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SHREE CEMENT LTD

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SCL/BWR/ENV/2021-22/

Date:-15/05/2021

To,

The Deputy Director General of Forests (C), Ministry of Env., Forest and Climate Change, Integrated Regional Office, Jaipur, A-209&218, Aranya Bhawan, Mahatma Gandhi Road, Jhalana Institutional Area, Jaipur – 302004, Rajasthan

Sub:- Compliance of conditions of environmental clearance letter of 300 MW (2*150 MW) Thermal Power Plant at village Andheri Deori, Tehsil-Masuda, District Ajmer (Rajasthan) by M/s Shree Cement Limited

Ref: - Environment Clearance letter No. J-13012/83/2009-IA-II (T) dated 30.11.2010

Dear Sir,

In reference to the above subject matter and referred letter, we are submitting herewith the point wise compliance of conditions of the above environmental clearance letter for the period from, October, 2020 to March, 2021.

This is for your kind information please.

Thanking you,

Yours faithfully,

For Shree Cement Ltd.

(Dr. Anil Kumar Trivedi) Sr. G.M. (Environment)

- Cc to:- 1. The Director (Industry-I)Ministry of Environment, Forests & Climate Change, Indra Paryavaran Bhavan, Jorbag Road, New Delhi-110003
 - The Addl. Principal Chief Conservator of Forest (C), Ministry of Environment Forest & Climate Change, Regional Office, Kendriya Bhawan, 5th Floor, Sector 'H' Aliganj, Lucknow (U.P.), Pin-226020.
 - 3. The In-Charge (Zonal Office), Central Pollution Control Board (CPCB), Vithal Market, Paryavaran Parisar, E-5 Arera Colony ,Bhopal-462003(M.P.)
 - 4. The Member Secretary, Rajasthan Pollution Control Board, 4, Institutional Area, Jhalana Doongri, JAIPUR-302004(Rajasthan).

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SHREE CEMENT LIMITED,

Compliance Status of 300 MW (2x150 MW) Thermal Power Plant

At Village Andheri Deori, Tehsil-Masuda, District Ajmer (Rajasthan)

• ENVIRONMENT CLEARANCE LETTER No. : J-13012/83/2009-IA.II (T) dated 30th November,

2010 ICE : Octob

PERIOD OF COMPLIANCE

October 20 to March 21

	Conditions	Compliances status
(1)	In case fuel for running the power plant is proposed to be changed from blending of Pet Coke and Imported Coal to other fuel (unblended liquid or solid or gas or any other in variance to the present proposal) the project proponent shall apply for such a change in environmental clearance along with necessary documents as required under EIA notification, 2006 (and its amendments). In such a case the necessity for holding public hearing again or otherwise will be determined by the Ministry in consultation with the Expert Appraisal Committee (Thermal Power).	Indian and Imported Coal are being used in power plant.
(ii)	Vision document specifying prospective plan for the site shall be formulated and submitted to the Ministry within six months.	Complied.
(iii)	A stack of 220 m height shall be provided with continuous online monitoring equipment's for SOx, NOx and Particulate Matter. Exit velocity of flue gases shall not be less than 22 m/sec. Mercury emissions from stack shall also be monitored on periodic basis.	Both the boilers are attached with a stack of 220 meter height. Continuous 'online monitoring system for monitoring of SO ₂ , NO ₂ and particulate matter has been installed. Monitoring of mercury emission was carried out in July 2019 by NABL & MoEF&CC accredited lab. (Analysis report is enclosed Annexure-III).
(iv)	The water requirement of 1300 m3/day shall be met from the water saved in the existing 44 MW CPP of the Cement Plant by replacing the water cooled condensers with the air cooled condensers. Water requirement is 4450m3/day of which 1300m3/day for the proposed 2x150 MW pet coke power plant and 3150 m3/day for the existing cement plant, mines and colony.	 Air cooled condenser has been installed. The industrial water consumption for FY-2020-2021 was 53635 KLD i.e < 1300 KLD at 300 MW.
(v)	Hydro geological study of the area shall be reviewed annually and report submitted to the Ministry. No water bodies including natural drainage system in the area shall be disturbed due to activities associated with the setting up/ operation of the power plant.	Hydro geological study of the area has been carried out for the year 2020. The report has been submitted. (Report enclosed as Annexure-II)
(vi)	COC of 5.0 shall be adopted.	Air cooled condenser has been installed.
(vii)	Local employable youth shall be trained in skills relevant to the project for eventual employment in the project itself. The action taken report and details thereof to this effect shall be submitted to the Regional Office of the Ministry and the State Govt. Dept. concerned from time to time.	Local people are employed in plant & are provided relevant training for enhancement the skills.
(viii)	Additional soil for leveling of the proposed site shall be generated within the sites (to the extent possible) so that natural drainage system of the area is protected and improved.	The site was flat; no soil for the leveling of site was used. Moreover, natural drainage system of the area is well protected and not affected during project installation and commissioning.
(ix)	Provision for installation of FGD shall be provided for future use.	FGD has been installed at site.
(x)	High Efficiency Electrostatic Precipitators (ESPs) shall be installed to ensure that particulate emission from the proposed power plant and cement plant does not exceed 50 mg/Nm3.	High efficiency electrostatic precipitators (ESPs) have been installed to achieve particulate emission below 50 mg/Nm ³ . (Monitoring report enclosed as Annexure-I)
xi)	Adequate dust extraction system such as cyclones/ bag filters and water spray system in dusty areas such as in coal handling and ash handling points, transfer areas and other vulnerable dusty areas	 Bag dust collectors are provided at all material transfer points. Closed Conveyor belts are provided for material transfer.

