VALUE:

15,000.00

NO. OF PACKING:

1500

DEPARTURE TIME:

5:50 PM

Please return the duplicate copy of this Citation with your Signature as a token of acknowledgement.

B. MADHUBABU

BACHUBAUJ

For PMB & CO

Signature of the Remitter  
with Stamp Seal

**PARTNER**

### FORM 3

[See rules 6(5), 13(7), 14(6), 16(5) and 20 (1)]

#### FORMAT FOR MAINTAINING RECORDS OF HAZARDOUS AND OTHER WASTES

1. Name and address of the facility supreme Petro Products, #9, Sguvarpalayam
2. Date of issuance of authorisation and its reference number 05/08/18 Thiruvallur
3. Description of hazardous and other wastes handled (Generated or Received)

Date	Type of waste with category as per Schedules I, II and III of these rules	Total quantity (Metric Tonnes)	Method of Storage	Destined to or received from
05/08/18	Oil waste	380 Liter	barrels	Savalsung
05/08/18	oil soaked cotton	800 kg	dust bin	Savalsung
05/08/18	oil filter waste	240 kg	dust bin	Savalsung

\* Fill up above table separately for indigenous and imported waste.

4. Date wise description of management of hazardous and other wastes including products sent and to whom in case of recyclers or pre-processor or utiliser:
5. Date of environmental monitoring (as per authorisation or guidelines of Central Pollution Control Board):

Date 05/08/18

Place savalsung

Signature of occupier



**FORM - 4**

[See rules 5(6) and 22(2)]

**FORM FOR FILING ANNUAL RETURNS BY THE OCCUPIER OR OPERATOR OF A FACILITY**

[To be submitted by occupier/operator of disposal facility to State Pollution Control Board/ Pollution Control Committee by 30<sup>th</sup> June of every year for the preceding period April 20<sup>th</sup> to March 20<sup>th</sup>.]

1.	Name and address of the generator/operator of facility	P.M.B & CO.			
2.	Name of the authorized person and full address with telephone and fax number	S. Sahul Hameed NO: 420 - B Scharanamahadevi Road Pettai - Tirunelveli Tamil Nadu Ph: 8438960655			
3.	Description of hazardous waste	Physical form with description	Chemical form		
		Oil cotton waste			
4.	Consented quantity of product/others	800 Kg			
5.	Manufactured quantity of product/others	300 Kg			
6.	Quantity of hazardous wastes (in MTA)	Type of hazardous waste as per Authorization	Quantity (in KL or MT)		
	Note: If the space is not sufficient enclose annexure →		Authorized	Generated	
		(a) Oiled cotton waste	800 Kg	300 Kg	
		(b)			
		(c)			
		(d)			
7.	Description of Storage	Sealed Package			
8.	Description of Treatment	Recycling			
9.	Details of transportation	Name & address of consignee	Mode of packing	Mode of transportation	Transportation Date      Quantity
		Sahul	Sealed Package	Truck	05/08/18      800 Kg
10.	Details of disposal of hazardous waste	Name & address of consignee	Mode of packing	Mode of transportation	Transportation Date      Quantity
		Whid	Sealed Package	Truck	07/08/18      800 Kg
11.	Quantity of useful materials sent back to the manufacturers* and others#	Name and Type of material sent back to Manufacturers* and Others#	Quantity in Tones/KL		
			—		

\* delete whichever is not applicable

# enclose list of other agencies

Note: The Quantity shall be match with Form-5, Environmental Audit

Date: 21/08/2018

Place: Pettai

Signature: For P.M.B & CO.

