

Proceeding of the Public Hearing conducted on 20.01.2009 for grant of environmental clearance to M/s Green Planet Energy Pvt. Ltd. for setting up of 13 MW capacity Bio-mass based power plant at Village Ramiana, Teh. Jaito, Distt. Faridkot (Punjab).

The following were present to supervise the proceedings:-

1. Sh. Gursewak Singh,
Tehsildar, Jaitu,
Distt. Faridkot.
2. Sh. Pritam Singh
General Manager,
District Industries Centre,
Faridkot
3. Sh. Randhir Singh, Project Manager
Punjab Energy Development Authority,
Chandigarh
4. Er. Rajiv Garg,
Environmental Engineer,
Punjab Pollution Control Board,
Head Office, Patiala.
5. Er. Jagdish Lal,
Assistant Environmental Engineer,
Punjab Pollution Control Board,
Regional Office, Faridkot.

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 13 MW capacity power plant proposed to be established by M/s Green Planet Energy Pvt. Ltd. at Village Ramiana, Teh. Jaito, Distt. Faridkot. 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 15 acres.
- The industry will provide two boilers of 30 TPH capacity using agro waste as fuel.
- The major fuel/raw material required for the proposed power plant is paddy straw, cotton / mustard stalks, sugar cane trash, rice husk, cattle dung, vegetable and fruit mandi waste etc. Total annual consumption of bio-mass for the project will be approx. 1,80,000/- MT, which is available in plenty in the nearby area.

- The total water requirement of the project is estimated to be 1797 KL/day, which will be drawn from Bore wells for which the 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.
- **Otto Cycle**:- Cow dung and bio-mass will be digested in a digester to produce bio-gas, which will be used to drive a gas engine to generate electricity. The digester waste will be used as organic manure for agriculture.

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 installation 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 1797 KL/day is estimated which will be met from own Bore Well. 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 digester 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.

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

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

S. N	Name of the Person	Question/query/statements of the person	Reply/ clarification given by Mr Thethi,
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			Project Director of the company.
1.	Sh. Kartar Singh, Rtd. Block Officer, Department of Forest, Vill. Ramiana, Jaitu, Distt. Faridkot.	<p>1. Our fields are near the proposed site, the proposed stack height of 50 metres may be increased further.</p> <p>2. There is a drain (Khala) for about 50 houses, which should not be closed.</p> <p>3. There is a passage near the proposed site for the nearby houses, which should not be closed, or some alternative proper passage should be provided.</p>	<p>1. The proposed stack height of 50 mtr from the ground level is more than the required height of 30 metres prescribed by Punjab Pollution Control Board. There will be no bad affect on the nearby fields.</p> <p>2. The drain will not be closed.</p> <p>3. Proper passage will be provided to the satisfaction of the concerned people.</p>
2.	Sh. Ranjit Singh, Dhaliwal Vill. Ramiana, Jaitu, Distt. Faridkot.	<p>1. How long the company will take to collect the agricultural residue from the fields.</p> <p>2. Whether the grass and small plants on the general path will also be used in this plant.</p>	<p>The company will cut the agro waste while it will be green as its moisture content will be useful for production of gas. The company will provided 70-80 reapers per Tehsil for cutting of agro waste immediately after the crop is collected with combine</p> <p>Yes, all such material will also be used.</p>
3.	Sh. Ram Singh S/o Baldev Singh, Vill. Ramiana, Jaitu, Distt. Faridkot.	This is a matter of joy that this project is being established near our village. The Nagar Panchayat agrees for the establishment of this project. It will solve the problem of electricity in the area.	No reply is required.
4.	Sh. Buta Singh, Vill. Ramiana, Jaitu, Distt. Faridkot.	Will the company take the tractor & trollies for various transportation activities from our village or it will bring these from outside.	The company will not purchase many tractor & trollies and the same will be taken from nearby villages for various transportation activities.

5.	M/s Darshan Singh, Vill. Ramiana, Jaitu, Distt. Faridkot.	Whether this plant will solve the problem of electricity in the nearby area?	The 13 MW power generated from this plant will be sold to the PSEB authorities and the company has no authority to supply the electricity to the people. However, the quality (Voltage level) of the power will be improved in the nearby area.
6.	Sh. Joga Singh, Vill. Ramiana, Jaitu, Distt. Faridkot.	The approach road for this project should be built before starting the project, as the transportation activities pertaining to this project will create problem for the nearby residents.	This project is approved as Mega Project by the State Govt. and accordingly wide and metalled road upto the project will be provided by the Punjab Mandi Board.
7.	Sh. Mithu Singh Sra, Vill. Ramiana, Jaitu, Distt. Faridkot.	Whether the labour for this project will be taken from this village or from outside.	Approximately 185 workers will be employed directly for this project and apart from this a lot of indirect employment will be generated like for transportation of compost produced from this plant, transportation of raw materials to the site & other miscellaneous activities. This labour will be taken from the nearby villages.
8.	Sh. Gurdev Singh, Vill. Ramiana, Jaitu, Distt. Faridkot.	Whether the compost to be produced from this plant will be distributed properly amongst all the farmers. As sometimes the influential farmers get the entire compost and no share is given to the weak/poor farmers.	The compost will be distributed as per decisions of the Local Panchayat. It will be sold to the farmers with proper distribution.

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 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. Tejinder Pal Singh Sandhu,
Sub Divisional Magistrate,
Jaitu, Distt. Faridkot.**