

GC/786/ MoEF/ RO/ 2021-22

15. 11.2021

To

The Director (S)
Ministry of Environment, Forests & Climate Change
Regional Office, I and II Floor, Handloom Export Promotion Council,
34, Cathedral Garden Road,
Nungambakkam, Chennai 600 034

Dear Sir,

Sub. : Half yearly Compliance Report upto Sep 21 - Reg
Ref. : MoEF clearance No J-11011/411/2006-I A II (I) dt 01.08.2007

With reference to the above we are sending herewith the Half - yearly report ending September 2021. We obtained the CTO from TNPCB for the expansion and started the operations. Please note that we have not obtained any financial assistance from any Institution and met with internal funds only.

The present status of the project is in running condition.

Kindly acknowledge the receipt of the same.

Thanking you
Yours faithfully
For Global Calcium Pvt. Ltd.,



Authorised Signatory

Encl. : As above

**ENVIRONMENTAL CLEARANCE
COMPLIANCE REPORT ENDING SEPTEMBER 2021**

EC OBTAINED Vide Letter Nos

F. No. J-11011/411/2006-IA-II(I) dated 1st August 2007

by

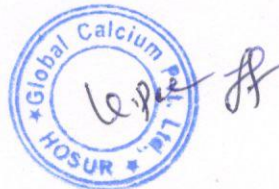
M/s Global Calcium Pvt. Ltd.,

at Plot No.125,126 , SIPCOT Industrial Complex, Hosur ,
District Krishnagiri, Tamil Nadu. 635126

Submitted to

Ministry of Environment, Forests and Climate Change Integrated Regional Office,
I Floor, Additional Office Block for GPOA, Shastri Bhavan, Haddows Road
Nungambakkam, Chennai 600 006

Sep 21



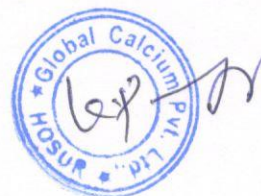
GLOBAL CALCIUM PRIVATE LTD.,
125&126, SIPCOT COMPLEX, HOSUR 635 126
Ref : No. J-11011/411/2006-IA-II(I) dated 1st August 2007

Compliance Report for the Period ending 31.09.2021

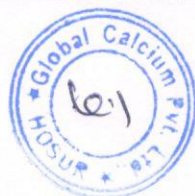
Sl. No.	Specific Conditions	Compliance
1.	All electrolytic cells shall be connected to a common Fume Scrubber which in turn shall be connected to the stack. Bag filter shall be provided for drying and milling section. Stack height with these will be 12m. The Boiler will have a stack of 15m and DG Sets will have a stack of 8-10m. Spray driers will also have +bag filters connected to stack of 22m.	<p>We have connected all electrolytic Cells to a common fume scrubber of 2 Nos which in turn is connected to a stack of 12mts height each.</p> <p>We have provided Exclusive bag filter provided for the drying and milling section and is connected to a stack of 12mts height.</p> <p>Further boiler (Briquette fired- Agro waste) with 30 meter height and DG sets each of 12 meter height are also provided. Spray drier with multicone cyclone separator connected to 22 meters height of stacks.</p>
2.	Bromine shall be analysed in ambient air and from the inlet and outlet of scrubber once in a week.	We are monitoring the Bromine on a regular basis in the ambient air and at the inlet and outlet of the scrubber.
3.	The gaseous emissions (SO ₂ , NO _x , and Br) along with particulate matter and RSPM from various process units shall conform to the standards prescribed by the concerned authorities from time to time. At no time, the emission levels shall go beyond the stipulated standards. In the event of failure of pollution control system(s) adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency.	We are monitoring the gaseous emissions (SO ₂ , NO _x , and Br) along with particulate matter and RSPM from the various process units through approved laboratory once in a month and the levels are within the limit. Bromine also monitored and found BDL. We assure that in the event of failure of the pollution control systems adopted by us, we will not restart the unit till it is rectified.