Designation: Partner  
PARTNER



**FORM 9**  
[See rule 18 (2)]

**TRANSPORT EMERGENCY (TREM) CARD**

[To be carried by the transporter during transportation of hazardous and other wastes, provided by the sender of waste]

1. Characteristics of hazardous and other wastes:

S. No.	Type of waste	Physical properties/	Chemical constituents	Exposure hazards	First Aid requirements
1.	oil soaked cotton waste	Solid	Polyaromatic hydrocarbon	Should not be brought in contact with any fire source	Fire extinguisher & first aid box should be available

2. Procedure to be followed in case of fire *use fire extinguisher to put off fire call the nearest fire station*  
 3. Procedure to be followed in case of spillage/accident/explosion *for help call the nearest hospital for medical help*  
 4. For expert services, please contact  
 (i) Name and Address *M/S PMB & Co*  
 (ii) Telephone No *Tirunelveli-627004*  
*+91 9488404304*

(Name, contact number and signature of sender)

Date *05/08/2018*

Place *Savalsung*



## FORM - 10

[See Rule 19(1)]

## MANIFEST FOR HAZARDOUS AND OTHER WASTE

1.	Sender's Name & mailing address (Including Phone No. & e-mail)	Siemens Gamera Renewable Power PVT LTD Plot NO: 10 Sai Park Road EXTA Nagar Bijapur Ph: 8217372097					
2.	Sender's Authorisation No.	GST NO: 29 A ACC 6027CIZV					
3.	Manifest Document No.	KA/SD-0030 FY 2018-19/VSL 17					
4.	Transporter's Name & address (Including Phone No. & e-mail)	Biehmilla Transport					
5.	Type of Vehicle	(Truck / Tanker / Special Vehicle)					
6.	Transporter's Registration No.						
7.	Vehicle Registration No.	TN12 BA 2505					
8.	Receiver's Name & mailing address (Including Phone No. & e-mail)	Supreme Petro Products 9, EAUVAR Palayam Gummidipoondi TR, Tirumaluru TN					
9.	Receiver's Authorisation No.	33 A Q J P H 6835 C 2ZW					
10.	Waste Description	waste oil					
11.	Total Quantity No. of Containers	380 L M <sup>3</sup> or MT 2 Nos.					
12.	Physical Form	(Solid / Semi - Solid / Sludge / Oil / Tarry / Slurry / Liquid)					
13.	Special handling instructions and additional information	Refer Form 9 (TREM Card)					
14.	Sender's Certificate : I hereby declare that the contents of the consignment are fully and accurately described above by proper shipping name and are categorised, packed, marked and labeled and are in all respects in proper conditions for transport by road according to applicable national Government regulations.						
	Name & Stamp	Signature	Month	Day	Year		
			08	08	20	18	
15.	Transporter's Acknowledgment of Receipt of Wastes :						
	Name & Stamp	Signature	Month	Day	Year		
	Biehmilla Transport Chennai		08	05	20	18	
16.	Receiver's Certification for receipt of hazardous and other waste :						
	Name & Stamp	Signature	Month	Day	Year		
	For Supreme Petro Product NMA Authorised Signatory.		08	10	20	18	

1. White Copy : Sender to TNPCB

2. Yellow Copy : Sender

3. Pink Copy : Receiver

4. Orange Copy : Receiver to Transporter

5. Green Copy : Receiver to TNPCB

6. Blue Copy : Receiver to Sender

7. Grey Copy : Receiver to PCB of the Sender (if Other State)



**FORM 11**  
[See rule 22]


**FORMAT FOR REPORTING ACCIDENT**

[To be submitted by the facility or sender or receiver or transporter to the State Pollution Control Board]

1. The date and time of the accident
2. Sequence of events leading to accident
3. Details of hazardous and other wastes involved in accident
4. The date for assessing the effects of the accident on health or the environment
5. The emergency measures taken
6. The steps taken to alleviate the effects of accidents
7. The steps take to prevent the recurrence of such an accident

Date: 05/08/2018

Place: Savalsung

Signature: 

Designation: 

No accident Reported for the  
disposal of Hazardous waste

PLOT NO.10,SAI PARK ROAD  
EKTA NAGAR,  
BIJAPUR  
KARNATAKA - 586109  
GST NO: 29AACCG6027CIZV

Proprietor

PLOT NO.10,SAI PARK ROAD  
EKTA NAGAR,  
BIJAPUR  
KARNATAKA - 586109  
GST NO: 29AACCG6027CIZV

**SIEMENS Gamesa**  
RENEWABLE ENERGY

NO.: KA/SD-0038

DATE : 5-Aug-2018

P.M.B & CO

No : 420 - B, CHERANAMAHADEVI ROAD

Contact Person : chithirai

**Contact No : 9488404304**

**PETTAI**

TIRUNELVELI - 627004

GST NO: 33AABFP7835KIZI

[illegible]

VEHICLE NO.:

TN72 8A2505

VALUE ( APPROX.):	4,500
-------------------	-------

NO. OF PACKING:

loose packing

DEPARTURE TIME: 07.30 P.M.

