

M/s. PARASAKTI CEMENT INDUSTRIES LTD.,
Jettipalem (Village & Post), Rentachintala (Mandal)
Guntur (Dist.) – A.P.

**ENVIRONMENTAL STATEMENT (AUDIT)
FOR THE FINANCIAL YEAR 2021-2022**

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ACKNOWLEDGEMENT

M/s. B.S ENVI-TECH PVT.LTD express since debt of gratitude to **M/s. Parasakti Limestone Mines (M/s. Parasakti Cement Industries Limited)** for the opportunity given by assigning the preparation of Environmental Statement (Audit) for their Mines located near Jettipalem (V) Rentachintala (M), Guntur (Dist) of Andhra Pradesh. The Environmental Statement (Audit) is prepared for the financial year from April 2021 to March 2022. Special mention needs to be made of executives of M/s. Parasakti Lime Stone Mines (M/s. Parasakti Cement Industries Limited) for their cooperation and assistance during the preparation of Environmental Statement. We also wish to acknowledge our gratitude to all of them who helped during the data collection and report preparation.

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**FORM - V
(See rule 14)**

**ENVIRONMENTAL STATEMENT REPORT FOR THE FINANCIAL
YEAR ENDING THE 31ST MARCH 2022**

PART – A

1	Name and address of the owner/ occupier of the industry operation or process.	M/s. Parasakti Cement Industries Ltd., Plot No. 8-3-214/21, Srinivasa Nagar Colony (West), Hyderabad – 500 038. Factory: Jettipalem, Rentachintala Mandal, Guntur District, Andhra Pradesh. Phone: 9866700013/14
2	Industry Category Primary: (STC Code) Secondary: (STC Code)	Primary
3	Date of last environmental audit Report submitted	September, 2021
4	Production Capacity (units)	Clinker Production – 1.20 MTPA Cement Production – 1.26 MTPA
5	Year of establishment	June - 2005

PART – B

Water and Raw Material Consumption		
a) Water consumption	1274.90 m ³ /day	KLD
1. Process consumption & Dust suppression	191.97 m ³ /day	KLD
2. Domestic	141.51 m ³ /day	KLD
3. WHR Consumption	941.43 m ³ /day	KLD

Name of Products	Water consumption per unit of product (KL/MT)	
	During the previous financial year (2020-2021)	During the current financial year (2021-2022)
Cement	0.122	0.117

Name of raw materials	Consumption of raw material per MT of output based on MT of Cement	
	During the previous financial year (2020-21)	During the current financial year (2021-2022)
Lime Stone	1.391	1.23
GCP Waste	0.0004	-
Laterite	0.093	0.083
Dolomite	0.015	0.013
Gypsum-S	0.030	0.045
Limestone-PIs	0.023	0.041
Coal	0.158	0.038
Gypsum	0.043	0.041
Fly Ash	0.087	0.075

PART - C
POLLUTION GENERATED
(Parameter as specified in the consent issued)

Pollutants		Quantity of Pollutants Discharged (kg/day) 2021-2022	Concentrations Of Pollutants in Discharges (mg/L) 2021-2022	Percentage of variation from prescribed standards with reasons
a) Treated Waste Water				
1	Total Dissolved Solids	126.48	1212	42.29 % less
2	Total Suspended solids	2.78	26.63	73.37 % less
3	COD	4.39	42.07	83.17 % less
4	BOD	1.53	14.62	51.27 % less
5	Oil & Grease	0.23	2.16	78.40 % less
Average Effluent Quantity		104.36 KLD		

b) Air.				
Stack Attached to	Pollutants	Quantity of Pollutants Discharged (Kg/day) 2021-2022	Concentrations Of Pollutants in Discharges (mg/Nm ³) 2021-2022	Percentage of variation from prescribed standards with reasons
Kiln – I	PM	70.87	22.63	24.58% less
Cooler - I	PM	56.12	21.95	26.83% less
Coal Mill – I	PM	12.23	22.18	26.08% less
Cement Mill –I	PM	12.91	22.98	23.39% less
Kiln – II	PM	116.87	22.84	23.86% less
Cooler – II	PM	55.58	20.66	31.14% less
Coal Mill – II	PM	21.72	22.99	23.36% less
Cement Mill – II	PM	12.97	23.18	22.72% less

**PART - D
HAZARDOUS WASTE**

(As specified under Hazardous wastes/Management and handling Rules, 2003)

Hazardous wastes	Total Quantity per year	
	During the previous financial year (2020-2021)	During the current financial year (2021-2022)
From Process		
Batteries scrap- used batteries	Nil	73No's
Used Hicrome Grinding Media	Nil	7910Kgs
Waste Lube Oil	1.06 KL	Nil
Waste Grease	0.72 MT	6450Kgs
From Pollution Control facility		
Quantity recycled or Re-utilized		

Note: Waste Oil and Grease generated from plant.

**PART – E
SOLID WASTES**

Solid Wastes	Total Quantity	
	During the previous financial year (2020-2021)	During the current financial year (2021-2022)
From Process		
	NIL	NIL
From Pollution Control Facilities		
	NIL	NIL
Quantity recycled or reutilized within the unit		
	NIL	NIL

PART - F

Please specify the characteristics (in terms of concentration and quantum) of Hazardous as well as solid wastes and indicates disposal particles adopted for both these categories of wastes.

About 73 No's of Batteries scrap- used batteries, 7910Kgs of Used High-Crome Scrap Liners/Grinding Media , 6450 Kgs of waste grease of have been generated from the plant.