	Conditions	Compliances status
	shall be provided.	 Water spray arrangement has been provided in coal handling areas. Dry ash is stored in silo & transported to cement plant.
(xii)	Utilization of 100% Fly Ash generated shall be made from 4th year of operation of the plant. Status of implementation shall be reported to the Regional Office of the Ministry from time to time.	Fly ash generated from the power plant is completely used in existing cement plant.
(xiii)	Fly ash shall be collected in dry form and storage facility (silos) shall be provided. Unutilized fly ash shall be disposed of in the ash pond in the form of slurry form. Mercury and other heavy metals (As, Hg, Cr, Pb etc.) will be monitored in the bottom ash as also in the effluents emanating from the existing ash pond. No ash shall be disposed of in low lying area.	One Silo has been constructed to store the dry fly ash and two silos have been constructed to store bed ash. Monitoring of heavy metals was done in July 2020 by MoEF&CC & NABL accredited lab (report enclosed as Annexure III)
(xiv)	Ash pond (if any) shall be lined with HDPE/LDPE lining or any other suitable impermeable media such that no leachate takes place at any point of time. Adequate safety measures shall also be implemented to protect the ash dyke from getting breached.	Not Applicable.
(xv)	Green Belt consisting of three tiers of plantations of native species around plant and at least 100 m width shall be raised. Wherever 100 m width is not feasible a 50 m width shall be raised and adequate justification shall be submitted to the Ministry. Tree density shall not less than 2500 per ha with survival rate not less than 75 %.	 Tree plantation is our on-going process. Out of total land 231.94 hectare we have developed green belt in the area of 82.83 hectare which covers around 35.71 % of total area with 228411nos. of trees saplings. Local native species of plants have been planted for increase of survival rate. Plantation detail is enclosed as Annexure – IV.
(xvi)	The project proponent shall also adequately contribute in the development of the neighboring villages. Special package with implementation schedule for free potable drinking water supply in the nearby villages and schools shall be undertaken in a time bound manner.	 Potable water is supplied in nearby villages during summer. A school is run by the unit for nearby villagers in plant campus. Financial aid is given in nearby govt. schools for development of infrastructure. Various activities under CSR are being carried out for the development of nearby villages.
(xvii)	An amount of Rs 5.0 Crores shall be earmarked as one time capital cost for CSR programme. Subsequently a recurring expenditure of Rs 1.0 Crore per annum shall be earmarked as recurring expenditure for CSR activities. Details of the activities to be undertaken shall be submitted within one month along with road map for implementation.	Company is engaged in extensive social welfare works under CSR activities. Total expenses on social welfare activity for the year 2019-20 was 563.76 lacs for all units cement, power & Mines.
(xviii)	While identifying CSR programme the company shall conduct need based assessment for the nearby villages to study economic measures with action plan which can help in upliftment of poor section of society. Income generating projects consistent with the traditional skills of the people besides development of fodder farm, fruit bearing orchards, vocational training etc. can form a part of such programme. Company shall provide separate budget for community development activities and income generating programmes. This will be in addition to vocational training for individuals imparted to take up self-employment and jobs.	 CSR programs is going in following areas: Health & Family Welfare Programme Educational Programmes Training and capacity building programme Women empowerment programme Agriculture development Natural resource management Contribution towards Religious & Social Programmes, promoting art and culture. Community infrastructure development projects Cement Issued on concessional rate To charitable/religious institution Charity & donation Sporte activity (Tournamente) Sponsorship