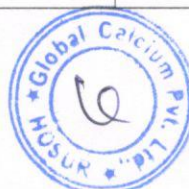
4.	The ambient air quality monitoring stations will be set up in consultation with the State Pollution Control Board. It will be ensured that at least one monitoring station is set up in up-wind & in down-wind direction along with those in other directions. On-line data for air emissions shall be transferred to the CPCB and SPCB regularly. The instruments used for ambient air quality monitoring shall be calibrated regularly.	We are monitoring the ambient air quality in upwind direction and down wind direction in consultation with PCB. Stack emission monitored data is transferred on line to CARE air center of TNPCB and the PCB informed us the same will be transmitted to CPCB by them. The instruments used for ambient air quality monitoring is calibrated regularly by third party.
5.	Dedicated scrubbers and stacks of appropriate height as per the Central pollution Control Board guidelines shall be provided to control the emissions from various vents. The scrubbed water shall be sent to ETP for further treatment.	We have provided two numbers of dedicated Bromine scrubbers with appropriate stack height and the scrubbed water is being sent to ETP for further treatment.
6.	As submitted, 0.6 ha will be developed as green belt as per the CPCB guidelines.	We have developed more than 0.6 ha of green belt within our factory premises by planting different kinds/species and the survival rate is more than 95%.
7.	Fugitive emissions in the work zone environment, product, raw materials storage area shall be regularly monitored. The emission shall conform to the limits imposed by the State Pollution Control Boards/Central Pollution Control Board.	We are monitoring the fugitive emissions in the work zone environment, product, raw materials storage area through approved laboratory and the levels are within the limit.
8.	The raw water requirement shall not exceed 142 KLD after the expansion. Raw water shall be sourced from the SIPCOT water supply.	As on today we are consuming less than 92 KLD which is well below the permitted limit and SIPCOT is supplying the water to us.
9.	Wastewater generation shall not exceed 60 KLD. Two stage R.O. Plant shall be installed for final treatment of the waste water and the treated water will be used for Green Belt development. There shall be no effluent discharge from the plant. The treated wastewater shall meet the relevant norms for the wastewater as provided by the SPCB. The unit shall utilize treated water.	We have installed ETP. Our waste water generation per day is 52 to 55 KLD for the Bulk drug division. The same is treated and the treated waste water is sent to RO plant in turn permeate is reused in the cooling tower as well as in boiler. By doing this we are achieving 'Zero Discharge'. We are evaporating the RO reject in MEES and ATFD



10.	About 3.0 TPA of process sludge and 1.5 TPA of ETP sludge will be generated which is non toxic as per the data submitted by the unit. The solid waste shall be collected in polythene bags and shall be stored within plant premises in a temporary roofed storage yard with impervious flooring till a common facility develops. The storage shall be covered and floor shall be non-leachable.	We are collecting the process sludge and ETP sludge in the polythene bags and storing in a closed room which is having impervious floor. The generation of solid waste is within the limit. We are sending this sludge to Tamil Nadu Waste Management Limited, Gummidipoondi, Chennai and Green Gene Enviro Protection Infrastructure, Ranipet. for further treatment.
11.	The company shall develop rainwater-harvesting structures to harvest the run off water for recharge of ground water.	We have made Rain Water Harvesting system at 7 places within our factory.
12.	Occupational health surveillance (OHS) of the workers shall be done on a regular basis and records maintained as per the Factories Act.	As per the Factories' Act we are checking the occupational health for all the workers and maintaining records.
13.	Appropriate and adequate PPEs shall be provided to all the workers and employees and it use of these may be ensured.	We have provided PPE to all the people and all are using the same.
14.	The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment. The eco-development plan should be submitted to the SPCB within three months of receipt of this letter for approval.	We have developed good green belt within our factory. Under CSR scheme we extended financial assistance to various schools, hospitals and orphanages in and around Hosur. Under this scheme we have incurred Rs. 160 lakhs over the last 3 years.
15.	All safety precautions shall be implemented as given in the EIA/EMP report as submitted to the Ministry.	We have implemented all the safety precautions which are given in EIA/EMP reports.
16.	Responses to the issues raised during the Public Hearing shall be implemented.	We have implemented all the issues raised during the public hearing.
General Conditions :		
1	The project authorities shall strictly adhere to the stipulations made by the State Pollution Control Board.	We are implementing all the conditions stipulated by the TNPCB. We have valid consent renewal upto 2022
2.	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and	We have gone for an expansion of additionally about 14 products (60 TPA). These 14 products will be manufactured



	Forests. In case of deviations or alterations in the project proposal from those submitted to this Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.	based on the market demand at a time one or more products within the existing factory premises. We got the Environment Clearance for our expansion. We got the required CTO from TNPCB
3.	At no time, the emissions shall exceed the prescribed limits. In the event of failure of any pollution control system adopted by the unit, the unit shall be immediately put out of operation and shall not be restarted until the desired efficiency has been achieved.	At no time, the emissions levels have gone beyond the prescribed limits. We will shut-down the respective unit in the event of failure of any pollution control system adopted by us until it is rectified.
4.	The project authorities shall strictly comply with the rules and regulations under Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 as amended in October, 1994 and January, 2000. authorization from the SPCB shall be obtained for collection, treatment, storage, and disposal of hazardous wastes.	An authorization from TNPCB under Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 as amended in October, 1994 and January, 2000. Authorisation for Hazardous waste has been obtained from TNPCB including the expansion.
5.	The overall noise levels and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation, the ambient noise levels shall conform to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).	Through external agency at 10 locations the noise levels are monitored once in a month during day and night time and the levels are within the limit
6.	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report.	We have implemented all the environmental protection measures and safeguards as recommended in the EIA/EMP report
7.	A separate Environmental Management cell equipped with full fledged laboratory facilities shall be set up to carry out the Environmental Management and monitoring functions.	We have environmental management cell with laboratory to monitor effluent quality. Further we are using the external laboratory facility for monitoring ambient air quality, stack emission and noise levels.