2850Kgs Waste Grease used internally for self consumption.

7910Kgs of High-Crome Scrap Liners/Grinding Media is sold to Harsha alloy casting loose.

73No's of Batteries scrap- used batteries and 3600Kgs of Waste grease is sold to M/S Sri Padmavathi Energy solutions India (p) Ltd Hyd. an agencies authorized by APPCB.

No Solid waste is generated from the Plant as it is a dry process. The intermediate products, raw material and finished product collected in various pollution control systems is being recycled in to the process.

PART – G

Impact of the pollution control measures on conservation of natural resources and consequently on the cost of production.

-Nil-

PART - H

Additional investment proposal for environmental protection including abatement of pollution.

1. An amount of Rs.3,20,016/- is spend on regular monitoring.
2. Total investment on the greenbelt development for the year 2021-22 is Rs.24,84,592/-
3. Total investment on the maintenance of the pollution control equipments for the year 2021-22 is Rs.64,25,094/-
4. Total investment on STP, Vacuum cleaner, Drinking welfare & Road sweeping maintenance for the year 2021-22 is Rs.18,57,652/-
5. River Water Cess Rs.2,92,667/-

PART - I

Any other particulars in respect of environment protection and abatement of pollution.

- Parasakti Cement Industries Ltd., (PCIL) is conducting regular meeting for reviewing and taking up various improvements in the quality of the Safety and Environment.
- PCIL is conducting regular environmental monitoring to comply the conditions of APPCB/ MOEF.
- PCIL incurred an amount of Rs.2,99,48,041/- towards the power consumption on pollution control equipment.

1. INTRODUCTION

M/s. Parasakti Cement Industries Limited has setup Cement manufacturing unit at Jettipalem Village, Rentachintala Mandal, Guntur District of AP. The Plant is established in the year of 2005. M/s. Parasakti Cement Industries Limited is manufacturing Ordinary Portland Cement (OPC) 53 grade, OPC 43 grade and PPC with a production capacity is 1.20 MT/A (Clinker) & 1.26 MT/A (Cement).

2. OBJECTIVE OF THE STUDY:

The objective of the present study is to review the performance of pollution control systems installed by the industry so as to identify efficient pollution prevention and control systems, which could be beneficial to both environment and its components. And also **Inserted by rule 2 of the Environment (Protection) second Amendment & Rules, 1992 vide G.S.R. 329 (E), dated: 13-3-1992.** Every person carrying on an Industry, operation or process requiring consent under section 25 of the water (prevention and control of pollution) Act 1974 (6 of 1974) or under section 21 of the Air (Prevention and Control of Pollution), Act 1981 (14 of 1981) or both or authorization under the Hazardous wastes (Management and Handling) Rules, 1989 issued under the Environmental (Protection) Act 1986 (29 of 1986) shall submit an environmental audit report for the financial year ending 31st March in Form – V to the concerned state pollution control board on or before the 30th day of September every year beginning 1993.

3. BENEFITS OF ENVIRONMENTAL AUDIT

Environmental audit creates awareness in the conservation of natural resources and helps to improve production safety and health. The benefits of audits are:

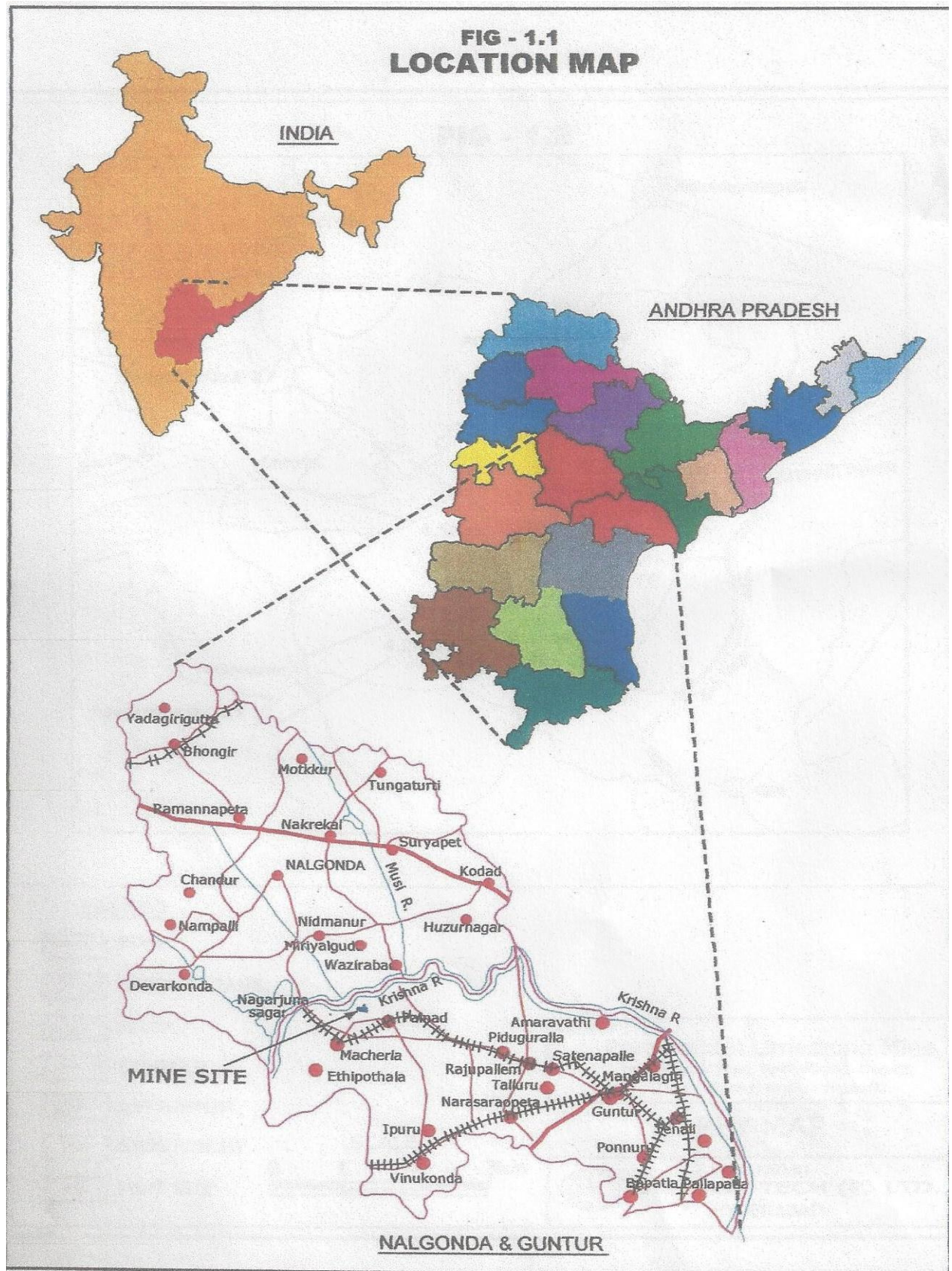
1. It helps in reduction of raw material consumption by way of waste minimization and adoption of recovery of waste and recycles the same.
2. Determined the performance of process systems and helps to improve the systems.
3. Efficiency of pollution control systems can be calculated.
4. This gives the awareness of environmental organization in the industry.
5. Data available will help the management for use in the plant modification and adopting pollution control for different types of technology.
6. It helps to identify pollution creating systems and exposure to it by the employees for taking remedial measures.
7. The management will be assisted in complying with local, regional and national laws regulations by adopting standards.
8. It helps to identify hazardous wastes, handling measures taken and exposure to litigation can be reduced.
9. To determine the impact on the surrounding environment due the disposal of its pollutants and identify suitable preventive measures.
10. Energy saving systems can be adopted by considering fuel consumption data.