(viv)	It shall be ensured that in huilt monitoring	Appual appial audit haing corriad out ha
	mechanism for the schemes identified is in place and annual social audit shall be got done from the nearest government institute of repute in the region. The project proponent shall also submit the status of implementation of the scheme from time to time.	government as well as private agency.
	General Condition	
(i)	The treated effluents conforming to the prescribed standards only shall be re-circulated and reused within the plant. There shall be no discharge outside the plant boundary except during monsoon. Arrangements shall be made that effluents and storm water do not get mixed.	SCL abide by Zero liquid discharge policy, complete waste water generated from RO system is being reused for making synthetic gypsum in synthetic gypsum plant & mill spray.
(ii)	A sewage treatment plant shall be provided (as applicable) and the treated sewage shall be used for raising greenbelt/plantation.	Domestic effluent is treated in STP (600 KLD) and treated water is being used in plantation.
(iii)	A well designed rainwater harvesting shall be constructed. Central Groundwater Authority/ Board shall be consulted for finalization of appropriate rainwater harvesting technology within a period of three months from the date of issue of clearance and details shall be furnished to the Regional Office of the Ministry.	 We have developed rainwater harvesting structures in and around the plant area & mines area. Details given as below: Check dams at vill: Jhunjhario Ka Bariya, Lulva, Gena rampura, Pulwali rapat & Teja ji ki nadi Andheri Deori Rain water collection in mine pit Construction of artificial reservoirs for rain water collection behind temple at Shree Vihar Colony and Anand Vihar Colony 02 nos. Artificial rain water recharge pit have been constructed in Power plant. Roof top rain water harvesting structures Drip irrigation systems.
iv)	Adequate safety measures shall be provided in the plant area to check/minimize spontaneous fires in coal yard, especially during summer season. Copy of these measures with full details along with location plant layout shall be submitted to the Ministry as well as to the Regional Office of the Ministry.	Adequate safety measures like fire extinguishers in the plant area and hydrant line have been provided in plant and coal yard area. Details have already been submitted to MoEF&CC.
v)	Storage facilities for auxiliary liquid fuel such as LDO and/ HFO/LSHS shall be made in the plant area in consultation with Department of Explosives, Nagpur. Sulphur content in the liquid fuel will not exceed 0.5%. Disaster Management Plan shall be prepared to meet any eventuality in case of an accident taking place due to storage of oil.	Auxiliary liquid fuel HSD is stored in plant area. License for storage has been obtained from Department of Explosives, Nagpur. Disaster Management Plan has been prepared.
ri)	Regular monitoring of ground water level shall be carried out by establishing a network of existing wells and constructing new piezometers. Monitoring around the ash pond area shall be carried out particularly for heavy metals (Hg, Cr, As, Pb) and records maintained and submitted to the Regional Office of this Ministry. The data so obtained should be compared with the baseline data so as to ensure that the ground water quality is not adversely affected due to the project.	 Regular monitoring of ground water level is being carried within the plant & mines area. Automatic water level recorder with telemetry system installed at 03 nos. of piezometer for regular monitoring of ground water level. There is no ash pond in power plant. Monitoring of heavy metals for coal, fly-ash & bottom ash sample was carried out in July 2020 by MoEF&CC & NABL Accredited lab (Analysis report enclosed as Annexure-III)
ii)	Monitoring surface water quantity and quality shall also be regularly conducted and records maintained. The monitored data shall be submitted to the Ministry regularly. Further, monitoring points shall be located between the plant and	There is no surface water available in the area.