8.	The project authorities shall earmark separate funds to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purpose.	An amount of Rs.9.2 Crores was allocated for environment management purpose and every year we are spending Rs. 90.0 lakhs under recurring expenditure including green belt development.
9.	The implementation of the project vis-à-vis environmental action plans shall be monitored by the concerned Regional Office of the Ministry / SPCB / CPCB. A six monthly compliance status report shall be submitted to monitoring agencies and displayed at the website of the company.	We are submitting the half yearly compliance report regularly to the Regional Office, Chennai and have uploaded the same in our company's web site
10.	The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at website of the Ministry at http://envfor.nic.in . This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.	We have given advertisement in two local news papers and submitted a copy of the same to Regional Office, Bangalore.
11.	The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.	We have informed the same to the Regional Office, Bangalore



**HALF YEARLY ENVIRONMENTAL CLEARANCE
COMPLIANCE REPORT ENDING SEPTEMBER 2021**

EC OBTAINED Vide Letter Nos

F. No. J-11011/411/2006-IA-II(I) dated 16th August 2016

by

M/s Global Calcium Pvt. Ltd.,

at Plot No.125,126 , SIPCOT Industrial Complex, Hosur ,
District Krishnagiri, Tamil Nadu. 635126

Submitted to

Ministry of Environment, Forests and Climate Change Integrated Regional Office,
I Floor, Additional Office Block for GPOA, Shastri Bhavan, Haddows Road
Nungambakkam, Chennai 600 006

Sep 21



GLOBAL CALCIUM PVT. LTD., HOSUR

Half Yearly Compliance Report ending September 2021

Environmental Clearance No – J-11011/411/2006- I A II (I) dt 16.08.2016

S.No	Condition	Compliance
A i	SPECIFIC CONDITIONS: National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) dated 21st July 2010 and amended time to time shall be followed by the unit.	We are following the standard prescribed as per GSR 608(E) dt 21.7.2010
ii	Bag filter and the stack of adequate height shall be provided to additional coal fired boiler. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.	Mechanical Dust collectors provided for the boiler stack and provided adequate stack height of 30 meters
iii	Scrubber shall be provided to control process emissions viz. Br ₂ . The scrubbing media shall be sent to effluent treatment plant (ETP) for treatment. Efficiency of scrubber shall be monitored regularly and maintained properly. At no time, the emission levels shall go beyond the prescribed standards.	We have connected the fume scrubber with soda solution as media, scrubbed liquid is being sent to ETP. The efficiency of scrubber is being monitored regularly
iv	Ambient air quality data shall be collected as per NAAQES standards notified by the Ministry vide G.S.R. No 826(E) dated 16 th September 2009. The levels of PM _{2.5} , PM ₁₀ , SO ₂ , NO _x , VOC, CO and Br ₂ shall be monitored in the ambient air and emissions from the stacks and displayed at a convenient location near the main gate of the company and at important public places. The company shall upload the results of monitored data on its 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 State Pollution Control Board (SPCB).	We have installed 'On line Monitoring of gaseous emission and the same is connected to Tamil Nadu Pollution Control Board. Apart from that we are regularly monitoring and report sent to TNPCB. The data uploaded in our web site. We are sending the same to Zonal office regularly.
v	In plant control measured for checking fugitive emissions from all the vulnerable sources shall be provided. Fugitive emissions shall be controlled by providing closed	We are monitoring the fugitive emissions in the work zone environment, product, raw materials storage area through approved



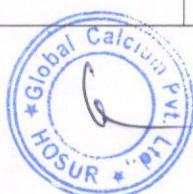
	<p>storage, closed handling and conveyance of chemicals/materials, multi cyclone separator and water sprinkling system. Dust suppression system including water sprinkling system shall be provided at loading and unloading areas to control dust emissions. Fugitive emissions in the work zone environment, product, raw materials storage area etc. shall be regularly monitored. The emissions shall conform to the limits stipulated by the SPCB. Odour management plan shall be implemented.</p>	<p>laboratory and the levels are within the limit.</p>
vi	<p>The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution.</p>	<p>We have provided adequate height of stacks with Acoustic enclosure</p>
vii	<p>Solvent management shall be carried out as follows:</p> <ol style="list-style-type: none"> 1. Reactor shall be connected to chilled brine condenser system 2. Reactor and solvent handling pump shall have mechanical seals to prevent leakages. 3. The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 95% recovery. 4. Solvents shall be stored in a separate space Specified with all safety measures. 5. Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done. 6. Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses. 	<p>We have connected the chilled brine condenser system to Reactor.</p> <p>We have provided the mechanical seals for the pumps to prevent leakage.</p> <p>We have provided sufficient condensers to achieve maximum recovery</p> <p>We have provided separate space with all safety measures.</p> <p>Proper earthing provided wherever solvent is being handled.</p> <p>All electrical items like motors, light fittings etc., are provided with flame proof and tanks are provided with breather valve.</p>



