EXECUTIVE SUMMARY OF DRAFT ENVIRONMENTAL IMPACT ASSESSMENT

For

Proposed 1X20 MW (Existing 9.8 MW)

Biomass Based Power Plant

SOUTH ASIAN AGRO INDUSTRIES LIMITED

Village - Khajuri, Tehsil - balowdabazar Distt. Raipur (Chhattisgarh)



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EXECUTIVE SUMMARY

1.0 INTRODUCTION

With the policy of privatization of the power industry and liberalized - schemes formulated by the Govt. of India and the state Govt. for setting up bio mass power plant by private enterprises and in view of the Energy policy as announced by State Govt. project proponent has decided to set up 1X20 MW Biomass Power Plant in addition to existing 9.8 MW at Village Khajuri, Tehsil Balowdabazar, Dist. Raipur (C.G.). South Asian Agro Industries Ltd. have decided to install a 1X20 MW power plant to generate power utilizing agro industrial residue namely rice husk as the main fuel and rice husk, coal, other biomass as the supplementary fuels.

1.1 SITE AND SURROUNDINGS

The plant site is located in Khajuri, Raipur district of Madhya Pradesh, having latitude and longitude of plant center 22°55'21" and 82°42'57" respectively. Nearest Railway Station is Bhatapara located at a distance of about 8 kms. The site is approachable about 65 kms from Raipur. The nearest airport is Raipur located at a distance of approximately 150 kms from the project site.

1.2 LAND REQUIREMENT

The land area required for the expansion of power plant from 10MW to 20 MW will be around 10 acres. The acquired land is barren land.

PARTICULAR	AREA IN SQ MT	AREA IN ACRES
Built up Area	4000	0.988
Road Development	2000	0.494
Green Belt	16000	3.953
Others	500	0.123
Storage Biomass	10000	2.471
Storage Coal	3000	0.741
Open Land	5000	1.235
Total area	40500	10.007

1.3 WATER AVAILABILITY AND REQUIREMENT

Ample water is available throughout the year in River Shivnath, which is flowing within the distance of 3.0 km from site. Apart River Shivnath, northern side of the proposed site is guarded by Jamunia Nallah flowing about 1.2 km from site. The water requirement for the operation of the plant is proposed to be drawn from River Shivnath that is about 3.0 km away from the proposed site.



1.4 FUEL AVAILABILITY & REQUIREMENT

Biomass requirement for the proposed plant is 34400 MTPA (For 80% basis) and 43000MTPA (For 100% basis). Coal requirement is 8000 TPA (20% basis). The boiler shall be designed for the design fuel (Rice husk) for 100% load. However it should be capable for firing the Biomass with the following combination:

Rice Husk	2800-3200Kcal/kg	80% of total fuel
Straw of paddy, wheat, chana, Tiwra, masoor etc.	2800-3200 Kcal/kg	10% of total fuel
Stalk of moong, tuwar, maize etc.	2800-3200Kcal/kg	10% of total fuel
Coal	3250 Kcal/kg	20% of total fuel

1.5 TRANSMISSION SYSTEM

The power plant will generate 20MW Biomass based power in addition to existing 9.8MW

1.6 PROJECT DESCRIPTION

With depleting fossil fuels, the renewable source of energy has gained importance worldwide. The Government has been encouraging setting up of mini power plants based on the usage of renewable sources. Keeping in view the deficit situation for power and encouragement given by Government for setting up of renewable energy projects, Considering various aspects as listed above for the proposed biomass power plant like type of main fuel and the size of power plant, it is decided to adopt direct combustion process where the biomass fuel can be directly fired inside the boiler. Direct combustion process is a proven technology and is being adopted for many power plants worldwide.