M/s. Parasakti Cement Industries Limited has entrusted the task of preparation of Environmental Statement (Audit) to M/s. Universal Enviro Associates (UEA), Hyderabad. An in-depth study was conducted by UEA, to review the process efficiency, waste water generated and the present treatment systems, emissions generated and air pollution control equipment provided mode of solid waste collection and disposal and the other associated problems leading to the pollution and impact on environment.

4. LOCATION

The M/s. Parasakti Cement Industries Limited is situated in Jettipalm Village, Rentachintala Mandal, Guntur district of Andhra Pradesh. The Plant is situated 30 km away from Macharla by the side of Macharla – Piduguralla road. **The project site falls under the Latitude 14°35' - 14°45' of North and Longitude of 78°30' - 78°35'**

East. The project area is rocky in nature. The site comes under arid zone. **The Location map and Plant layout are show in Fig. 1.**



5. PROCESS DESCRIPTION:

The limestone is drilled, blasted and then loaded by hydraulic excavators into dumpers, which transports the limestone boulders to the crusher. After crushing it sent to stockpile.

The stages of cement manufacture at PCIL are as follows:

- | | | | |
|----|----------------------------------|---|---------|
| 1. | Mining & Crushing of limestone | - | Stage 1 |
| 2. | Raw meal grinding | - | Stage 2 |
| 3. | Coal grinding | - | Stage 3 |
| 4. | Clinker Production (Pry process) | - | Stage 4 |
| 5. | Cement grinding | - | Stage 5 |
| 6. | Packing of Cement | - | Stage 6 |

1. Mining and Crushing of limestone

Lime for Parasakti Cement is mined at our captive limestone mine, Parasakti Limestone Mines and crushed in the compound impact crusher. The crushed limestone is stocked in the limestone stock pile. The stock pile bays are demarcated for high grade and low grade limestone. Depending on the analysis the crushed limestone is stocked in the respective bays.

2. Raw meal Grinding

Raw meal is prepared by grinding limestone and additives in suitable proportions in Raw Mill. Raw Mill feed system consists of 4 hoppers. For maintaining uniform particle size in the ground raw meal, the raw mill system is equipped with a High efficiency separator. In the 4 hoppers, one hopper is meant for High grade limestone, second hopper for Low grade limestone, the third hopper for Iron ore and the fourth for Laterite. All the four hoppers are equipped with weigh feeders. Proportioned and weighed quantities of raw materials are fed to the Raw mill to meet the quality requirement.

Tertiary crusher is installed after weigh feeders, for further reduction of limestone size before entering the raw mill.

Raw mill is a tube mill filled with required quantity of grinding media charged inside. Raw mill consists of a drying chamber for drying of raw materials and two grinding chambers. The ground material from 1st and 2nd chambers is drawn out of the mill with air sucked through raw mill fan. The ground material is discharged into an air side and is carried to high efficiency separator through air slides and bucket elevator. In the separator, the ground material is separated to finer and coarse fraction. Finer fraction, called raw meal is transported to Raw meal silo, a continuous flow silo by Belt Bucket Elevator or Vertical Pneumatic Pump.

The fine dust in the air is collected in a Cyclone and the air is sent to Bag House. The collected dust is mixed with raw mill product when raw mill is running and to a separate dust silo when raw mill is stopped. The dust in silo will be added to the raw mill product when the mill is running.

