Global Calcium
Adding Life to Life
UNIT-III

GC III/786/ MoEF/ RO/ 2024-25 13.12.2024

To

The Director (S)
Ministry of Environment, Forests & Climate Change
Integrated Regional Office, Ist Floor,
Additional Office Block For GPOA
Shastri Bhavan, Haddows Road,
Nungambakkam, Chennai 600 006

Dear Sir,

Sub. : Submission of Half yearly Report – Sep 24
Ref. : F- No. J-11012/77/96- IA II (I) dated 29.07.1997
F- No J- 11011/417/2006 IA II(I) dt. 18th July, 2007, and 25.06.2018 and
EC No IA-J-11011/141/2019-IA-II (I) dt 11.08.2023

With reference to the above, we are sending herewith the Half yearly report ending Sep 24. We have obtained the amendment from the ministry for change in name from M/s Calci Tech India P. Ltd to M/s Global Calcium P. Ltd., Unit III from the ministry and TNPCB. Our consent is valid up to March 2027, copy of the same is attached.

We also obtained EC from MoEF for the proposed expansion as referred to above and obtained Consent to Establish from Tamil Nadu Pollution control Board.

Now the project is in implementation stage.

Kindly acknowledge the receipt of the same.

Thanking you
Yours faithfully
For GLOBAL CALCIUM PRIVATE LIMITED., UNIT III

Authorised Signatory

Encl. : As above

Global Calcium Pvt Limited Unit III)

(Formerly CalciTech India Pvt Ltd.)

19,19B SIPCOT Industrial Complex, Hosur, Tamil Nadu

Ref : MoEF Letter No. J-11011/417/2006- IA II (I) dated 18.07.2007.

Half Yearly Compliance Report upto September 24

S. No.	Specific Conditions	Compliance
1.	The gaseous emissions (SO_2, NO_X, HCl and Bromine) and particulate matter 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 not using Sodium Bromide in the process. Because of this there is no Bromine emission. Apart from this there is no process stacks. The non-process stacks of utility block (boiler stack and Fluid Bed dryer) emission such as SO2, NOX and particulate matter are monitored through the external agency on monthly basis. At no time, the emission levels were gone beyond the stipulated standards and in the event of failure of pollution control system(s) adopted by the unit, the respective unit will not be restarted until the control measures are rectified to achieve the desired efficiency.
2.	A periodic monitoring of Bromine at salient locations within the plant premises as well as outside the plant shall be carried out. A continuous monitoring system for bromine shall be installed.	There is no Sodium Bromide usage in the process as we have discontinued the process as committed to the Ministry. Hence there is no Bromine emission. Because of this Bromine is not monitored.
3.	An action plan for change of process route avoiding bromine shall be submitted and be implemented within a maximum period of 2 years.	We were using Sodium Bromide upto 2012 and stopped. Afterwards we have used enzyme process and this process also was stopped 2015 onwards. Though we have changed our process we have not submitted the action plan for change of process route avoiding Bromide within a period of two years.
4.	The ambient air quality monitoring stations shall be set up in down-wind direction as well as where maximum ground level concentration are anticipated in consultation with the TNPCB.	We are monitoring the ambient air quality through external agency on monthly basis in upwind direction and down wind direction including where the maximum ground level concentrations are anticipated in consultation with PCB.
5.	Efficient scrubber for control of Bromine emissions from electrolyte process shall be	We have changed the electrolysis process to Enzyme route to avoid