	7. All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.	All solvent storage tanks are connected with vent condenser.
viii	Total fresh water requirement from SIPCOT water supply shall not exceed 92 m ³ /day.	As on today we are consuming less than 92 KLD which is well below the permitted limit and SIPCOT is supplying the water to us.
ix	Effluent generation shall not exceed 72m ³ /day and treated in the ETP followed by RO. Permeate will be recycled/reused in process. RO rejects will evaporated in MEE. Condensed water from Mechanical Evaporator is also reused Condensate and recover water will be recycled/reused within factory premises.	We have installed ETP. Our total waste water generation per day is 65 to 70 KLD. The same is treated and the treated waste water is sent to RO plant in turn permeate is reused in the cooling tower as well as in boiler. By doing this we are following 'Zero Discharge'. We are evaporating the RO reject in MEES and ATFD.
x	No effluent shall be discharged outside the premises and zero liquid discharge should be followed.	We have installed ETP with RO MEE , ATFD and achieved ZLD norms and we are not discharging any effluent.
xi	Process effluent/any waste water shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.	We made separate arrangements for waste water and storm water drains separately
xii	Automatic/online monitoring system (24x7 monitoring devices) for flow measurement and relevant pollutants in the treatment system to be installed. The data to be made available to the respective SPCB and in the Company's website.	We have provided on line monitoring for stack, Electromagnetic Flow Meter and Camera for the ETP area are provided and connected to TNPCB and CPCB
xiii	Hazardous chemicals shall be stored in tanks, tank farms, drums, carboy etc. Flame arresters shall be provided on tank farm. Solvent transfer shall be by pumps	Proper care is being taken to handle/ storage of Hazardous chemicals. All solvent transfer are through pump only.
xiv	As proposed, process organic residue and spent carbon shall be sent to cement industries. ETP sludge, process inorganic and evaporation salt shall be disposed off to the	We are collecting the process sludge and ETP sludge in the HDPE bags and storing in a closed room which is having impervious floor. We are sending this sludge to Tamil Nadu



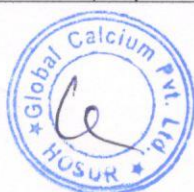
	TSDf. The ash from boiler shall be sold to brick manufacturers/cement industry.	Waste Management Limited, Gummidipoondi, Chennai or Green Gene Enviro Protection Ranipet for further treatment. The Boiler ash is being sent to Brick manufacture as proposed.
xv	The company shall obtain Authorization for collection, storage and disposal of hazardous water under the Hazardous Waste (Management, Handling and Trans-Boundary Movement) Rules, 2008 and amended as on date for management of Hazardous wastes and prior permission from TPCB shall be obtained for disposal of solid/hazardous waste in the TSDf. Measures shall be taken for firefighting facilities in case of emergency.	We have obtained Hazardous Waste Management Authorisation for the existing and for expansion operation.
xvi	The company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All Transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.	We are strictly following the Hazardous waste rules.
xvii	Fly ash should be stored separately as per CPCB guidelines so that it should not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by flowing along with the storm water. Direct exposure of workers to fly ash and dust should be avoided.	We are not generating any fly ash. The ash generated from the boiler (wood fired) are being sent to Brick manufacturer. The ash is being stored in separate shed without any access to air or rain water.
xviii	The company shall undertake following waste minimization measures: a. Metering and control of quantities of active ingredients to minimize waste. b. Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. c. Use of automated filling to minimize spillage.	We are handling the process liquid in closed pipes and recovering the spilled product as much as possible We reuse wherever possible.



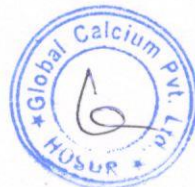
	Forests. In case of deviations of alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environment protection measures required, if any.	permission for any modification before starting.
iii	The locations of ambient air quality monitoring stations shall be decided in consultation with the State Pollution Control Board (SPCB) and it shall be ensured that at least one stations is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.	We are monitoring the ambient air quality in upwind direction and down wind direction in consultation with PCB.
iv	The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time and 70 dBA (night time).	Through external agency at 10 locations the noise levels are monitored once in a month during day and night time and the levels are within the limit.
v	The company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and use the same water for the process activities of the project to conserve fresh water.	We have made Rain Water Harvesting system at 7 places within our factory.
vi	Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees n handling of chemicals shall be imparted.	We are providing training to all employees and being monitored by a Safety Manager. As per the Factories' Act we are checking the occupational health for all the workers and maintaining records.
vii	Usage of Personnel Protection Equipments (PPEs) by all employees/workers shall be ensured.	We have provided PPE to all the people and all are using the same.