3. Fine Coal Grinding

Incoming raw coal is unloaded into a hopper. Truck unloading system is installed in the plant for coal unloading. The coal from the hopper is conveyed to the raw coal crusher. The crushed coal is stocked in the coal stock pile in different bays as per the grade of coal. Fine coal is prepared by grinding crushed coal. The coal mill system consists of a two chambered air swept tube mill (one drying chamber and one grinding chamber), grit separator and a bag house. The coal from the raw coal hopper is fed to the mill through rotary table feeder. The dried coal from drying chamber then passes to grinding chamber filled with grinding media. Hot air from the Kiln cooler is utilized for the drying of coal.

The powdered coal is swept to grit separator, by air because of the induced draft created by coal mill bag filter fan, where fines and coarse are separated. Coarse material is returned back to mill for further grinding and fines are swept to bag house where fines are collected and stocked in fine coal bins.

4. Production of Clinker

Clinker preparation is subdivided into 4 stages.

- Raw meal extraction,
- Preheating & Precalcination
- Burning (Clinkerisation)
- Cooling
- Recycling of Dust

Raw meal Extraction:

The material stored in continuous flow silo, which is storage cum blending silo. The inverted central cone silo creates a good blending effect on the raw meal. The silo is equipped with multiple gates that are operated in auto/manual mode. The material is extracted in a cycle of multiple gates opening at a time for fixed period. This cycle feeds homogenized raw meal to the preheater system. This extracted raw meal is called Kiln Feed.

The extracted raw meal is discharged in to kiln feed storage bin using air slides. From the storage bin, weighed quantity of kiln feed using solid flow meter is transported to preheater system by Belt Bucket Elevator or V.P. Pump.

Preheating & Pre-Calcinations:

The kiln feed is preheated and partly calcined by hot kiln exit gases in a tower of heat exchange cyclones called Preheater. The heat exchange between gas and the material takes place in the cyclones, in suspension of material and gas.

The preheater at PCIL is a 5 stage preheater equipped with precalcinator, called RSP (Reinforced Suspension Preheater). The material from the 4th stage of preheater is fed into the pre-calcinator called Swiri calciner. 60% of the fuel required for clinkerisation is fed into this calciner system along with hot recouped air from cooler called Tertiary air. The material from the precalciner goes to 1st stage of the preheater before entering the kiln. By the time it enters the kiln, the kiln feed attains about 80-95% of degree of calcinations.

Burning (Clinkersation):

The final clinkerisation of the kiln feed takes place in the rotary kiln. 40% of fuel required for clinkerisation is fed into the kiln for burning. The precalcined kiln feed entered from preheater is further heated in the rotary kiln to about 1350 - 1450⁰C at which clinker form is formed.

Cooling:

The clinker produced in the kiln is cooled from 1100 - 1400⁰C to 120-150⁰C in the grate cooler by air quenching. The cooler is fitted with slotted grate plates. As the clinker moves on the grates towards the discharge end of the cooler, air is blown from the bottom of the plates and cools the clinker. The hot air generated, is recouped and utilized for clinker burning as secondary air for the kiln and tertiary air for precalcinator.

Recycling of Dust:

The dust laden exhaust gases from the preheater are passed Reverse Air Bag House (RABH), where the fine dust is collected and clean gases are released into the atmosphere. The dust collected is transported back to raw meal silo along with raw mill product. When the raw mill is not running this dust is collected in an intermediary dust silo and then mixed with the raw mill product, when raw mill is running.

