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JKLCL/ES/KILN/2023/

90108.

Date: 16.09.2023

To,
The Member Secretary
Rajasthan State Pollution Control Board,
4, Institutional Area, Jhalana Doongari,
JAIPUR-302 004 (Rajasthan)

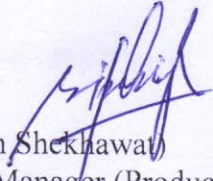
Sub: Environmental Statement for the Financial Year 2022-23 for Kiln 1, Kiln 2 & Kiln 3 of JK Lakshmi Cement Ltd. Jaykaypuram, Sirohi (Raj.)

Dear Sir,

Please find enclosed herewith Environmental Statement for the FY 2022-23 in the prescribed Form V in accordance with the notification GSR 329 (E) dated 13/03/1992 issued by the Ministry of Environment & Forest, New Delhi.

This is for information and record please.

Thanking you.
Yours Faithfully,
For JK LAKSHMI CEMENT LTD.


(Rajpal Singh Shekhawat)
Sr. General Manager (Production)

Encl: As above

CC: 1) Ministry of Environment & Forests, Regional office (Central Region)
Kendriya Bhawan, 5th Floor, Sector 'H' Aliganj, Lucknow – 226024 (UP)

2) The Regional Officer, Rajasthan State Pollution Control Board,
Plot No. 68, Shanti Nagar, Main Highway Road,
Sirohi (Raj.)-307001



FORM-V

ENVIRONMENTAL STATEMENT FOR THE FINANCIAL YEAR ENDING 31st MARCH 2023

PART-'A'

- | | | |
|----|---|--|
| 1- | Name & address of the
Owner/occupier of the industry
Operation of process | Dr. S.K Saxena (Sr. Vice President - Works)
JK Lakshmi Cement Ltd. Sirohi (Raj.) |
| | Cement Plant. | : M/s JK LAKSHMI CEMENT LTD
P.O: JAYKAYPURAM
DIST. SIROHI (RAJASTHAN)
PIN CODE - 307019 |
| | Admn. Office | : NEHRU HOUSE
4, BAHADUR SHAH ZAFAR MARG
NEW DELHI - 110002 |
| 2- | Industry category | : Red Category (Large) : Cement Manufacturing |
| 3- | Production capacity | : 8.70 MTPA (CEMENT)
: 5.35 MTPA (CLINKER) |
| 4- | Year of establishment | : Kiln-1 : 15-08-1982
Kiln-2 : 30-03-1995
Kiln-3 : 10-11-1996 |
| 5- | Date of last environmental
Statement submitted | : 26 th September, 2022 |

Part- "B"

Water and Raw Material consumption

<u>Water consumption M³/Day</u>	(2021-22)	(2022-23)
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Process	:	Nil
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i) Cooling	:	1530.89 M³/DAY	1475.98 M³/DAY
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ii) Domestic	:	489.81 M³/DAY	459.90 M³/DAY
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**Water consumption
(cooling) per unit of
product**

Name of the product:

During the previous

During the current

Ordinary Portland Cement

(O.P.C)

Financial year

Financial year

Pozzolana Portland Cement

(P.P.C)

2021-22

2022-23

Clinker sold+Transfer to

a) **Grinding Units.**

0.093 (M³/ MT)**

0.091 (M³/ MT)**

b)

Raw Material consumption:

**Name of the
Raw material**

**Name of the
Product**

**Consumption of Raw material per
Unit of MT/MT During the**

Financial year.

Current year.