	Conditions	Compliances status
	drainage in the direction of flow of ground water and records maintained. Monitoring for heavy metals in ground water shall be undertaken.	
(viii)	First Aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.	First Aid and sanitation arrangements are available at the site for the drivers and other contract workers.
(ix)	Noise levels emanating from turbines shall be so controlled such that the noise in the work zone shall be limited to 75 dBA. For people working in the high noise area, requisite personal protective equipment like earplugs/ear muffs etc. shall be provided. Workers engaged in noisy areas such as turbine area, air compressors etc shall be periodically examined to maintain audiometric record and for treatment for any hearing loss including shifting to non-noisy/less noisy areas.	 Following measures are taken for control of noise emission in the work zone area. Acoustic enclosures are provided for turbines. Personal protective equipment like earplugs/ear muffs have been provided to the people working in the high noise area. Audiometric examination annually carried out and corrective action taken accordingly. Regular preventive maintenance of equipment & machinery being done regularly. All compressor are placed in compressor house for create barrier of direct path of sound. Ambient & Work zone noise level report enclosed as Annexure-1.
(x)	Regular monitoring of ground level concentration of SO2, NOx, PM2.5 & PM10 and Hg shall be carried out in the impact zone and records maintained. If at any stage these levels are found to exceed the prescribed limits, necessary control measures shall be provided immediately. The location of the monitoring stations and frequency of monitoring shall be decided in consultation with SPCB. Periodic reports shall be submitted to the Regional Office of this Ministry. The data shall also be put on the website of the company.	Regular monitoring of ground level concentration of SO2, NO2, PM 2.5 & PM10 is carried out. (Analysis report enclosed as Annexure-I) Monitoring of mercury emission was carried out in July 20 by NABL & MoEF&CC approved lab. (Analysis report enclosed as Annexure-III) The monitored data has been displayed on company website along with compliance report.
(xi)	Provision shall be made for the housing of construction labour (as applicable) within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	Housing facility has been provided for construction labour with all necessary infrastructure and facilities during construction phase.
(xii)	The project proponent shall advertise in at least two local newspapers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned within seven days from the date of this clearance letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the State Pollution Control Board/Committee and may also be seen at Website of the Ministry of Environment and Forests at http://envfor.nic.in.	Published on 06/12/2010. Copy has been sent to Ministry of Environment and Forests and it's Regional Office and SPCB vide letter dated 21/12/2010.
xiii)	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parisad / Municipal Corporation, urban local Body and the Local NGO, if any, from whom suggestions/representations, if any, received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.	Copy of EC letter has been sent to the gram panchayat Andheri Deori. Acknowledgement has been sent to Ministry of Environment and Forests and it's Regional Office and SPCB vide letter dated 21/12/2010. Copy of the EC letter has been uploaded at our web site <u>www.shreecement.in</u>
xiv)	An Environmental Cell shall be created at the project site itself and shall be headed by an officer	Separate environmental management cell has already been established with qualified personnel