5. Cement Grinding:

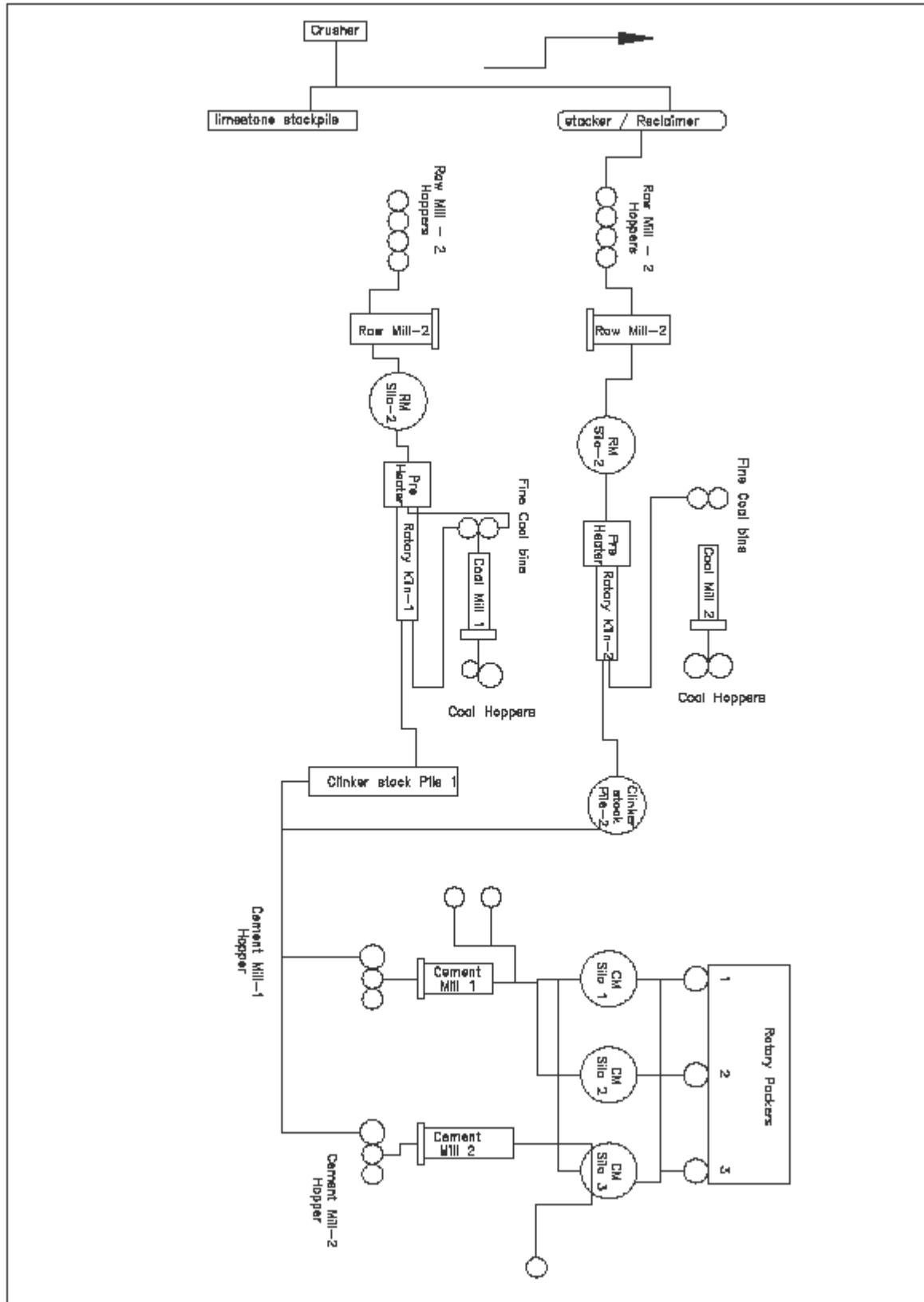
Cement is ground by grinding clinker, fly ash and gypsum in suitable proportions. Cement mill at PCIL are closed circuit ball mills. Each Cement mill is having of 3 hoppers (one for clinker, second for Gypsum and one for spare). For fly ash separate metallic storage silos are installed. Weighed quantity of Fly ash is extracted through solid flow meter from the bottom of the silo and pumped to high efficiency separator.

Weigh feeders are installed to every hopper, and Mills are equipped with high efficiency classifiers for better particle size distribution. Weighed & proportioned quantities of clinker, gypsum are fed into the cement mill from hoppers. The cement mill are two chambered mills. The ground cement and fly ash is fed to the separator by air slide and bucket elevator. In the separator, the ground material and fly ash is separated to finer and coarse fraction. Finer fraction is transported to four compartment silo by Bucket Elevator or Vertical Pneumatic Pump.

6. Dispatch of Cement

PCIL has electronic packers with eight spouts for packing the cement into bags and loading into the trucks.

Cement from the silos is extracted through gates and transported to the Hopper in Packer System. Bags are attached to the nozzle of the rotating electronic packer. Filled in bags are automatically discharged from the packer on to the belt conveyers and loaded in to the trucks.



6. WATER REQUIREMENT:

The total consumption is 1274.90 m³/day and the breakup details are given below:

1. Process consumption & Dust suppression	-	191.97 m ³ /day
2. Domestic	-	141.51 m ³ /day
3.WHR Consumption		941.43 m ³ /day

Most of the process and cooling water will be evaporated / consumed. The domestic requirement includes requirements of colony, drinking as well as sanitation. The water requirement is being met from the bore wells.

7. POLLUTION CONTROL IN THE PLANT

The industry has given top priority for pollution prevention and control. Therefore all the sources that release particulate matter are provided with ESP & Bag filters for the control of particulate emissions into atmosphere. Tall stacks are provided as an effective measure for good atmospheric dispersion of the pollutants and air pollution control.

7.1 Waste water Sources and Monitoring

Most of the water consumed for process as well as cooling is consumed/ evaporated. The only source of wastewater is from sanitary facilities of the plant and colony is presently being sent to Sewage treatment plant to treat this wastewater. Discharges from the sewage treatment plant water characteristic meets the discharge standards of APPCB for on-land irrigation.

7.2 Air Pollution Control

7.2.1 Stack Emissions

The sources of air emissions are from Raw mills & Kiln, Raw mills and kiln, Cooler Stack, Cement Mill –I & II, Coal Mill. Stack emissions monitoring is carried out regularly for the parameters PM. The average values of stack emission data is given in table 7.1. It is

noticed from the collected emissions data that the parameters monitored are within the limits prescribed by AP pollution control Board.

Table 7.1

AIR POLLUTION CONTROL EQUIPMENTS		
UNIT – I		
S No.	LOCATION	TYPE OF EQUIPMENT
U1-1	RAW MILL & ROTARY KILN	REVERSE AIR BAG HOUSE
U1-2	COAL MILL	BAG HOUSE
U1-3	COOLER	ESP
U1-4	CEMENT MILL	ESP and BAG FILTER
U1-5	LIMESTONE CRUSHER	BAG FILTER
U1-6	LIMESTONE HOPPERS TOP	BAG FILTER
U1-7	TERTIARY CRUSHER	BAG FILTER
U1-8	RAW MEAL SILO	BAG FILTER
U1-9	RAW MEAL SILO EXTRACTION	BAG FILTER
U1-10	COAL CRUSHER	BAG FILTER
U1-11	COAL TRANSFER POINT	BAG FILTER
U1-12	COAL FEED CIRCUIT	BAG FILTER
U1-13	CLINKER DISCHARGE ABOVE DBC	BAG FILTER
U1-14	CLINKER STOCK PILE SHAFT – I	BAG FILTER
U1-15	CLINKER STOCK PILE SHAFT – II	BAG FILTER
U1-16	CSP TO TRANSFER POINT	BAG FILTER
U1-17	CLINKER HOPPER TOP	BAG FILTER
U1-18	CEMENT SILO	BAG FILTER
U1-19	PACKING PLANT	BAG FILTER
U1-20	COAL MILL HOPPERS TOP	BAG FILTER
U1-21	PRE-HEATER TOP	BAG FILTER
U1-22	FLY ASH SILO TOP	BAG FILTER