2022-23

2023-24

a) **Raw material**

Cement Grade Limestone

Clinker

1.4050993

1.4154023

F.F Slag

Clinker

0.0000111

0.0000000

Red Ochre

Clinker

0.0245411

0.0274037

Marble Waste(khanda)

Clinker

0.0111740

0.0161896

Bed Material LS

Clinker

0.0000000

0.0000000

Calcite

Clinker

0.0005559

0.0000000

Fly Ash

Cement

0.1289802

0.1237598

Gypsum

Cement

0.0682508

0.0682438

Jarosite Cake

Cement

0.0015243

0.0015050

Fuels :

Coal (Imported - S.African)

Clinker

0.0000000

0.0000000

Coal (Imported - Indonesia)

Clinker

0.0008515

0.0126981

Coal IMP. US

Clinker

0.0180919

0.0010598

Coal (Imported - Australia)

Clinker

0.0059322

0.0000000

Colombian Coal

Clinker

0.0000000

0.0000000

Pet Coke (Indigenous)

Clinker

0.0146874

0.0232606

Pet Coke (Imported)

Clinker

0.0000000

0.0454741

Bed Material -PC

Clinker

0.0000000

0.0000000

Alternative Fuel Resources :

Bio-mass	0.0029855	0.0024781
Rdf Fluff	0.0000026	0.0000061
De Oiled Cake	0.0009637	0.0009632
TDI TAR	0.0002492	0.0002815
Waste Mix Solid	0.0007963	0.0000717
Own TPP Fly Ash	0.0081325	0.0022056
Pulp Waste	0.0000000	0.0000000
Waste Mix liquid Low	0.0004043	0.0000000
Waste Mix liquid High	0.0000000	0.0000000
Scrap B	0.0000000	0.0000000
Juli Flora	0.0000000	0.0004475
Textile ETP	0.0000598	0.0000569
Paint Sludge	0.0000245	0.0000039
ETP Sludge	0.0011468	0.0023603
Grinding Sludge	0.0000057	0.0000000
Splent Bleching	0.0000000	0.0004747
Spent Clay	0.0000000	0.0000000
Mix hazardous Waste	0.0000000	0.0000000
Gasket Scrap	0.0000000	0.0000000
Roof liner Waste	0.0000000	0.0000000
Cotton Waste Mix	0.0000000	0.0000000
CETP	0.0000000	0.0000000
FRP plastic Waste	0.0000247	0.0000000
Phosphate Sludge	0.0000023	0.0000000
Oil Socked Cotton	0.0000000	0.0000000
Process Waste	0.0008174	0.0011189
Distillation Residue (Organic)	0.0008458	0.0004625
Process Waste (inorganic Waste)	0.0000220	0.0000000
Aqueous Waste	0.0005496	0.0000292
Spent Solvent	0.0014827	0.0015239
Plastic Waste	0.0000032	0.0000000
Process Residue	0.0000150	0.0000404
Drill Cutting Excluding	0.0000092	0.0000233
Coal Fines	0.0000000	0.0000000
Plastic Waste(Hazards)	0.0000042	0.0000000
Off Specification Product	0.0000000	0.0000048
Sealant Waste (23.1)	0.0000000	0.0000000
Oily Sludge Oil(4	0.0000000	0.0000000

****This is excluding the water consumption of Captive power plant & Mines.However inclusive of water consumption in WHR. Raw material consmption statement attached vide annexure - " A "**

Part - "C"

Pollution discharged to environment/unit of out put.

<u>Pollutants</u>	<u>Quality of Pollution discharged Mass/Day</u>	<u>Conc.of Pollutants in discharged (Mass/Vol.)</u>	<u>Percentage of variation from prescribed standard with Reasons.</u>
<u>a) Water</u>			
<u>I) Industrial</u>	Nil	Nil	Zero Liquid Discharged
<u>II) Domestic</u>	Nil	Nil	Zero Liquid Discharged

Note: JK Lakshmi Cement Ltd. does not generate any liquid effluent from its process, It's a dry manufacturing process. The domestic waste water generated from household is being treated well in Sewage Treatment Plant (STP) as per the desired condition & completely reused (100%) in Cement plant for industrial cooling purpose. Hence, no waste water is discharged from the colony. The effluents quantities / quality are well with in the limits prescribed by RSPCB. STP details attached vide annex -"B".