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TABLE NO: 1.1 SALIENT FEATURES OF PROPOSED EXPANSION OF POWER PLANT

Plant Details:	
Name of the Plant	South Asian Agro Industries Limited
Site Address	Khajuri Village, Dabadih Panchayat, Balodabazar
	Tehsil, Raipur District, Chhattisgarh State
Technical Details of the plant:	
1.0 Plant power generation capacity	20MW
2.0 Biomass availability	2.92 lakh Tons
3.0 Fuel Required per hour	23 Tons/hr
3.1 Numbers of days of operation	335 Days
3.2 Steam required for De-aerator, @ 5 ata	10tph
4.0 Boiler data:	
4.1 Boiler capacity at MCR (100% load)	90 tons/hr
4.2 Steam pressure at super heater outlet	66 ata
4.3 Steam temperature at super heater outlet	485°C
4.4 Design fuel	Biomass- Paddy husk
4.5 Supplementary fuel	Woodchips, other biomass & coal
5.0 Turbo generator data:	
5.1 Rated capacity of the turbine	20000 KW
5.2 Steam pressure at the TG inlet	64 ata
5.3 Steam temperature at the TG inlet	480°C
5.4 Type of Turbine	Bleed cum condensing
5.5 Generator Voltage	132 KV
5.6 Condenser type	Surface condenser/ water cooled
6.0 Power Generated and exported:	
6.1 Plant Load factor	90%(from 2 nd year)
6.1 Gross power generated at the generator	20000 KW
terminals	2000 KW
6.2 Internal consumption of power plant	18000 KW
6.3 Net exportable power to the grid	
7.0 <u>Water:</u>	
7.1 water sources	From Shivnath river & borewells
7.2 Water requirement	95 M ³ /hr
8.0 Power evacuation:	
8.1 Voltage	132 KV
8.2 CSEB Sub-station	132/11 KV SS, Sonadhi Village
8.3 Distance from plant	17 kms
9.0 Fuel handling	Series of belt conveyors
10.0 Ash handling	
10.1 Bottom Ash	belt conveyors
10.2 Fly Ash	Combination of belt & Screw conveyors
11.0 Chimney	65 mt. RCC chimney
12.0 DM plant capacity	12 M ³ /hr
13.0 Cooling Tower:	
13.1 Туре	RCC counter flow
13.2 Capacity	120 M ³ /hr



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1.7 DESCRIPTION OF THE ENVIRONMENT

The topography of the land in the plant site is plain with hillocks and no water streams present in the site area. The environmental setting of the proposed plant site is given in **Table-1.2**

TABLE NO: 1.2 ENVIRONMENTAL SETTING OF THE SITE

S. NO.	PARTICULARS	DETAILS
1	Latitude	22°55'21"
2	Longitude	82°42'57"
3	Height above mean sea level	240m
4	Nearest City	Raipur 65 km
5	Nearest Railway Station/Town	Bhatapara 8 km
6	Nearest Airport	Raipur 150 km
7	Nearest Highway	NH-200 at about 27 km
8	Nearest Village	2 km at SW direction
9	Hills/Valley	No in 10 km radius
10	Ecological Sensitive Zone	No in 10 km radius
11	Reserve Forest	No in 10 km radius
12	Historical Plakhe	No in 10 km radius
13	Nearest River/ Nalla	Shivnath river – 3.0 km in North East direction
		Max. Temperature - 48°C
		Min. Temperature - 6°C
14	Annual Climatic Conditions	Average Rainfall 1112.5 mm
		Max. RH (%) - 98%
		Min. RH (%) - 7%

1.8 BASELINE ENVIRONMENTAL SCENARIO

The baseline environmental status for various environmental attributes within the study area has been established through field monitoring supported by data from secondary sources. The environmental disciplines studied include land use, demography and socio-economics, geology, soils, hydrology, water use, water quality, meteorology, air quality, terrestrial and aquatic ecology and noise,

1.8.1 Land Use

A detailed land use pattern study has been carried out througk Satellite Imagery studies with the help of Remote Sensing Technique at Tehsil level and 10 Km zone. The study area covers about **31398.83** ha among which 6039.85 ha is Built up land, 19046.20 Ha is agriculture land, 193.55 Ha is under plantation, 663.50Ha is under water bodies, 1070.20 Ha is fallow land, 1132.55 Ha is forest land, 90.40 Ha is Barren Land, 332.50 is under Mining Pit and 2828.60 Ha is waste land,



1.8.2 Demography and Socio Economics

The total population of the study area is 54573 among which 26720 are male and 27853 are female. Literacy Rate of the study area is 64.2%. The total working population of the study area is 55.66% among which 67.76% is main workers and 32.24% marginal workers. 44.34% is the total non working population.

1.8.3 Soils

Five locations within 10 km radius of the project site were selected for soil sampling. At each location, soil samples were collected from three different depths viz. 30 cm, 60 cm and 90 cm below the surface and homogenized. It has been observed that the texture of the soil was observed to be sandy and clay.

1.8.4 Hydrology

In nature there are two main sources of water i.e. surface water and ground water. Surface water bodies are filled with rainwater and seepage/ discharge water from abandoned. The water table is as low as 3.5m below ground level during monsoon period and about 13.0m below ground in summer season as recorded in nearby wells. As per the water level data of the observation wells existing in neighboring villages of Khajuri power plant site, there is no noticeable fall in water table or change in quantity.