AIR POLLUTION CONTROL EQUIPMENTS		
UNIT – II		
S No.	LOCATION	TYPE OF EQUIPMENT
U2-1	RAW MILL VENT	BAG FILTER
U2-2	KILN & RAW MILL	REVERSE AIR BAG HOUSE
U2-3	COOLER STACK	ESP
U2-4	COAL MILL VENT	BAG FILTER
U2-6	CEMENT MILL STACK	ESP and BAG FILTER
U2-7	TP-8 (@RMH-II FEEDING)	BAG FILTER
U2-8	RM HOPPERS TOP	BAG FILTER
U2-9	TERTIARY CRUSHER (RMH BOTTEM)	BAG FILTER
U2-10	RMH BOTTEM FOR WEIGH FEEDERS-3 NOS.)	BAG FILTER
U2-11	BLENDING SILO TOP – SILO VENT	BAG FILTER
U2-12	BLENDING SILO TOP – (DB+BE/VP/PUMP)	BAG FILTER
U2-13	SILO DISCH. BIN (KILN FEED BIN)	BAG FILTER
U2-14	PREHEATER TOP (BE/VP/PUMP VENT)	BAG FILTER
U2-15	COOLER DISCHARGE ABOVE DBC	BAG FILTER
U2-16	CSP TOP	BAG FILTER
U2-17	CSP EXTRACTION – 2 NOS.	BAG FILTER
U2-18	TP-9 (@CSP OUTLET)	BAG FILTER
U2-19	TP-10 (@CMH. FEEDING CONV.)	BAG FILTER
U2-20	CEMENT MILL HOPPERS TOP	BAG FILTER
U2-21	CEMENT MILL HOPPERS BOTTEM (WEIGH FEEDERS)	BAG FILTER
U2-22	CEMENT SILO TOP (SILO VENT)	BAG FILTER
U2-23	CEMENT SILO TOP (BE/VP PUMP+DB)	BAG FILTER
U2-24	PACKING PLANT (PACKER #2)	BAG FILTER
U2-25	TP-II(@COAL TRANSFER POINT)	BAG FILTER
U2-26	RAW COAL HOPPERS TOP	BAG FILTER
U2-27	COAL MILL BUILDING – 3 NOS.	BAG FILTER
U2-28	@TP -4 (BC-1 SPLITTING)	BAG FILTER
U2-29	@TP-5 (LSP-II EXTRACTION)	BAG FILTER
U2-30	@TP-6 (STACKER FEEDING TP)	BAG FILTER
U2-31	@TP-7 (RECLAIMER DISCHARGE. TP)	BAG FILTER
U2-32	ADDITIVE DUMP HOPPER	BAG FILTER
U2-33	ADDITIVE DUMP CRUSHER	BAG FILTER
U2-34	@CMB-I (SEPERATOR CHIMNEY – TAPPING)	BAG FILTER
U2-35	FLY-ASH SILO TOP	BAG FILTER
U2-36	CEMENT SILO #3 TOP (SILO VENT)	BAG FILTER
U2-37	CEMENT SILO #3 TOP (BE/VP/PUMP VENT)	BAG FILTER
U2-38	PACKING PLANT (PACKER #3)	BAG FILTER
U2-39	EXTENDED TUNNEL CLINKER FEED POINT	BAG FILTER

The emission from Cooler, Kiln, cement mill is passed through ESP which reduces the particulate matter to the minimum levels. The emission from Coal Mill, Kiln and Cement Mill are passed through Bag filters.

7.2.2 Ambient Air Quality

Ambient air quality monitoring is carried out regularly at mines to know the status of the ambient air quality.

Ambient air quality is monitored for 24 hours at each station for the estimation of PM₁₀, PM_{2.5}, SO₂, NO_x. Estimated average values for the parameters monitored are represented in the Table 7.2 the analyzed values for PM₁₀, PM_{2.5}, SO₂ and NO_x are within limits prescribed by APPCB.

Table 7.2
AVERAGE VALUES OF AMBIENT AIR QUALITY DATA

Location	Parameters			
	PM ₁₀	PM _{2.5}	SO ₂	NO _x
Near Security gate	59.13	23.83	13.91	18.26
Near Cement mill area	55.98	22.31	13.09	17.86
Near Crushing area	63.01	25.76	15.02	19.12
Colony	58.94	23.39	13.20	18.73

Note: All the values are expressed as ($\mu\text{g}/\text{m}^3$)

7.2.3 Noise Pollution

Noise Levels are measured at various places in the factory premises by using a sound level meter. The noise levels were found to be within the limits prescribed by APPCB. The management provided ear muffs for workers who are exposing to high noise levels. The industry has provided industrial type silencers for Diesel Generator sets for controlling noise pollution.