Air : Stack emission

	<u>Stack attached to</u>	<u>Quantity of SPM discharged Kg/Day</u>	<u>Conc.of SPM discharged Mg/Nm³</u>	<u>Percentage of variation from prescribed standard with Reasons.</u>
<u>II) KILN -I</u>				
	1.Raw mill/Kiln -BagHouse	77.4	25.7-6.4	+53.3
	2.Raw mill/Kiln -BagHouse	58.0	15.4-6.2	+66.7
	3.Coal Mill-1 Bag house	13.0	24.3-3.4	+56.7
	4. Clinker Cooler-ESP	78.9	19.4-4.1	+43.3
	5.Cement Mill -1 Bag Hous	18.9	11.5-7.5	+63.3
	7. Cement Mill -3 Bag Filte	15.3	26.5-1.3	+50
<u>III) KILN-II</u>				
	1.Raw Mill/Kiln-Bag House	196.0	24.4-6.9	+40
	2. Coal Mill-2 Bag filter	16.8	26.2-10.4	+60
	3. Clinker Cooler-ESP	83.5	12.5-3.2	+50
	4. Cement Mill -2 Bag hous	23.6	19.2-7.3	+66.7
	5. Cememt Mill -4 Bag Filt	10.2	28.9-4.2	+66.7
<u>IV) KILN-III</u>				
	1.Raw Mill/Kiln-Bag Hous	157.6	23.3-6.0	+ 50
	2.Clinker Cooler-ESP	9.0	15.7-5.3	+70
	3.Coal Mill-3 Bag house	102.1	27.2-4.2	+ 53.3
	4.Cement mill -5 Bag filter	15.3	27.1-4.3	+ 50
	5.Cement mill -6 Bag filter	11.2	12.7-5.2	+ 63.3

Part-"D"
Hazardous waste

As specified under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.

Hazardous waste:Used oil,Category 5.1 as per schedule - I

	<u>Total quantity(Kg/KL)</u>	
	<u>During previous Financial year 2021-2022</u>	<u>During Current Financial year 2022-2023</u>
a) From process(Plant machineries : CTPP,Mine etc.)	21.43	35.13
b) From Pollution control Facility	Nil	Nil

Part "E"
Solid waste

Solid waste

	<u>Total quantity (MT)</u>	
	<u>During previous Financial year 2021-22</u>	<u>During Current Financial year 2022-2023</u>
a) From Process (Used/Scraped refractory bricks from pyro process)	368.91	575.56
b) From pollution control facility	Nil	Nil
1)Quantity recycled or Re-utilised	Nil	Nil
2)Sold to recyclers	368.91	575.56
3)Disposed	Nil	Nil

Part-"F"

Please specify the characteristics(in term of concentration & quantum) of hazardous as well as Solid waste and indicates disposal practice adopted for both these categories of wastes.

Solid waste generated from process operation especially through spillage of various raw material or finished product i.e clinker & cement is being recycled back into the process . Hence,there is no solidwaste generation during the process of cement manufacturing.

Used Batteries were sold to authorised recycler

Used oil covered under hazardous waste is generated from various section of the Plant like Mine, Raw Mills, Kilns ,Cement Mills and CTPP are carefully collected transfer and stored in storage yard & further sold to CPCB authorised recyclers. Details are submitted.

Part - "G"

Impact of Pollution Control measures on conservation of natural resources and consequently on the cost of production.

**M/s JK LAKSHMI CEMENT has employed latest technologies for better Pollution Assesment and Control. The design efficiency of pollution Control equipment is more than 99.9%. With the help of Pollution Control equipments, industry is recovering valuable Raw material as well as finished product by keeping emission standard within the prescribed limits. Further we are using substantial amount of other industry wastes like Fly ash, Rdf fluff, Pulp waste, TDI TAR, Agriculture waste (Bio-mass), Waste Mix Solid for coprocessing in Kiln giving aid to solid waste management in ecofriendly way & conserving natural resources like fuels for sustainable growth. On line system for continous Emission, Effluent and Ambient air (CEMS & CAAQM) quality monitoring have been installed in plant /colony area for better inspection and pollution assesment.