viii	The company shall also comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, risk mitigation measures and public hearing relating to the project shall be implemented.	We have implemented all the environmental protection measures and safeguards as recommended in the EIA/EMP report.
ix	The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. CSR activities shall be undertaken by involving local villages and administration.	We are doing many projects on CSR activities for Health, Education etc.,
x	The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.	We are undertaking many eco-developmental measures.
xi	A separate Environmental Management Cell equipped with full fledged laboratory facilities shall be set up to carry out the Environmental management and Monitoring functions.	We have separate Management Cell involving, maintenance, Environmental Engineer, Safety Manager, etc.,
xii	The company shall earmark sufficient funds toward capital cost and recurring cost/annum to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/pollution control measures shall not be diverted for any other purpose.	We earmarked Rs.2 Crores was allocated for environment management purpose and being utilized for the same.
xiii	A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zila Parisad/Municipal Coporation, Urban local body and the local NGO, if any, from who suggestion / representations, if any, were received while processing the proposal.	Copy of clearance letter was sent to Hosur Municipality on 7.9.2016.
xiv	The project proponent shall also submit six monthly reports on the status of compliance	We are submitting the six monthly report to the Zonal Office regularly and



	of the stipulated environmental clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional office of MoEF, the respective Zonal office of CPCB and the T.N. Pollution Control Board. A copy environmental clearance and six monthly compliance status report shall be posted on the website of the company.	the report is being posted in our web site.
xv	The environmental statement for each financial year ending 31 st March in Form-V as is mandated shall be submitted to the concerned State Pollution Control Board as prescribed under the Environmental (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 MoEF by e-mail.	We are regularly submitting the Environmental statement in Form V to Tamil Nadu Pollution Control Board. Copy attached.
xvi	The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry at http://envfor.nic.in . This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.	We have given advertisement in two local newspapers on 30.8.2016 and submitted a copy of the same to Regional Office, Chennai.





TAMIL NADU POLLUTION CONTROL BOARD

District Environmental Laboratory, Hosur

STACK MONITORING SURVEY – Report of Analysis

Report No. 031/ SM/2021-2022

Date: 27.08.2021.

1. Name of the Industry : Global Calcium (P) Ltd (Unit – I & II)
2. Address of the Industry : S.F.Plot No: 124,125,126 & CP 173 SIPCOT,
Juzuvadi Village, Hosur Tk, Krishnagiri Dt
3. Date of Survey : 18/08/2021
4. Type of Industry : Blug Drugs

Stack Monitoring Survey Results

Sl. No.	Stack attached to	Stack .Temp °C	Velocity in (m/ sec)	Discharge rate In Nm ³ /Hr	Pollutants (mg / Nm ³)		
					PM	SO ₂	NO _x
1	Boiler – I & II	125	8.5398	6509.7	45	15	24
2	SPDA – III Wet Scrubber Outlet	78	5.7240	2783.4	30	04	14

Test Performed	Test Method
PM	IS 11255: (Part 1) – 1985
SO ₂	IS 11255: (Part 2) – 1985
NO _x	IS 11255: (Part 7) – 2005

A. Bafey
Deputy Chief Scientific Officer,
District Environmental Laboratory,
TNPCB / Hosur.



TAMIL NADU POLLUTION CONTROL BOARD

District Environmental Laboratory, Hosur .

AMBIENT/SOURCE NOISE LEVEL SURVEY - Report of Analysis

Report No. 031 / NLS/2021 -2022

Date: 27 / 08 / 2021

1.	Name of the Industry	Global Calcium (P) Ltd (Unit – I & II)		
2.	Address of the Industry	S.F.Plot No: 124,125,126 & CP 173 SIPCOT, Juzuvadi Village, Hosur Tk, Krishnagiri Dt		
3.	Date of Survey	18.08.2021		
Category		Red / Large	Land use Classification	Industrial
Type of Survey		Ambient	Time of Survey	Day
Meteorological conditions			Calm	

Logging Parameters

Instrument Used	Casella Technologies	Serial No	CC8110029		
Logging Interval	10 Minutes each point	Measuring Range	50-110		
Weighting	“ A ”	Peak Weighting	“ C ”	Time Weighting	FAST
Sound Incidence	RANDOM		Time in hrs	11.45 Hrs	

