

Proceeding of the Public Hearing conducted on 16.01.09 for grant of environmental clearance to M/s Green Planet Energy Pvt. Ltd. for setting up of 6 MW capacity Bio-mass based power plant at Village Manuke Gill, Tehsil Nihal Singh Wala, Distt. Moga.

The following were present to supervise the proceedings:-

1. Sh. Nirbhai Singh Toor,
Sub Divisional Magistrate,
Nihal Singh Wala, Distt. Moga.
2. Sh. Jaswant Rai Dani,
Tehsildar
Nihal Singh Wala, Distt. Moga.
3. Sh. Amarjeet Singh
Chairman Block Samiti,
Nihal Singh Wala, Distt. Moga
4. Sh. Randhir Singh, Project Manager
Punjab Energy Development Agency,
Chandigarh
5. Sh. Kuldeep Singh Chahal,
Functional Manager
District Industries Centre,
Moga
6. Er. Paramjit Singh Sidhu,
Environmental Engineer,
Punjab Pollution Control Board,
Regional Office, Faridkot.
7. Er. Rajiv Garg,
Environmental Engineer,
Punjab Pollution Control Board,
Head office, Patiala

Sh. Narinder Singh Thethi, Project Director, M/s Green Planet Energy Pvt. Ltd. welcome the panel members and people from adjoining Towns/Villages who came for the public hearing of 6 MW capacity power plant proposed to be established by M/s.Green Planet Energy Pvt. Ltd. at Village Manuke Gill, Tehsil Nihal Singh Wala, Distt. Moga. Thereafter, Sh. Rajiv Garg, Environmental Engineer, Punjab Pollution Control Board apprised the public about the requirement of conducting the public hearing before grant of environmental clearance as per the provisions of EIA notification no. 1533 (E) dated 14.09.2006 issued by the Ministry of Environment and Forests, Govt. of India, New Delhi. Then, he requested the representative of the industry to elaborate the main features of the project and the EIA study report.

The Project Director of the company brought out the details of the project before the public as under:-

REQUIREMENT OF THE PROJECT

- The power plant project will be set up in an area of 24 acres.
- The industry will provide 30 TPH capacity boiler using agro waste as fuel.

- The major fuel required for the proposed power plant is paddy straw, cotton / mustard stalks, Sugar cane Trash & Rice Husk. Total annual consumption of agro waste as fuel for the boiler will be approx. 80,000/- MT, which is available in plenty in the nearby area.
- The total water requirement of the project is estimated to be 864 KL/day, which will be drawn from Bore wells for which that company has already obtained approval from Central Ground Water Authority.

TECHNOLOGY OF POWER GENERATION

- **Rankine Cycle**:- Steam will be raised by burning agro-waste in the boiler which will be used to drive the turbo-generator to produce electricity. The flue gases will be passed through ESP to remove the ash and vented through a 50m tall chimney.

METHODOLOGY FOR PREPARATION OF EIA STUDY:-

- A map of the area around the proposed project for 10 km radius was prepared and the location of various towns, villages and other important places was marked on the same.
- The prospective problems likely to be caused due to establishment of the project were identified.
- Ambient air quality monitoring of the impact area was carried out at different locations to adjudge the level of air quality of the area and the likely impact from the project.
- Water samples and soil samples were also collected from various points in the area for analysis.
- Impact assessment were carried out indicating various sources of air pollution, water pollution, noise pollution etc. likely to be caused by the proposed project and environmental management plan has been prepared accordingly.

ENVIRONMENTAL IMPACTS AND MANGEMENT PLAN:-

AIR ENVIRONMENT

The emissions of concern from the power plant are particulate matter (SPM), SO₂ and insignificant NO_x. The industry has proposed to provide Electro-Static Precipitator as air pollution control device to bring down the particulate matter level in the flue gases less than 100 mg/Nm³, which will be below the statutory norms for emission discharge. The industry has proposed adequate stack height of 50 metres for proper dispersion of flue gases.

NOISE ENVIRONMENT

The major noise generating source is turbine-generator. The steam turbine would be housed in a closed building, which considerably reduces the noise levels.

The green belt provided along the periphery of the industry will act as noise barrier.

The ambient noise level at the boundary wall of the proposed plant will be well within the National Ambient Noise Standards.

WATER ENVIRONMENT

The total water requirement of 864 KL/day is estimated which will be met from own bore wells. This raw water is used as a make-up of the losses in the boiler blow down, cooling tower evaporation, service water etc. The wastewater will be reused in various processes after treatment and the surplus treated wastewater will be used for irrigation/plantation purpose.

SOLID WASTE MANAGEMENT

The fly ash to be produced from the boiler furnace will be mixed with waste residue to make organic manure, which will be sold to the farmers on reasonable rates.