Table
Ambient Noise Levels

S No.	Location	Noise Levels in dB(A)	Noise Levels in dB(A)
		Day Time	Night Time
1	Near Raw Mill	62.55	54.23
2	Near QC Lab	54.29	44.03
3	Near Time Office	57.26	41.89
4	Near Colony	42.60	41.36

8. GREENBELT DEVELOPMENT

DETAILS OF SPECIES FOR GREEN BELT DEVELOPMENT FOR THE YEAR 2021-2022	
PLANT AREA	
AREA IN ACRES	1.89Acre
NO. OF PLANTS	1000
NAME OF THE SPECIES	Dubai,Feltoform, Ganuga
Survival rate (%)	85%
WATER SUPPLY	Drip system and Water Tanker

9. HOUSEKEEPING:

Proper cleaning of the different sections is required to maintain healthy environment, to avoid unnecessary loss of product in the form of dust emission and polluting surrounding environment. Water spraying is done inside the factory premises to control fugitive emissions from coal yard and raw material storage yards. Stores to be maintain properly. Factory premises are to be clean and green to have good housekeeping.

M/s. Parasakti Cement Industries Ltd, is keeping their plant and premises neat tidy.

Housekeeping has been found to be well.

ANEXURE-1			
MONTH WISE INPUT WATER CONSUMPTION FOR THE YEAR 2021-2022			
MONTH	RIVER WATER(KL)	SUMP WATER(KL)	TOTAL(KL)
April- 2021	31530	19010	50540
May- 2021	39500	17130	56630
June-2021	30950	20300	51250
July- 2021	21400	5820	27220
August- 2021	22750	25060	47810
September- 2021	21930	21740	43670
October-2021	17620	6280	23900
November- 2021	17150	25220	42370
December- 2021	19660	11670	31330
January- 2022	19450	12890	32340
February- 2022	20520	21660	42180
March-2022	40590	6150	46740
TOTAL	303050	192930	495980

ANEXURE-1			
MONTH WISE WATER CONSUMPTION FOR THE YEAR 2021-2022			
MONTH	INDUSTRIAL(KL)	DOMESTIC(KL)	WHR(KL)
April- 2021	7825	4470	35663
May- 2021	8126	4460	41514
June-2021	7759	4050	36901
July- 2021	8084	4430	11823
August- 2021	5569	4320	35177
September- 2021	3524	4190	33477
October-2021	3131	4490	13478
November- 2021	2948	4390	33541
December- 2021	4647	4260	19532
January- 2022	4535	4280	21193
February- 2022	6365	3770	29512
March-2022	7555	4540	31810
TOTAL	70068	51650	343621

MONTH WISE EFFLUENT WATER CONSUMPTION FOR THE YEAR 2021-2022

MONTH	STP(KL)	N-PIT(KL)
April- 2021	3119	3210
May- 2021	3227	5100
June-2021	3128	5460
July- 2021	3247	710
August- 2021	3228	4080
September- 2021	3130	3870
October-2021	3240	1230
November- 2021	3145	4050
December- 2021	3240	2600
January- 2022	3218	2390
February- 2022	2943	2980
March-2022	3227	4560
TOTAL	38092	40240

RAW MATERIAL CONSUMPTION-2021-2022

MONTH	Limestone	Laterite	Dolomite	Gypsum-S	Gypsum	Fly Ash	Limestone-PIS	Coal Imp	Pvt. Coal	Pet Coke
APR'21	169286	10895	1824	817.21	5655.42	7974.72	4247	17906.00	0.00	0.00
MAY'21	126904	8188	1377	2123.00	4336.66	6188.09	3346	14047.00	0.00	0.00
JUN'21	130148	8393	1400	2523.14	4307.00	7720.89	3478	15256.00	0.00	0.00
JUL'21	105208	6788	1130	1247.21	3964.00	7582.95	3270	10890.14	0.00	885.86
AUG'21	138677	8809	1489	2409.00	3873.00	6808.55	3403	16223.00	0.00	0.00
SEP'21	114165	7233	1226	4044.00	2831.00	5909.40	2512	13009.00	0.00	0.00
OCT'21	31127	1878	334	4593.00	3076.00	6025.49	2906	3378.00	0.00	0.00
NOV'21	111596	6693	1194	3393.00	2152.00	4021.64	1984	13207.00	0.00	0.00
DEC'21	57732	3461	618	5604.00	3307.00	6070.90	3194	6536.00	0.00	0.00
JAN'22	65556	5169	717	5382.00	2990.00	5991.75	2968	6001.00	1204.00	0.00
FEB'22	105989	9317	1164	6683.00	2837.00	5996.93	3611	6618.65	3080.00	1311.00
MAR'22	120714	9623	1314	8450.00	3383.00	7958.63	4431	4140.73	3088.75	3101.02
TOTAL	1277102	86447	13787	47268.56	42712.08	78249.94	39350	127212.52	7372.75	5297.88

CLINKER PRODUCTION, CONSUMPTION & SALES FOR THE YEAR 2021-2022			
MONTH	Production	Consumption	Sales
APR'21	120623	91107.65	26399.16
MAY'21	89587	69227.25	2783.44
JUN'21	93574	78089.97	27421.58
JUL'21	74951	83072.84	17031.33
AUG'21	98688	72075.45	3225.82
SEP'21	81075	52073.6	12274.28
OCT'21	21611	59956.51	2458.08
NOV'21	80979	42208.36	1776.45
DEC'21	40971	64632.1	1248.69
JAN'22	46773	59801.25	2998.13
FEB'22	77818	71203.07	2071.85
MAR'22	85420	88555.37	2406.62
Total	912070	832003.42	102095.43