Report of Noise Level Monitoring

Sl No	Location	Duration (min)	Distance (M)	Direction	Sound Level – dB (A)					
					L _{eq}	L ₉₀	L ₅₀	L ₁₀	Min	Max
1	Near Anaerobic Tank	10	90	N	61.3	60.0	61.0	62.5	59.5	64.1
2	Near ETP Area	10	110	NE	60.8	58.5	61.0	62.0	58.2	64.4
3	Near Plant – I Pump House	10	100	SE	63.3	61.5	62.5	64.5	61.4	69.4
4	Near Old Boiler House	10	90	SW	63.3	62.0	63.0	64.5	61.7	67.6
5	Near Diesel Storage Yard	10	110	NW	59.0	57.0	58.0	60.5	56.6	67.0

Note: L90 Value refers to background noise: L50 Value refers to mean noise.L10 value refers to nuisance or annoyance level : Leq value is the average energy for the measured period

A. B. Jeyaraj
Deputy Chief Scientific Officer,
District Environmental Laboratory,
TNPCCB / Hosur.

Ref: GC / 786 /054/TNPCB / 2020-21

**The District Environmental Engineer,
Tamil Nadu Pollution Control Board,
Plot no.149-A, First floor, Dharga,
HOSUR – 635126.**

Date: 27.04.2021

Sir,

**Sub: TNPCB-(FORM-V): Environmental Statement for the year ending 31st March 2021 –
Reg.**

With reference to the above, we are herewith submitting the Environmental Statement for the
Financial year ending 31st March 2021 in duplicate.

Kindly acknowledge and receipt of the above.

Thanking you

Yours faithfully,
For **Global Calcium Pvt. Ltd.**



Authorised Signatory

Encl: as above



email.info@globalcalcium.com

www.globalcalcium.com

GLOBAL CALCIUM PVT. LTD.

REGD. OFFICE / PLANT :
125 & 126, SIPCOT Industrial Complex,
Hosur 635 126, India.
Tel : 91 - 4344 - 406000
276958 / 276959
Fax 91 - 4344-276126

CORPORATE OFFICE :
No.1, Hundred Feet Road,
V Block Koramangala,
Bangalore 560 095, India
Tel : 91-80-4055 4500
Fax : 91-80-25530807



FORM-V
(See rule 14)

Environmental statement for the financial year ending with 31st March 2021

- i. Name and address of the owner/
Occupier of the industry or operations : Satish Hebbar R
Director - Operations
No. 124,125 &126 Sipcot Industrial Complex.
Tel: 91-4344-406000, 276958/276959.
Fax: 91-4344-276359
Hosur 635 126
- ii. Industry category primary-(STC Code) : Red Large
Secondary-(STC Code)
- iii. Production category/units. : Red
- iv. Year of establishment : 1980
- v. Date of the last environmental
Statement submitted. : 20.05.2020

PART -B

1. Water consumption:

Water consumption in m3/day	162.94 m3/day
Process	79.34
Cooling	51.6
Domestic	07
Garden	25

S.No	Name of products	Process water consumption per unit of products (KL)-During the previous year from April 2019 to Mar 2020	Process water consumption per unit of products (KL) – During the current year from April 2020 to March 2021
1.	Pharmaceutical Bulk drugs and chemicals such as mineral salts.	15.0 lit/Kg	15.2 lit/Kg
2.	API Process	90.0lit/Kg	88.0 lit/Kg

2. Raw Material consumption:

S. No	Name of raw materials	Name of products	Raw material consumption in MT per unit of output- During the previous year from April 2019 to Mar 2020	Raw material consumption in MT per unit of output – During the current year from April 2020 to March 2021
1	GDL, Lactic Acid, Citric Acid, Oratates etc...	Pharmaceutical Bulk drugs and chemicals such as mineral salts.	1.05	0.95
2	Carbonate (oxide of calcium, Magnesium Zinc etc....		0.35	0.35

* Industry may use codes if disclosing details of raw material would violate contractual obligations, otherwise all industries have to name the raw materials used.

PART –C

Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

Pollutants	Quantity of pollutants discharged (mass/day)	Concentration of Pollutants discharged (mass/volume)	Percentage of variation from prescribed standards with reasons
a)Water	ZLD plant followed by ETP, BTP, RO & ATFD plants and the quantity not exceeded the limit.	Standards are being maintained well within the limit prescribed by board.	Standards are being maintained well within the limit prescribed by board.
b)Air	APC measures followed and not exceeded the limit.	Standards are being maintained well within the limit prescribed by board	Standards are being maintained well within the limit prescribed by board

PART –D

Hazardous Wastes

(As specified under Hazardous wastes (management & Handling Rules, 1989))

S.No.	Hazardous wastes	Total quantity During the previous year from April 2019 to Mar 2020 (KG)	Total quantity During the current year from April 2020 to March 2021 (KG)
1	Process Residue & waste (28.1)	3870	23940
2	Spent Carbon (28.3)	4043	9857
3	Spent Solvent (28.6)	21250	167589
4	Empty barrels/Containers/ liners (33.1)	1742	4882
5	Chemical sludge from WWTP (35.3)	2445	6347
6	MEE Salt (35.3)	10825	101296

PART –E
Solids Wastes

S.No.	Solids wastes	Total quantity During the previous year from April 2019 to Mar 2020 (KG)	Total quantity During the current year from April 2020 to March 2021 (KG)
1	From Process	Nil	Nil
2	From Pollution Control Facilities	Nil	Nil
3	Quantity Recycled or re-utilized.	Nil	Nil

PART –F

Please specify the characteristics (in terms of concentration and quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of Wastes.