** For more details please refer Annexure - 'A', 'B', 'C', 'D' & 'E'.

Part - "H"

Additional investment proposal for environmental protection including abatement of Pollution.

1-	During 2022 -2023, 3000 trees were planted in plant /colony area Common for Kiln-1,Kiln-2,Kiln-3 & Near by plant area.	41.55 Lacs
	Proposed trees plantation during 2023-24	45.00 Lacs
2-	Operation and maintenance of Pollution Control Equipment	176.63 lakh

Part-"I"

Any particulars in respect of environment protection and abatement of Pollution.

M/s JK Lakshmi cement Ltd has taken number of steps towards Environment protection like Waste heat recovery Power plant, Hot Air Recirculation System, New technic for Water harvesting and recharging underground aquifers, Plantations (In plant and out side the plant area) Solar water heating system, Water treatment plant, Sweeping of plant/colony road is done through sweeping machines and vacuum cleaners,for collection of dust spilled on floors. M/s JK Lakshmi Cement Ltd has a separate Environmental Management Cell equipped with pollution monitoring facilities like Stack monitoring kits (VSS -1), UV Spectro photmeter,Respirable dust sampler (RDS), Fine Particulate Sampler(APM - 550), High volume samplers, Sound level Meter etc. New addition for Water testing like Thermo Reactor, Spectroquant, Ph / Coductivity/ TDS Meter, BOD Incubator etc. For efficient monitoring of environmental parameters .Details attached vide annexure - " D".

In respect to energy efficeincy various energy conservation project have been sucessfully implemented that resulted into signinificant saving of energy.

Raw material Consumption Statement :

April 2022 to March 2023

Item		Receipts	Consumption
		MT/Annum	MT/Annum
Limestone:	Own	6700176.00	6700176.00
	Purchase	350021.43	358124.00
Fuel	Coal (Imported - S.African)	160.580	0.000
	Coal (Indigenous)	0.000	0.000
	Coal (Imported - Indonesia)	118941.530	63322.830
	Coal IMP. US	9272.900	5285.076
	Coal (Imported - Australia)	5885.080	0.000
	Colombian Coal	0.000	0.000
	Pet Coke (Indigenous)	108609.314	115995.400
	Pet Coke (Imported)	218854.629	226769.29
	Bed Material -PC	0.000	0.000
	Bio-mass	20257.41	12357.96
	Rdf Fluff	30.28	30.28
	De Oiled Cake	4,902.78	4803.48
	TDI TAR	1,238.69	1403.70
	Waste Mix Solid	0.00	357.63
	Own TPP Fly Ash	13065.50	10998.85
	Waste Mix liquid Low	0.00	0.00
	Waste Mix liquid High	0.000	0.000
	Scarp B	0.00	2231.49
	Jolly Flura	1981.51	0.00
	Textile ETP	357.93	283.70
	Paint Sludge	0.00	19.16
	ETP Sludge	10812.90	11693.61
	Grinding Sludge	0.00	0.00
	Splent Bleching	2467.17	2366.98
	Spent Clay	0.00	0.00
	Mix hazardous Waste	0.00	0.00
	Gasket Scarp	0.00	0.00
	Roof liner Waste	0.00	0.00
	Cotton Waste Mix	0.00	0.00
	CETP	0.00	0.00
	FRP plastic Waste	0.00	0.00
	Phosphate Sludge	0.00	0.00
	Oil Soaked Cotton	58.91	0.00
	Process Waste	3963.81	5543.30
	waste mix (non hazardous)	0.00	0.00
	Distillation Residue (Organic)	2274.84	2291.27
	Process Waste (inorganic)	0.00	0.00
	Aqueous Waste	117.39	144.78
	Spent Solvent	7329.85	7550.13
	Plastic Waste	0.00	0.00
	Process Residue	328.41	199.96
	Drill Cutting Exclu.(2.1)	0.00	115.62
	Plastic Waste haz.	0.00	0.00
	Off Specification Product	130.65	23.71
	Sealant Waste (23.1)	0.00	0.00
	Oily Sludge Oil(4	0.00	0.00
	Spent clay Containing Oil	0.00	0.00
	Fly Ash	13065.50	10998.90
Clinker	Own	4986780.00	4899728.90
	Purchase	0.00	0.00
	Clinker(Sold + Transfer)		16,17,193.90
Gypsum		359620.376	340317.000
Additives.	Flv Ash	632011.22	617163.00
	F.F Slag	0.000	0.000
	Red Ochre	143002.44	1,36,656.00
	Marble Waste(khanda)	92343.24	80734.00
	Bed Material LS	0.00	0.0000
	Calcite	19144.88	19888.96
	Jarosite Cake	7,436.32	7505