-	Conditions	Compliances status
	of appropriate seniority and qualification. It shall be ensured that the Head of the Cell shall directly report to the head of the organization.	to carry out various environmental management functions under the supervision of senior executive, under overall control of Whole Time Director.
(xv)	The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MOEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM (PM2.5 & PM10), SO2, NOX (ambient levels as well as stack emissions) shall be displayed at a convenient location near the main gate of the company in the public domain.	Status of compliance of EC conditions has been uploaded on company's website www.shreecement.com and updated periodically. Compliance status has been sent to Regional Office of MOEF, the respective Zonal Office of CPCB and SPCB. Digital display board has been installed at the plant main gate to display the criteria pollutant emission level.
(xvi)	The environment statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Offices of the Ministry by e- mail.	Environment statement for each financial year ending 31 st March is being submitted to SPCB & by e-mail to Regional Offices of the Ministry and also uploaded on the website of the company along with the status of compliance of environmental clearance conditions.
(xvii)	The project proponent shall submit six monthly reports on the status of the implementation of the stipulated environmental safeguards to the Ministry of Environment and Forests, its Regional Office, Central Pollution Control Board and State Pollution Control Board. The project proponent shall upload the status of compliance of the environment of the environmental clearance conditions on their website and update the same periodically and simultaneously send the same by e-mail to the Regional Office, Ministry of Environment and Forests	Six monthly reports of the status of implementation of the stipulated environmental safeguards are being sent to the Ministry of Environment and Forests, its Regional Office, Central Pollution Control Board and State Pollution Control Board. Status of compliance of EC conditions has been uploaded on company's website <u>www.shreecement.in</u> and updated periodically.
xviii)	Regional Office of the Ministry of Environment & Forests will monitor the implementation of the stipulated conditions. A complete set of documents including Environmental Impact Assessment Report and Environment Management Plan along with the additional information submitted from time to time shall be forwarded to the Regional Office for their use during monitoring. Project proponent will up-load the compliance status in their website and up-date the same from time to time at least six monthly basis. Criteria pollutants levels including NOX (from stack & ambient air) shall be displayed at the main gate of the power plant.	EIA/EMP report has been submitted to the Regional office of MoEF&CC along with additional information. Status of compliance of the EC conditions has been uploaded on company's website <u>www.shreecement.in</u> and updated periodically. Digital display board has been installed at the plant main gate to display the criteria pollutant emission level.
kix)	Separate funds shall be allocated for implementation of environmental protection measures along with item-wise break-up. These cost shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for other purposes and year-wise expenditure should be reported to the Ministry.	Total environmental expenditure during financial year 2019-20 was Rs. 102.54 Lacs.
(x)	The project authorities shall inform the Regional Office as well as the Ministry regarding the date of financial closure and final approval of the project	First boiler commissioned in October 2011 and second boiler commissioned in January 2012.

	Conditions	Compliances status
	by the concerned authorities and the dates of start of land development work and commissioning of plant.	
(xxi)	Full cooperation shall be extended to the Scientists/Officers from the Ministry/ Regional Office of the Ministry at Bangalore/ CPCB/ SPCB who would be monitoring the compliance of environmental status.	Full cooperation is being extended to all mentioned authorities during monitoring of the project.

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Annexure-I

Shree Cement Limited, SREE POWER PLANT Andheri Deori Tehsil-Masuda District-Ajmer, Rajasthan Monitored data

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Ambient Air Quality Monitoring Data :- (Period: October 2020 to March 2021):- (All values in $\mu g/m3$)

	-						-		
		NO2	40	ΛT	10	10	C1 F	+ ,	71 5
	n Gate	SO ₂	r	1	9		. 0		ر ل
	Mai	PM 2.5	76	17	27	33	3 6	20	20
		PM 10	42	£	45	41	4K	2	
		NO2	•		10	10	2α		12
	al Colony	S02	2	>	7	9	2		. «
	Residenti	PM 2.5	31	5	29	32	22	38	29
	H	PM 10	38	3	42	43	41	- .	
	ower	NO ₂	10	24	7	11	13	10	12
	towards F nt	SO2	œ	, ,	9	8	6	12	10
	oundary t Plai	PM 2.5	29		24	24	31	32	34
	Plant b	PM 10	41		41	46	47	50	52
	lage	NO ₂	6	4	ų	6	10	ω	6
	wards vil 1a	SO ₂	7	C	-	9	9	S	7
	oundary to Sarakaı	PM 2.5	25	Le	67	26	29	32	30
	Plant bo	PM 10	51	64	4/	51	54	56	58
Contraction of the Links	Location	Month	0ct-20	Nov 20	NZ-ANN	Dec-20	Jan-21	Feb-21	Mar-21