1.8.5 Water Quality

The data conform to the water quality standards for most of the parameters. The dissolved oxygen levels range between 6.2 to 6.4 mg/l, Total Hardness ranges from 250 to 280 mg/l; BOD levels are as low as 4.0 to 4.4 mg/l. The heavy metal content has been observed within the limit. The analysis of the sample indicates that the organic pollution of River is insignificant. The physico-chemical and biological analysis revealed that all the parameters are well within the prescribed limits of IS: 2296.

1.8.6 Meteorology

The climatic condition of this area is semi arid. The maximum and minimum temperatures are 49.0°C & 2°C respectively. The average annual rainfall is observed to be 1600-1900 mm. The winds in the area are light to moderate during summer and winter. However, the speed of the wind increases during the end of the summer season and monsoon season.

1.8.7 Ambient Air Quality

Ambient air quality was conducted at five appropriate locations within the study area to know the status of various air pollutants like suspended particulate Matter (SPM), Respirable Particulate Matter (RPM), Sulphur Dioxide (SO2), Oxides of Nitrogen (NOx).

1.8.8 Ecology

The study area is devoid of forest vegetation and grass cover. Only scattered trees along with bunds and road side are recorded during survey. Shrubs and herbs have found in the barren land. As the dense vegetation is not there, the environment is not moderate for higher animals. No rare and endangered species of fauna and flora have been reported in the study area. There is no National park and wild life sanctuary within 10 km radius area.



1.8.9 Noise

The noise monitoring location is shown in table 2.1.9.1. Noise levels recorded were found to be in the range of 46.4 - 64.5 dB (A) during daytime and in the range of 35.25 - 36.1 dB (A) during nighttime.

1.8.10 Land environment

The existing land environment status was studied with respect to the site location, topography, soil and land use. The existing land environment status was studied with respect to the site location, topography, soil and land use. A detailed land use pattern study has been carried out at macro level i.e. at tehsil level and 10 Km zone. The study was carried out through satellite imagery studies through Remote Sensing Technique.

TABLE 1.3: THE CALCULATED COVERAGE AREA OF LAND USE / LAND COVER CLASSES IN 10KMS RADIUS OF STUDY AREA.

LANDUSE / LANDCOVER CLASSES	AREA IN HECTAERS
BUILT-UP LAND	6039.85
AGRICLUTURE LAND	19046.20
PLANTATION	193.55
WATER BODIES	663.50
FALLOW LAND	1070.20
SCRUB/WASTE LAND	2828.60
BARREN LAND	90.40
MINING PIT LAND	332.50
FOREST LAND	1132.55
TOTAL	31398.83

TABLE 1.4: THE CALCULATED COVERAGE AREA OF LAND USE / LAND COVER CLASSES IN 1KM. RADIUS OF STUDY AREA.

LANDUSE / LANDCOVER CLASSES	AREA IN HECTAERS
BUILT-UP LAND	11.138
AGRICLUTURE LAND	152.452
SCRUB/WASTE LAND	147.42
WATER BODIES	1.80
TOTAL	312.81



1.8.11 Biological Environment

1.8.11.1 Flora (I) FOREST

Three vegetation types are found in the buffer zone (i.e. within the 10 Km radius of mining project), moist deciduous forest, dry deciduous forest and grassland. The forest cover in buffer zone is reported in the range of 35%. The common species are Anogeissus latifolia, Terminaiia spp. Gamelina sp. Gardenia latifolia, sterculia uresna and Bauhinia retusa.

(II) GRASSLAND

Grassland of the region is secondary in origin and has originated due to frost, fire and ungulate browsing. However, some browsing and frost resistant trees such as Butea monsperma, Cassia fistula, Diospyros Melanoxylon and Zizyphus jujube have encroached the grass land especially at the edge of the forest. The large trees which dot the grassland such as shorea robusta, erminalia spp., Ficus spp. And Madhuca indica is probably relicts of the original vegetation or their descendents.

1.8.11.2 Fauna

The climate, rainfall and vegetation type contribute to decide the type of faunal community in the area. In the region the flat hilltops, varying degree of slopes and Rolling Meadows in the valley create diverse type of habitats and form ideal niches for varied forms of animals. There are more than 250 species of birds, 36 species of mammals and several reptiles, orthopods etc. occupying respective structure and function.