LIST OF FINISHED PRODUCT

1- O.P.C-33	Nil Quantity	NIL	Quantity(MT/Annum)
2- O.P.C-43	533015	Quantity(MT/Annum)	
3- O.P.C-53	1620224	Quantity(MT/Annum)	
4- P.P.C	2014825	Quantity(MT/Annum)	
4- P.S.C	105960	Quantity(MT/Annum)	
SUB TOTAL	4274024	Quantity(MT/Annum)	
CLINKER (Sold+Tansfer)	1617193.9	Quantity(MT/Annum)	
GRANT TOTAL	5891218	Quantity(MT/Annum)	


 (Rajpal Singh)
 Sr. General Manager (Production)

JK LAKSHMI CEMENT LTD. JAYKAYPURAM (SIROHI)

BRIEF DISCRIPTION OF SEWAGE TREATMENT PLANT (STP)

1. Capacity of STP	: 400 KLC
2. Date of installation	: 31.03.2003
3. Capital Expenditure	: 45 Lacs
4. Technology	: Activated Sludge Process
5. Effluent Treated	: Colony Wastewater

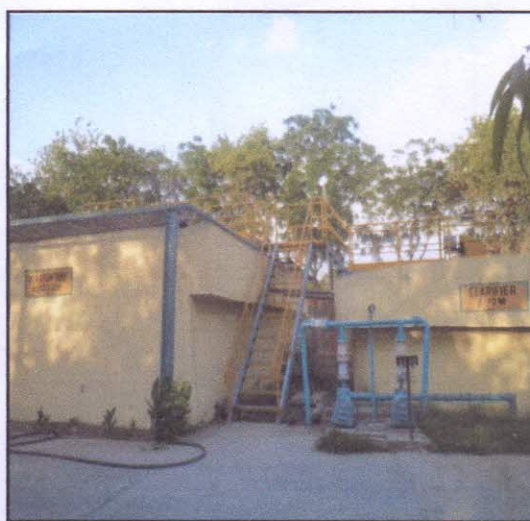
Process Description:

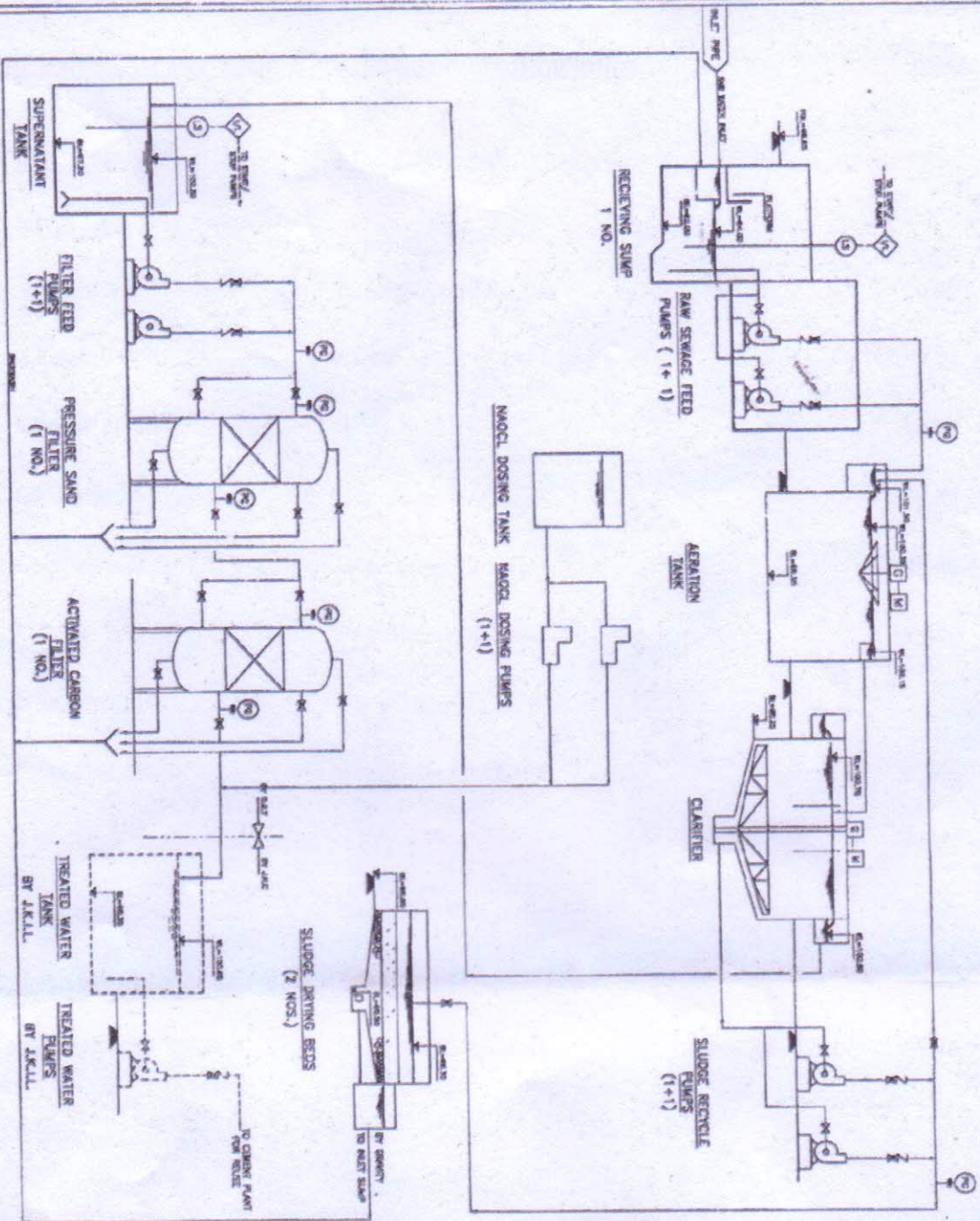
Raw sewage is passed through a grit separation chamber for removal of foreign materials from the sewage. This is collected in sewage sump.

It is further treated in an extended aeration tank, where required amount of oxygen is supplied by surface reactor. The overflow of the aeration tank is fed to the clarifier provided with clarifier mechanism. The sludge deposited at the bottom of the clarifier is recycled back to the aeration tank & excess sludge is sent to the sludge drying beds.

To make the treated sewage suitable for reuse, the clarifier outlet is stored in a clear water storage tank & is further treated by passing through Pressure Sand Filter & Activated Carbon Filter for removal of suspended solid & traces of BOD, COD etc. The filtered water is suitably chlorinated for disinfections for purpose and to produce treated water having BOD less than 30 mg/liter.

The treated water is collected in a clear water tank and is pumped to the cement plant for industrial cooling purpose.