Stack Emission Monitoring data:-(Period: October 2020 to March 2021) 2

MONTH Boiler-I (2 x 15) 0ct-20 SD Nov-20 SD Dec-20 SD Jan-21 SD Mor-21 A		All values in (mg/Nm3)	0 MW) Boiler-II (2 x 150 F	SD SD	SD	SD	SD	SD	7511
MONTH MONTH Oct-20 Nov-20 Jan-21 Feb-21 Mor-21			Boiler-I (2 x 15(S	SD	SD	SD	SD	16.8
	MONTH	HINDM		0ct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21

-I & II (Non

17.4

tack)

22.14 SD SD SD 22

POLATION	Plant boundar Sar:	y towards village akana	Plant boundary Pl:	r towards Power ant	Residen	tial Colony	Mair	n Gate
Month	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time	Dav Time	Night Ti
0ct-20	60	50	65	42	60	39	58	48
Nov-20	68	41	66	38	59	35	63	47
Dec-20	61	40	63	40	58	42	65	20
Jan-21	72	42	62	39	60	40	63	44
Feb-21	68	55	70	44	71	58	60	50
Mar-21	66	49	65	55	65	43	69	51

T

Location	0ct'20	Nov'20	Dec'20	lan'21	Feh'21	IC'TCM
Boiler I & II of SPP	57.2	72	69	72	70.2	72.3
Turbine house of SPP	59	74	77	74	75	76
mpressor House of SMP*	60	75	77	69	68	70.2
Boiler I & II of SMP*	62	73	72.4	71.9	71.3	70.9
Furbine house of SMP*	65.3	69	77	78	72	75

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GROUND WATER RESOURCES & RAINWATER HARVESTING SCL, BEAWAR, AJMER, RAJASTHAN

CHAPTER - 1 EXECUTIVE SUMMARY

Project	•	Groundwater Resources Evaluation & Rainwater			
		Harvesting System Development Studies.			
Promoters	:	M/S SHREE CEMENTS LTD, BEAWAR, RAJASTHAN			
Conducted by		ASSOCIATE ENGINEERS & CONSULTANTS			
Possible sources	•	Subsurface & Rainwater in the plant			
Study Year	•	2020 (Pre & Post Monsoon)			

Investigation Methodology :

Surface Hydro geological studies for plant, Colony & mine area (Core Zone).

Surface Hydro geological studies for Buffer zone (10 Km radius).

Coverage:

I washert

(a) Core Zone

1. 2.3194 Sq. Km of Plant area

2. 0.32 Sq.Km of Colony area

3. 8.568 Sq.Km of Sheopura-Kesarpura Mines

4. 4.485 Sq.Km of Shyamgarh Mines

(b) Approx. 10 Km radius (Buffer Zone)

Findings:

 The regional water level ranges between 5.80 m. to 28.47 m. below ground level during the pre-monsoon period. Post monsoon water levels are 1.84 m. to 13.59 m. below ground level.

Based on results of hydro geological survey conducted in the area, it appears that ground water occurs in water table condition in weak zones of medium hard & hard rock. In the investigated area, thickness of top soil is very less generally not more than 2 to 3m plant area.

For buffer zone (10 km radius) total recharge due to rainfall & irrigation return flow at study year rainfall works out to be 12.92 mcm/annum. Total discharge works out to be 21.25 mcm/annum & stage of development is 164%.

Annex-TV

S.N	Location	Plantation till Sept,2020	Tree planted in Oct,20	Tree planted In Nov,20	Tree planted In Dec,20	Tree plant ed in Jan,21	Tree planted In Feb,21	Tree planted in Mar,21	Total
1	SMP	228401	0	0	0	0	0	0	
2	SP		0	0	0	0	0	0	
3	Plant		0	0	0	0	0	0	228411
4	Colony		0	10	0	0	0	0	-