- The used spent oil is received from DG set/machineries being collected in HDPE barrels stored with impervious platform under closed shed and dispose to recyclers approved by SPCB/CPCB.
- The process waste is received from process plants being collected in HDPE barrels/poly bags stored with impervious platform under closed shed and dispose to TNWML, Gummidipoondi, /GEPIL, Ranipet for incineration by approved person SPCB/CPCB.
- The Spent solvent is received from process plants being collected in HDPE barrels stored with impervious platform under closed shed and dispose to Ozpec chemical industrial pvt. Ltd., Coimbatore for recycler by approved person SPCB/CPCB.
- The chemical sludge from waste water treatment being collected in poly bags stored with impervious platform under closed shed and dispose to TNWML, Gummidipoondi /GEPIL, Ranipet for landfill by approved person SPCB/CPCB.
- The Boiler ash from boiler being collected and dispose to bricks manufacture.

PART –G

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

- Treatment and use of process effluent within facility after treatment in ETP followed by RO/MEE plant and achieved ZLD.
- Raw sewage effluent from toilet and wash room being collected and treated along with Biological treatment plant and the treated water reused within facility.
- Mechanical seals are provided for reactors and pumps to avoid raw materials losses in to ambient.

PART -H

Additional measures /investment proposal for environmental protection including abatement of pollution:

- Multiple Effect Evaporator and ATFD plant were installed followed BTP for proposed API effluent treatment and reuse the treated water with in facility.
- Sequential Batch Reactor (SBR) was installed for sewage water from toilet and the wash room will be treated separately and reuse for gardening.
- The Bio sludge from sewage treatment plant will be collected and will dispose as manure for gardening.
- As a part of continual improvement plantation of sapling and the green belt development in and around factory premises.
- Condensers were installed in the process and the bulk storage solvent tank for proposed plant to avoid solvent losses in to atmosphere. The recovered solvent will be reused in the process.

PART -I

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

- EHS awareness training program being conducted for all the employees and contractor's for prevention and control of pollution and maintain environmental standards.



01-07-2021 J182 S26	1269 PARTICULATE MATT mg/m3	1269 PARTICULATE MATT Min.	1269 PARTICULATE MATT Max.	1269 PM_D_S2 mg/m3	126 PM_D Mir
01-07-2021	-25.00	-25.00	-25.00	0.00	
02-07-2021	-25.00	-25.00	-25.00	0.00	
03-07-2021	-25.00	-25.00	-25.00	0.00	
04-07-2021	-25.00	-25.00	-25.00	0.00	
05-07-2021	-25.00	-25.00	-25.00	0.00	
06-07-2021	-25.00	-25.00	-25.00	0.00	
07-07-2021	-25.00	-25.00	-25.00	0.00	
08-07-2021	-25.00	-25.00	-25.00	0.00	
09-07-2021	-25.00	-25.00	-25.00	0.00	
10-07-2021	-25.00	-25.00	-25.00	0.00	
11-07-2021	-25.00	-25.00	-25.00	0.00	
12-07-2021	-25.00	-25.00	-25.00	0.00	
13-07-2021	-25.00	-25.00	-25.00	0.00	
14-07-2021	-25.00	-25.00	-25.00	0.00	
15-07-2021	-25.00	-25.00	-25.00	0.00	
16-07-2021	-25.00	-25.00	-25.00	0.00	
17-07-2021	-25.00	-25.00	-25.00	0.00	
18-07-2021	-25.00	-25.00	-25.00	0.00	
19-07-2021	-25.00	-25.00	-25.00	0.00	
20-07-2021	-25.00	-25.00	-25.00	0.00	
21-07-2021	-25.00	-25.00	-25.00	0.00	
22-07-2021	-25.00	-25.00	-25.00	0.00	
23-07-2021	-25.00	-25.00	-25.00	0.00	
24-07-2021	-25.00	-25.00	-25.00	0.00	
25-07-2021	-25.00	-25.00	-25.00	0.00	
26-07-2021	13.00	-35.00	75.00	0.00	
27-07-2021	49.00	20.00	67.00	0.00	
28-07-2021	53.00	25.00	77.00	0.00	
29-07-2021	51.00	8.00	75.00	0.00	
30-07-2021	49.00	29.00	75.00	0.00	
31-07-2021	39.00	4.00	78.00	0.00	