- LEGEND:-**
- ▷ BATTERY WAKE
 - ∇ NON RETURN VALVE
 - ⊕ PV BALL VALVE
 - ⊗ PRESSURE DRAIN
 - ⊙ LEVEL SWITCH
 - ⊠ MOTOR
 - ⊡ CLEAN BOX
 - ⊞ SELF PRIMING PUMP

NOTES:-

DATE	REVISION	CHKD BY

PROJECT		CLIENT	
DAYSTAR Green Technologies		J.K. INDUSTRIES LTD.	
228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000		Sewage Treatment Plant	
J.K. INDUSTRIES LTD.		J.K. INDUSTRIES LTD.	
Lokeshwari Cement Division,		Lokeshwari Cement Division,	
Adelapattur, Rajasthan.		Adelapattur, Rajasthan.	
P. & I. DIAGRAM		P. & I. DIAGRAM	
HYDRAULIC LEVELS		HYDRAULIC LEVELS	
DATE	01/04/2011	DATE	01/04/2011
DRG. NO.	DCI/226/P-01	DRG. NO.	DCI/226/P-01
REV	0	REV	0

Details of major Air Pollution Control Equipment installed

<u>S.NO</u>	<u>LOCATION</u>	<u>CONTROL EQUIPMENT</u>	<u>EFFICIENCY (%)</u>
1	<u>KILN - I</u>		
i)	Kiln/ VRM	Bag House(Plus- Jet)	99.95
ii)	Kiln/Raw Mill	Electro-plus Hybrid Bag house	99.98
iii)	Clinker Cooler	ESP	99.95
iv)	Coal mill -1	Bag filter	99.96
v)	Cement mill -1	Bag house(Plus-Jet)	99.40
vi)	Cement mill -3	Bag filter(Plus-Jet)	99.45
2	<u>Kiln - II & III</u>		
i)	Raw Mill / Kiln	Bag house (RABH)	99.96
ii)	Clinker Cooler	ESP	99.98
iii)	Coal mill -2 & 3	Bag filter(Plus-Jet)	99.98
iv)	Cement mill - 2	Bag house (Plenum plus)	99.45
v)	Cement mill - 4,5 & 6	Bag filter (Plus-Jet)	99.45

JK LAKSHMI CEMENT LTD. JAYKAYPURAM (SIROHI)

DEATAILS OF ENVIRONMENT MONITORING EQUIPMENTS

INSTRUMENT	MODEL	QTY	MAKE
STACK MONITORING KIT	VSS1	2	VAYUBODHAN UPKARAN PVT LTD
STACK MONITORING KIT	VSS PLUS	1	VAYUBODHAN UPKARAN PVT LTD
FINE PARTICULAR SAMPLER (FPS)	ASS190	4	ENVIROTECH INST. PVT LTD
RESPIRABLE DUST SAMPLER (RDS)	APM 460 BL	4	ENVIROTECH INST. PVT LTD
SOUND LEVEL METER	SYGNET	1	BASELINE TECHNOLOGY
BOD INCUBATOR	SM 1002/CAT T1 505	1	TEMP MUMBAI
TESTO KIT FOR GASIOUS MONITORING	TESTO 350	1	TESTO GERMANY
HOT PLATE	-	1	TEMP MUMBAI
ELECTRONIC BALANCE	CA-64	1	CONTECH
UV-VIS SPECTROPHOTOMETER	SYSTRONICS - 117	1	SYSTRONICS AHMEDABAD
PH/CONDUCTIVITY METER	PC-700	1	MERCK
TDS METER	HM DIGITAL	1	HM DISGITAL USA
WATER BATH	SM1226	1	TEMPO
HEATING MENTAL	HM-2L	1	MAC
REFRIGERATOR	21271	1	WHIRLPOOL

ANNEXURE- "E"

List of activities carried out during the year 2022-23 for Environmental Protection and Sustainable Growth.