SOCIO-ECONOMIC BENEFITS

- The harm caused to the health of residents due to the air pollution created by the uncontrolled burning of paddy /wheat stubbles by the farmers in the fields will be avoided.
- The damage caused to the fertility of soil due to the uncontrolled burning of paddy/wheat stubbles in the fields will be avoided.
- Electricity will be generated by burning agro-waste in the boiler without doing any harm to the environment. The generation of electricity will help the state to overcome electricity shortage.
- The remaining part of paddy /wheat straw post harvest combine operation will be cut and collected with reapers. The fields will be cleared in minimum possible time for sowing of next crop.
- Purchase of agro-waste/bio-mass from the farmers will add to their income.
- Establishment of project in the area will generate direct/indirect employment avenues in the villages surrounding the project.
- Good quality organic manure will be prepared in the plant and given to the farmers. It will increase soil fertility/agriculture produce in the area and reduce the consumption of chemical fertilizers.
- Dense forestation around the project will improve the environment in the villages surrounding the project.
- Generation of electricity in the rural area will improve the quality (voltage level) of electricity in the surrounding villages.
- The agriculture machines such as tractors and trolleys of the farmers when lying idle will be hired by the company, which will add to the income of the farmers.

Sh. Randhir Singh, Project Manager, Punjab Energy Development Agency, Chandigarh apprised the public about the policies of PEDDA to encourage the use of non-conventional sources of energy. He informed that as per study conducted by PEDDA sufficient agro waste is available in the state to produce electricity to the tune of 1000 MW and the PEDDA has sanctioned 14 Bio-mass based power projects to M/s Green Planet Energy Pvt. Ltd. at various places in the State with total production capacity of 147 MW.

Thereafter, Er. Rajiv Garg, Environmental Engineer, requested the public present in the hearing to give their comments/views / suggestions/objections on the proposed project one by one:-

Following are the queries/views/suggestions/objection of the people and replies given by the representatives of the company:-

S. N	Name of the Person	Question/query/statements of the person	Reply/clarification given by Mr Thethi, Project Director of the company.
1.	Sh. Harbhajan Singh S/o Joginder Singh, Vill. Gholian, Distt. Moga.	Will the company take the Tractors Trolleys and other machinery from nearby villages?	The tractors, trolleys & other machinery will be taken from the nearby villages on rent basis.
2.	Sh. Chamkaur Singh S/o Mewa Singh, Panch, Vill. Manuke Gill, Distt. Moga.	<p>1. Whether the paddy straw and other raw material will be stored in the premises of industry or the company will make arrangement in different villages for storage of paddy straw?</p> <p>2. Whether there will be any bad affect on the agricultural land in the surrounding area?</p> <p>3. Will the Company give preference to the residents of Village Manuke Gill for employment.</p>	<p>1. The paddy/wheat straw will be stored at 5-6 places in 10 Km radius from the site. The company will also make necessary arrangement for storage of raw material in its premises.</p> <p>2. There will be no bad affect on the agricultural land by operation of the power plant.</p> <p>3. Yes, the company will give preference to the residents of Village Manuke Gill for employment.</p>

		4. Whether, there is any provision to provide clean water to the Village by the company?	4. There is no such proposal in the project at this stage, however the company will consider the same in future, if need be.
3.	Sh. Amrit Pal Singh S/o Naib Singh, Vill. Manuke Gill, Distt. Moga.	Will the water level go down due to the establishment of power plant?	The company will adopt the rainwater harvesting to recharge the ground water level.
4.	Sh. Jaspal Singh, Vice President Club, Vill. Phuleke, Distt. Moga	1. Will the company give the machines for cutting the paddy straw? If these machines will be purchased by the farmers then, whether the company will provide any subsidy? 2. Whether the company will gives the employment to our village also.	1. The company will provide special type of machinery for cutting/collection of waste. The company will also give necessary help to the farmers for buying such machines. 2. The company will give employment to the residents of other nearby villages also.
5.	Sh. Beant Singh, Vill. Gholian Kalan, Distt. Moga.	Will the company vacate the land of Village Gholian Kalan, which it has occupied.	The company has acquired only that land which was earmarked by the Sarpanch and Kango of Village Manuke Gill.

Sh. Nirbhai Singh Toor, Sub Divisional Magistrate, Nihal Singh Wala, Distt. Moga shared his views with the people regarding benefits of the project.

Sh. Rajiv Garg, Environmental Engineer, Punjab Pollution Control Board asked the public if any one else want to ask any question but no one came forward. Thereafter, he requested the public present in the hearing to confirm by raising their hands as to whether they approve the establishment of proposed independent power plant project at this site. In response to this, more than 90% of the people present in

the public hearing raised their hands and gave their consent for the establishment of the project.

The panel members observed that the participants of the public hearing have no objection from environmental angle for setting up of the project at the proposed site provided the company will comply with the provisions of the law for control of environmental pollution.

The hearing ended with vote of thanks to the panel members and all the public present in the hearing.

**Sh. Nirbhai Singh Toor,
Sub Divisional Magistrate,
Nihal Singh Wala, Distt. Moga.**