01-08-2021 J213 S30	1269 PARTICULATE MATT mg/m3	1269 PARTICULATE MATT Min.	1269 PARTICULATE MATT Max.	1269 PM_D_S2 mg/m3	12 PM_I M
01-08-2021	49.00	22.00	75.00	0.00	
02-08-2021	48.00	17.00	72.00	0.00	
03-08-2021	49.00	25.00	71.00	0.00	
04-08-2021	48.00	27.00	77.00	0.00	
05-08-2021	52.00	21.00	77.00	0.00	
06-08-2021	55.00	26.00	79.00	0.00	
07-08-2021	51.00	28.00	79.00	0.00	
08-08-2021	57.00	38.00	77.00	0.00	
09-08-2021	52.00	22.00	76.00	0.00	
10-08-2021	53.00	33.00	74.00	0.00	
11-08-2021	52.00	32.00	77.00	0.00	
12-08-2021	53.00	29.00	72.00	0.00	
13-08-2021	58.00	33.00	81.00	0.00	
14-08-2021	49.00	24.00	72.00	0.00	
15-08-2021	54.00	28.00	78.00	0.00	
16-08-2021	52.00	22.00	77.00	0.00	
17-08-2021	49.00	27.00	78.00	0.00	
18-08-2021	4.00	-19.00	71.00	0.00	
19-08-2021	-18.00	-19.00	-18.00	0.00	
20-08-2021	-18.00	-19.00	-18.00	0.00	
21-08-2021	-18.00	-18.00	-15.00	0.00	
22-08-2021	-17.00	-18.00	-14.00	0.00	
23-08-2021	-18.00	-19.00	-16.00	0.00	
24-08-2021	-17.00	-19.00	-16.00	0.00	
25-08-2021	-17.00	-18.00	-15.00	0.00	
26-08-2021	-15.00	-18.00	-13.00	0.00	
27-08-2021	-16.00	-17.00	-14.00	0.00	

28-08-2021	12.00	-17.00	81.00	0.00	
29-08-2021	60.00	36.00	79.00	0.00	
30-08-2021	62.00	44.00	83.00	1.00	
31-08-2021	55.00	11.00	82.00	0.00	
01-09-2021 J244 S35	1269 PARTICULATE MATT mg/m3	1269 PARTICULATE MATT Min.	1269 PARTICULATE MATT Max.	1269 PM_D_S2 mg/m3	12 PM_I M
01-09-2021	65.00	42.00	89.00	0.00	
02-09-2021	75.00	54.00	88.00	0.00	
03-09-2021	67.00	49.00	85.00	0.00	
04-09-2021	70.00	45.00	88.00	0.00	
05-09-2021	78.00	67.00	88.00	0.00	
06-09-2021	65.00	44.00	82.00	0.00	
07-09-2021	62.00	39.00	80.00	0.00	
08-09-2021	62.00	27.00	79.00	0.00	
09-09-2021	66.00	45.00	80.00	0.00	
10-09-2021	65.00	44.00	82.00	0.00	
11-09-2021	67.00	41.00	86.00	0.00	
12-09-2021	73.00	47.00	94.00	0.00	
13-09-2021	72.00	49.00	85.00	0.00	
14-09-2021	66.00	43.00	84.00	0.00	
15-09-2021	67.00	38.00	89.00	0.00	
16-09-2021	76.00	59.00	93.00	0.00	
17-09-2021	84.00	65.00	95.00	0.00	
18-09-2021	79.00	51.00	93.00	0.00	
19-09-2021	47.00	-12.00	90.00	0.00	
20-09-2021	73.00	30.00	92.00	0.00	
21-09-2021	71.00	48.00	92.00	0.00	
22-09-2021	65.00	29.00	92.00	0.00	
23-09-2021	71.00	2.00	90.00	0.00	
24-09-2021	67.00	37.00	92.00	0.00	
25-09-2021	67.00	50.00	84.00	0.00	
26-09-2021	72.00	57.00	88.00	0.00	
27-09-2021	62.00	-6.00	92.00	0.00	
28-09-2021	75.00	44.00	90.00	0.00	
29-09-2021	72.00	43.00	86.00	0.00	
30-09-2021	72.00	57.00	91.00	0.00	
01-10-2021 J274 S39	1269 PARTICULATE MATT mg/m3	1269 PARTICULATE MATT Min.	1269 PARTICULATE MATT Max.	1269 PM_D_S2 mg/m3	PM
01-10-2021	70.00	54.00	88.00	0.00	
02-10-2021	47.00	-12.00	93.00	0.00	
03-10-2021	79.00	62.00	89.00	0.00	
04-10-2021	77.00	60.00	91.00	0.00	
05-10-2021		63.00	82.00		