1.8.11.3 Fisheries

In the absence of any big lakes around the site, the fish breeding is restricted to rivers and nallas. There are no fisheries or fish farms exist near the site. Fishing is not one of the major occupations of people; it is carried out to satisfy local demands on very small scale.

1.9 LAND USE

As stated else where the proposed plant is to be accommodated on the barren land of Industrial area which has been leased to the project proponent by the Govt. only ash will be generated from the proposed power plant as a solid waste. Ash handling and storage system is total enclosed. The ash generated in the boiler will be collected from the banks, economizer and air heater zone and the ESP. Belt conveyer shall be used to collect the ash coming out from the air heater/ economizer and ESP zone. The fly ash from air heater fodder and the ESP hoppers shall also be carried away by screw conveyors, which will be collected in a common belt conveyor and ash will be discharged in the ash silo. The fumes bottom ash is collected by small hand trolleys and disposed off manually. Water will be sprinkled through a water spray nozzle, which is provided in the screw feeders. Then wet ash will be discharged to trucks for disposal. It is proposed to use the ash profitably by selling the same for brick manufacturing units. Further project proponent is looking forward to enter into agreement with EBM India Limited for proper disposal of ash.

M/s In Situ Enviro Care



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1.10 OCUPATIONAL SAFETY, HEALTH AND SOCIO ECONOMICS

Occupation safety and health is very closely related to productivity and good employeremployee relationship. The main factors of occupational health in plant are fugitive dust and noise. Safety of employee during operation and maintenance of equipment and handling of materials are proposed to be taken care of as per regulations. To avoid any adverse affects on the health of workers due to dust, heat, and noise sufficient measures have been provided in the project. During operation of the plant, care should be taken to ensure healthy and safe working conditions for ail workers. The South Asian Agro Industrial Limited is conscious of its moral arid legal obligation to prevent hazards and to provide healthy working environments.

1.11 AIR QUALITY

The major pollutant emitted from South Asian Agro Industries Ltd will be suspended particulate matter and other major sources in plant will be various material transfer points. Ambient air quality monitoring carried out around the plant site shows background SPM, but prediction of GLC prove that short term 8 hour average concentration of SPM will be insignificant. Thus, the proposed Power Plant of South Asian Agro Industries Ltd. will not adversely change the existing ambient air quality.

Modern technology provides a wide range of control equipments for removal of particulate matter. South Asian Agro Industries Ltd. will adopt latest state of art technology for the removal of particulate from various units of proposed plant.

1.12 SOILS

The impacts on soil during construction phase shall be mainly due to loss of topsoil in the construction areas and contamination of the soils of surrounding area due to construction materials such as cement, sand, oils, etc. However, it shall be temporary and shall be confined to the areas of construction only. Conservation measures would be taken to minimize such local impacts.

1.13 WATER ENVIRONMENT AND WATER QUALITY

There will be no industrial effluent generated due to proposed projects. Evaporation losses will be made up by treated water. The domestic wastewater generated from the proposed plant will be treated in well-designed septic tank followed by soak pit arrangement. The blow down from the boiler section which is about 2 m³ per day will be neutralized through neutralization tanks and mixed with Cooling tower blowdown and recycles to D.M Plant and the Cooling Tower Blow Down will be Neutralized in neutralization pit and afterward passed through pressure filters and go to D.M. plant for mixing with raw water whereas the waste water from resin regeneration which is about 8 m³ per day will be Neutralized in



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neutralization pit and afterward passed through pressure filters and go to D.M. plant for mixing with raw water. Thus the effluent would get finally dispersed into the soil and no further treatment would be necessary. It is thus presented that instead of any additional negative impact on water quality; there will be a positive impact in the water table due to proposed water harvesting techniques.

1.14 NOISE

Noise generating sources of the Power Plant are mainly boiler, rotary equipments, feed pumps, DG sets, turbine etc. but no person is required to remain constantly at the above mentioned units and will go occasionally to check the systems. Noise attenuating devices like earplugs and earmuffs shall be provided to workers exposed to high noise levels. Noise barriers, Silencer and enclosures shall be incorporated in the equipments which emit high noise level. All basic equipments and various machineries should be kept well maintained. The sufficient green belt may be proposed to control noise levels.