Please return the duplicate copy of this Chalan with your Signature as a token of acknowledgement.

For SIEMENS GAMESA RENWABLE POWER PVT LTD

Authorized Signatory

prepared by

Signature of the Receiver  
with Stamp Seal

~~For PMB & CO.~~

Siemens Gamesa  
Renewable Power Pvt. Ltd.

5 AUG 2018

## PARTNER



PLOT NO.10,SAI PARK ROAD  
EKTA NAGAR,  
BIJAPUR  
KARNATAKA - 586109  
GST NO: 29AACCG6027C1ZV

*M. Mas*  
For Supreme Petro Product  
Signature of the Receiver  
with Stamp Seal  
Authorised Signatory.

Siemens Gamesa  
Renewable Power Pvt. Ltd.

U 5 AUG 26 18

**GOVERNMENT OF ANDHRA PRADESH  
DIRECTORATE OF ELECTRICAL SAFETY**

From

The Director of Electrical Safety and  
Chief Electrical Inspector to Govt,  
D.No: 5-17-6,1/16, Brodipet,  
Guntur-522002.  
Phone: 0863 - 2241944

To

M/s .Mytrah Vayu(Krishna)Pvt Ltd,  
8.5MW Wind Power Project,  
Burgula(V & M),  
Kurnool Dist.

Lr.No.DES&CEIG/GNT/Tec Sec/HT/KUR-92/D.No. / 120 /18, Dated: (2 /01/ 2018.

Sir,

Sub:-The Electricity Act-2003 and Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2010 -Electrical Installation of Voltage Exceeding 650V of M/s. Mytrah Vayu(Krishna) Pvt Ltd, 8.5MW Wind Power Project, Burgula(V )& (M),Kurnool Dist- Statutory Approval under Section 54 of The Electricity Act, 2003 & Regulation 43(4)& 32 of CEA (Measures relating to Safety and Electric Supply Regulations, 2010 - Approval Accorded.

Ref:- 1) Inspection Dated. 10/01/2018.  
2) Your Lr. received on dated. 12/01/2018.

\*\*\*\*\*

Under Section 54, Regulations 43(4) & 32 of Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2010, the following equipment of your Electrical Installation of voltage exceeding 650V are approved for energisation. .

AS PER ANNEXURE ENCLOSED.

Under Regulation 43(4) of Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2010, any additions or alteration in your installation shall not be connected to supply until the same are approved in writing by this office and offer for annual inspection under Regulation 30 of Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2010 every year to the concerned Deputy Electrical Inspector.

Under Regulation 13(4), 46(7) of Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2010, you are at all times solely responsible for the maintenance of the above installation on such condition as to be free from danger.


The above approval accorded is without prejudice to the statutory/ mandatory obligations to be fulfilled by you under various other acts and rules as the case may be.

The approval accorded for energizing the electrical equipment is the safety for men and machine from electrical hazards in your installation and ipso facto does not confer any right to be used for any other purpose other than for which the approval is accorded.

The original manufacturer Test certificates of Transformer etc. are accepted and returned.

Yours sincerely

Encl:- Test Certificates &  
List of Load Particulars

  
Director of Electrical Safety and  
Chief Electrical Inspector to Govt(FAC)

Copy to The Divisional Engineer/Operation/APSPDCL/Dhone / The date of  
synchronisation of supply may be intimated to Dy. Electrical Inspector/ Kurnool Sub-Division.  
Copy to Dy. Electrical Inspector/ Kurnool Sub division.  
Copy to Accounts Officer, O/o Director of Electrical Safety and C.E.I.G, Guntur.