CEMENT PRODUCTION DETAILS 2021-2022					
MONTH	OPC 43GR	OPC 53GR	PPC	SRPC	TOTAL
APR'21	11704	73216	23305	1577	109802
MAY'21	5109	61798	17746	568	85221
JUN'21	7242	66290	22141	446	96119
JUL'21	5872	70935	21667	663	99137
AUG'21	4390	63642	19453	1084	88569
SEP'21	3572	46689	16884	225	67370
OCT'21	4718	53402	17429	1008	76557
NOV'21	4260	35381	13606	512	53759
DEC'21	5551	58320	17779	1158	82808
JAN'22	4862	54548	17212	511	77133
FEB'22	5353	66770	17227	981	90331
MAR'22	6778	81833	22808	1359	112778
TOTAL	69411	732824	227257	10092	1039584

CEMENT DESPATCH DETAILS 2021-2022					
MONTH	OPC 43GR	OPC 53GR	PPC	SRPC	TOTAL
APR'21	11619.12	67071.39	22149.09	1245.33	102085
MAY'21	4665.82	60688.56	18645.32	824.13	84824
JUN'21	6944.7	66280.61	21884.27	552.59	95662
JUL'21	6220.25	73354.44	21484.34	642.50	101702
AUG'21	4828.01	61542.32	19455.01	1080.28	86906
SEP'21	3200.59	46235.26	16550.60	378.92	66365
OCT'21	4306.18	51661.43	18297.26	809.26	75074
NOV'21	4649.26	39386.70	13314.22	655.00	58005
DEC'21	5643.03	56836.46	18532.36	1038.00	82050
JAN'22	5162.45	53185.98	16299.70	627.87	75276
FEB'22	5340.71	71867.48	17785.75	893.95	95888
MAR'22	6399.73	77916.64	22108.00	1607.49	108032
TOTAL	68980	726027	226506	10355	1031868

EXPENDITURE ON POLLUTION CONTROL EQUIPMENT & MONITORING 2021-2022

LINE-01	
CEMENT MILL -1 - BAG FILTERS	36377.27
CEMENT MILL -1 - ELECTRO STATIC PRECIPITATORS	5535.98
KILN,PREHEATER,COOLER -1 - BAG FILTERS	21809.26
KILN,PREHEATER,COOLER -1 - BAG HOUSE	9398.12
POWER DISTRIBUTION -LC3-ESP TRANSFORMERS-KILN 1	2640.00
POWER DISTRIBUTION -LC4-ESP TRANSFORMERS-CEMENT MILL 1	440.00
RAW MILL -1 - BAG FILTERS	464.62
KILN,PREHEATER,COOLER -1 - ELECTRO STATIC PRECIPITATORS	32006.61
LINE-01 Total	108671.86
LINE-2	
CEMENT MILL -2 - BAG FILTERS	319583.32
CEMENT MILL -2 - ELECTRO STATIC PRECIPITATORS	51699.71
COAL MILL -2 - BAG FILTERS	665834.75
KILN,PREHEATER,COOLER -2 - BAG FILTERS	121895.03
KILN,PREHEATER,COOLER -2 - BAG HOUSE	3558472.70
KILN,PREHEATER,COOLER -2 - ELECTRO STATIC PRECIPITATORS	185788.10
L.S.CRUSHER - BAG FILTERS	21619.70
POWER DISTRIBUTION -LC7-ESP TRANSFORMERS-CEMENT MILL 2	2190.00
RAW MILL -2 - BAG FILTERS	194551.21
LINE-02 Total	5121634.52
LINE-1&2	
CIVIL - HORTICULTURE	155335.97
CIVIL - IND. VACUUM CLEANER	69682.65
CIVIL - SWEEPING MACHINE	504346.12
PACKING PLANT -1 - BAG FILTERS	7177.68
PLANT GENERAL- HORTICULTURE	11625.63
PLANT GENERAL- POLLUTION MONITORING EQUIPMENT	1187610.38
TRACTOR PLANTATION	181130.44
P&A/WELFARE - DRINKING WATER TREATMENT PLANT	646422.74
LINE-1&2 Total	2763331.61
YEARLY THIRD PARTY(Universal)MONITORING CHARGES	320016
YEARLY STP MAINTANANCE BILL	637200.00
RIVER WATER CESS	292667.00
POWER CONSUMPTION ON POLLUTION EQUIP	29948041.00
MIYAWAKI PLANITATION	2136500.00
TOTAL COST	41328061.99

MONTH WISE CONSUMPTION OF ELECTRICAL ENERGY FROM APSPDCL / GENERATION OF ELECTRICAL ENERGY FROM D.G.SETS/DIESEL CONSUMPTION FOR THE YEAR OF 2021-22

MONTH	ELECTRICAL ENERGY FROM APSPDCL	WHR UNITS	ELECTRICAL ENERGY FROM D.G. SET
APR'21	7752500	3395224	-
MAY'21	4054300	4465124	-
JUN'21	5246800	4088863	-
JUL'21	7725100	718974	-
AUG'21	4672200	4580720	-
SEP'21	3094900	4442414	-
OCT'21	3356100	1032938	-
NOV'21	2771600	4228166	-
DEC'21	3303400	2182716	-
JAN'22	3333800	2063232	-
FEB'22	5662900	2292764	-
MAR'22	6787600	2313058	-
TOTAL	57761200	35804193	-