1.15 TERRESTRIAL ECOLOGY

During construction phase, deposition of fugitive dust on pubescent leaves of nearby vegetation may lead to temporary reduction of photosynthesis. Such impacts would, however, be confined mostly to the initial periods of the construction phase and would be minimized through water sprinkling. During operation phase, predicted ground level concentration of pollutant in ambient air is well within the Indian Standards for Ambient Air Quality. The Impact on the surrounding trees expected to insignificant.

1.16 AQUATIC ECOLOGY

There would not be any tangible change in the water quality of the receiving water due to no wastewater discharges from the plant operation. It is also found that there is no big lake around the project site so there is no chance to any adverse effect on the fisheries.

1.17 ASH HANDLING AND UTILIZATION

The ash generated in the boiler will be collected from the banks, economizer and air heater zone and the ESP. Belt conveyer shall be used to collect the ash coming out from the air heater/ economizer and ESP zone. The fly ash will be collected in a common belt conveyor and will be discharged in the ash silo. The fumes bottom ash is collected by small hand trolleys and disposed off manually. Water will be sprinkled through a water spray nozzle, which is provided in the screw feeders. Then wet ash will be discharged to trucks for disposal. It is proposed to use the ash profitably by selling the same for brick manufacturing units. Further project proponent is looking forward to enter into agreement with EBM India Limited for proper disposal of ash.



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1.18 ENVIRONMENTAL MONITORING PROGRAMME

Success of any environmental management program depends upon the efficiency of the organizational set up responsible for the implementation of the program. Regular monitoring of the various environmental parameters is also necessary to evaluate the effectiveness of the management program so that necessary corrective action can be taken in case there are some drawbacks in the proposed program.

TABLE NO: 1.5 SUGGESTED MONITORING PROGRAM

S. No.	Environmental Attributes	Locations	Parameters	Period and Frequency
1	Ambient Air quality	4 Fixed stations	SPM, RSPM, SO ₂ , NOx, CO	24 hr. average samples, Two days per week and 4 week per season during operation phase
2.	Water Quality of surface and ground water.	Around the site	28 parameters as per GSR 422 (E)	Once in a season at 8- 10 location
3	Drinking water	Project site	Drinking Water parameters as per IS 10500 19.05.93	Pre Monsoon and Post Monsoon.
4	Ambient Noise	Ambient Air Quality monitoring site	dB (A) levels	Hourly day and night time Leq levels every month during construction phase every quarter during operation phase.
5	Inventory of Flora	-	Tree Plantation, Survival	Once in a year
6	Water Discharge for Plantation	Plant Area	Parameters for horticulture use – BOD, pH, SS and coliforms	Monthly
7	Soil Quality	In and around the site	Organic matter, C, H, N, alkalinity, acidity, heavy metal	Annual



1.19 ENVIRONMENT MANAGEMENT PLAN

During operation phase, the impacts on the various environmental attributes should be mitigated using appropriate pollution control equipment. The Environment Management Plan prepared for the proposed project aims at minimizing the pollution at source.

AIR POLLUTION MANAGEMENT

The major pollutant emitted from South Asian Agro Industries Ltd will be suspended particulate matter, fly ash and other major sources in plant will be various material transfer points. Modern technology provides a wide range of control equipments for removal of particulate matter. South Asian Agro Industries Ltd. will adopt latest state of art technology for the removal of particulate from various units of proposed plant. Details of pollution control equipments are given below.

S. No.	Pollution Control Equipments	Description
1	Bag Filters	The existing screening/chopping plant will be used for Power Plant. The necessary Bag filter will be provided to control the air pollution and to meet the norms fixed by State Pollution Control Board.
2	ESP	A suitable ESP (50mg per NM ³) shall be installed after the boiler to meet the emission standards laid down by Pollution Control Board. The dust free gas shall be discharged into the atmosphere through a 40m height stack.
3	Raw Material Storage and handling	Trucks will convey RM and it will be unloaded and stored in the long covered shed. Husk will be screened /chopped and then conveyed to fuel bunkers located near the boiler unit from where it will be fed to the boiler by Screw/Rotary feeders.
4	Handling of rice husk ash fly ash	The fly ash from the flue gases of the Ash collected in Hoppers of ESP is pneumatically conveyed to Silo Area for temporary storage. The Ash generated from the power plant is stored in SILO having storage capacity of 1 week (75 Cum) The total ash quantity generated in the boiler, by the burning of Rice husk if taken 100% will be around 21.61 TPD and, is approximately28 TPD, if rice husk consumption is 80% and coal consumption is 20%. One rotary air lock pocket feeder is provided below the ash for every hopper, The ash collected at ESP hoppers is continuously discharged through the rotary feeders. Water will be sprinkled through a water spray nozzle, which is provided in the screw feeders. Water will be sprinkled through a water spray nozzle, which is proposed to use the ash profitably by selling the same for brick manufacturing units. It may be sale out to Rice Husk -corn, it is assured that no ash will be left at site and proper disposal shall be adopted. Agreement with EBM limited has also

TABLE NO: 1.6 DETAILS OF POLLUTION CONTROL EQUIPMENTS



been help us to dispose off the ash.