S.NO	Job Description	Investment (In lacs)	Benefits
1	01 set of low Nox burner for line- 1	150.0	To maintain NOx emission with in norms
2	Replacement of fiber glass PTFE Laminated filter bags and cages in Kiln 1 Hybrid Bag House	261.0	To maintain Particulate Matter emission with in norms
3	Installation of High frequency Power Supply (HFPS) for Kiln-1 & 2 ESP second field (2 Nos)	19.0	To maintain Particulate Matter emission with in norms
4	Installation of One (01) CAAQMS in Cement Plant	70.0	To access ambient air condition 24X7
5	VFD MODULE FOR HYBRID BAG HOUSE FAN MOTOR 465 KW	14.0	To maintain Particulate Matter emission with in norms
6	Air drier for Hybrid BH fan U1 Raw Mill, Chaina Bag House & CM-2 O'SEPA Bag House	9.7	
7	Installation of New Energy Meter with EMS System Hardware	3.3	Energy saving
8	PIPE STRUCTURE / G.I SHEET REPLACEMENT OF SLAG SHED NEAR GYPUSUM YARD	29.3	To maintain Particulate Matter emission with in norms
9	Rewiring of Colony Quarter	7.0	Energy saving
10	Upgradation of CCTV Control Room for safety of data during any unrest	9.0	
11	CCTV Cameras for Monitoring of High risk job	9.0	
12	Installation Of VFD in mill vent fan of raw mill	6.5	
13	Installation of Fresh air damper in kiln-3	18.9	
14	Installation of weigh feederr at raw coal feeding system	20.0	
15	Primary Impact Arm (Crusher-2)	30.0	
16	MILL FEED HEAD FOR CM - 1	40.0	
17	FIXED AND MOVING AIR BEAM OF IKN COOLER FOR K-1	14.8	
18	PRE-HEATER FEED ELEVATOR BELT REPLACEMENT K-1	103.0	
19	COMPLETE ASSY. OF ROLLER CRUSHER DRIVE K-1	93.0	
20	Complete chain for panconveyor E-345,KZB-Q 1200/400/5 Commissioning No. 35169 (Kiln-3)	63.0	
21	Lube Pump Motor for VRM PH-1 & 2 Hydraulic System & Kiln solid Flow Meter Motor Assembly	4.5	
	TOTAL	974.9	

(RAJPAL SINGH)
Sr. G.M. (Production)

JK LAKSHMI CEMENT LTD.

JAYKAYPURAM (SIROHI)

DEATAILS OF AWARD

SN	Name of the Award	Area of Specialization	Date	Awarded by
1	QCFI Par Excellence Award – Prakasj Lean Quality Circle (Electrical Department)	Quality Circle	7-Jan-2021	QCFI Hyderabad
2	QCFI Par Excellence Award – Prakasj Lean Quality Circle (Instrumentation Department)	Quality Circle	7-Jan-2021	QCFI Hyderabad
3	QCFI Par Excellence Award – Prakasj Lean Quality Circle (Production & Quality Control Department)	Quality Circle	7-Jan-2021	QCFI Hyderabad
4	QCFI Par Excellence Award – Prakasj Lean Quality Circle (Mechanical Department)	Quality Circle	7-Jan-2021	QCFI Hyderabad
5	EAR Special Jury Trophy in Best Employer Award 2019 Award Competition	Outstanding Performance in Production Excellence	6-Feb-2021	The Employers Association of Rajasthan
6	Innovative CIO Award 2021	Recognition to india's most innovative and forward-thinking CIO's	17-Feb-2021	BitStream Mediaworks pvt. Ltd.
7	Commendation Certificate for safety innovation award 2020	Innovation in safety management system	17-Mar-2021	The institution of Engineers (India) Delhi State Centre
8	Excellence in Energy Management 2022	Excellence in Energy Management	Aug 2022	Confederation of Indian industry
9	Convention on Quality Concepts (CCQC 2022) Gold Award	Quality Circle	Sep 2022	QCFI Rajsamand
10	Gold Award in 3rd TIOL National Taxation Award 2022	Taxation	Nov 2022	TIOL Trust
11	Par Excellence Awards	Quality Circle	Dec 2022	QCFI Hyderabad
12	5 Star rating Award 2021-22	Mines Operation	March 2023	Indian Bureau of Mines
13	Rajasthan Govt Energy Efficiency Award	Energy Efficiency	2023	Rajasthan Govt
14	Platinum Award under Apex India OH & S Award 2022	Occupational Health & Safety	April 2023	Apex India