WATER POLLUTION MANAGEMENT

There will be no industrial effluent generated due to proposed projects. Evaporation losses will be made up by treated water. The domestic wastewater generated from the proposed plant will be treated in well-designed septic tank followed by soak pit arrangement. The blow down from the boiler section which is about 2 m³ per day will be neutralized through neutralization tanks and mixed with Cooling tower Slowdown and recycles to D.M Plant and the Cooling Tower Blow Down will be Neutralized in neutralization pit and afterward passed through pressure filters and go to D.M. plant for mixing with raw water whereas the waste water from resin regeneration which is about 8 m³ per day will be neutralized in neutralization pit and afterward passed through pressure filters and go to D.M. plant for mixing with raw water. Thus the effluent would get finally dispersed into the soil and no further treatment would be necessary. It is thus presented that instead of any additional negative impact on water quality; there will be a positive impact in the water table due to proposed water harvesting techniques.

NOISE POLLUTION MANAGEMENT

Noise generating sources of the Power Plant are mainly boiler, rotary equipments, feed pumps, DG sets, turbine etc. but no person is required to remain constantly at the abovementioned units and will go occasionally to check the systems. Noise attenuating devices like earplugs and earmuffs shall be provided to workers exposed to high noise levels. Noise barriers, Silencer and enclosures shall be incorporated in the equipments which emit high noise level. All basic equipments and various machineries should be kept well maintained. Green belts are good noise barriers and same to be developed around the plant. The sufficient green belt may be proposed to control noise levels.

SOLID WASTE MANAGEMENT

The main solid waste from the proposed power plant will be ash (fly ash and bottom ash). It is proposed to utilize 100% of the fly ash generated. During emergency the ash will be disposed off safely in ash pond area to avoid environmental hazards. All efforts, however, will be made to utilize fly ash for various purposes. To control fugitive dust emission from the ash pond area water sprinkling would be done. After the ash pond is abandoned, its area will be reclaimed through tree plantation. It is proposed to use the ash profitably by selling the same for brick manufacturing units. Further project proponent is looking forward to enter into agreement with EBM India Limited for proper disposal of ash.

1.20 RISK ASSESSMENT DISASTER MANAGEMENT PLAN

This is done by a systematic study of the industrial installations to identify possible failures and prevent their happening/occurrence and avoid the same which otherwise can result into a disaster. For effective Disaster Management plan the industry should have the following details readily available with it:



- a) Description of various processes.
- b) Process Engineering flow scheme.
- c) Operation manuals for all machinery.
- d) Plant and equipment layout.
- e) Details on population, density and related data on the surroundings of plant.
- f) Data on status of existing facilities for emergency preparedness.
- g) Existing/Proposed fire fighting facilities.

1.21 PROJECT BENEFITS

The proposed project by SOUTH ASIAN AGRO INDUSTRIES LTD. would enable to meet part of the growing power demand. Further, the proposed power plant will result in improvement of infrastructure as well upliftment of social structure in the area. It is anticipated that the proposed power plant will provide benefits for the locals in two phases i.e. during construction phase as well as during operational stage.

The major benefit due to the proposed project will be in the sphere of generating temporary employment for substantial number of personnel, most of whom would be unskilled workers.

In the view of environment the proposed plant not only reduces the stress on conventional fuel supply for electricity generation but also encourage the use of biomass based electricity generation. After all, the project is beneficial for the environment as well as for upliftment of employment.

1.22 CONCLUSIONS

On the basis of Rapid EIA study, we strongly feel that the management will operate the plant with care from environmental point of view and due to proposed activities there will be no negative impact. The proposed power plant project of South Asian Agro Industries limited at Industrial Area, village - Khajuri, Tehsil - Balowdabazar, District – Raipur in the state of Chhattisgarh will be environmental compatible to the surrounding due to the high standards of pollution control measures to be adopted during the operation activity. Thus it can be safely stated that the proposed activities will not have any adverse effect on the surroundings, if the proper environmental management plan is adopted.