	installed. All electrolytic cells shall be connected to a common scrubber which shall be connected to stack. Bag filters shall be provided to stack and spray drier. The scrubber water after neutralization shall be sent to ETP for further treatment.	Bromine evolution in the process and this process also was stopped from 2015 onwards. The scrubber used for Bromine emission was utilized for reaction process stack. Mechanical dust collectors with Cyclone separators are provided to stack and Spray Drier. Up to 2015 the scrubbed water was sent to ETP for further treatment. Since the Bromine process and enzyme process are eliminated, there is no scrubbed water. .
6.	The company shall undertake following Waste Minimization measures • Metering and control of quantities of active ingredients to minimize waste. • Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. • Use of automated filling to minimize spillage.	We have undertaken the following Waste Minimization measures: • We have provided electronic weighing scale for raw material and finished products. • There are no by-products are being produced in the process. • We are collecting the products directly from the Blender to bags and avoiding the spillage.
	• Use of "Close Feed" system into batch reactors. • Venting equipment through vapour recovery system. Use of high pressure hoses for equipment clearing to reduce wastewater generation.	We are using closed feed system into batch reactors. We are not using any solvent in the process and because of this there is no venting. We are using High-pressure hoses for equipment cleaning.
7.	Fugitive emissions in the work zone environment, product, Raw materials storage area shall be regularly monitored. The emissions shall confirm to the limits imposed by TNPCB.	We are monitoring the fugitive emissions in the work zone environment, product, Raw materials storage area through approved laboratory on monthly basis. The emission levels are within the limits of TNPCB.
8.	Total water requirement from SIPCOT water supply shall not exceed 65 m^3/day and prior permission shall be obtained. The effluent generation shall not exceed 37m^3/day. All the wastewater containing high BOD and low COD shall be treated aerobically and anaerobically (Primary and	Water is supplied by M/s SIPCOT authorities. The present water consumption is less than 60m3/day. There is no process effluent. The water is used only for washing the equipments in the production block and floor

	secondary treatment) in existing ETP and then passed through Reverse Osmosis (RO) plant. No high COD effluent shall be generated. Treated water from RO shall be reused and rejects shall be treated in mechanical evaporator and water shall be reused in the process. All the treated wastewater shall be recycled and reused and no effluent shall be discharged outside the premises and “Zero discharge” shall be adopted. No organic solvent shall be used in the process. The domestic wastewater shall be treated in the septic tank followed by the soak pit.	washing. This water is sent to ETP for further treatment. The effluent water generation is maximum 38 m3/day. All the waste water containing high BOD and low COD is treated anaerobically and aerobically (Primary and secondary treatment) in existing ETP and then passed through Reverse Osmosis (RO) plant. Recently we have installed a lamella Clarifier with Lime soda process to reduce the Hardness in the treated water before RO plant RO permeate is reused in the process and reject is sent to Multiple Effect Evaporator (MEE) and ATFD. The salt is being sent to TSDF and achieved Zero Liquid Discharge (ZLD) norms All the treated water is recycled and reused. No effluent is discharged outside the premises and zero discharge is followed. No organic solvent is used. The domestic waste water is sent to existing ETP for further treatment.
9.	The solid waste generated in the form of process waste and ETP sludge. Process waste (rejects) shall temporarily be stored at site and sent to Tamil Nadu Common TSDF for final disposal whenever comes into operation. ETP sludge shall be used as manure. Sodium Bromide used as catalyst shall be recycled and reused in the process. All the other solid/ hazardous waste shall be disposed off as per the hazardous Waste (Management & Handling) Rules.	The solid waste generated from the process and ETP are stored and sent to Tamil Nadu Waste Management Ltd., Common TSDF or Green Gene Enviro Protection Infrastructue, Ranipet for Pre processing. Sodium Bromide is not used in the process from 2012 onwards. Ash is disposed to brick manufacturers. Waste oil is sent to the authorized recyclers. We obtained the Hazardous waste authorization valid upto 31st March 2027.
10.	The company shall adopt surface as well as roof top rain water harvesting measures to harvest the run-off water for recharge of ground water. Methods shall also be adopted for the conservation of water	We have developed surface as well as roof top rain water harvesting measures to harvest the run off for recharge of ground water. The treated waste water after RO that is RO permeate is reused in boiler, cooling tower, etc.

	through and recycling and reusing the treated wastewater.	
11.	The area under green belt shall be increased 33% and the selection of the Blast species shall be as per CPCB guidelines to mitigate the effects of fugitive emissions as per the Central Pollution Control Board guidelines.	Our unit is in SIPCOT industrial area. The total land is 1.02 Ha. There is no much area for plantation work. We have planted in front of the factory, around the office, along the eastern and western side of compound wall, around ETP areas including turfing/lawn.
12.	Occupational Health Surveillance (OHS) of the workers shall be done on a regular basis and records maintained as per the Factories Act.	OHS is being carried out as per the Factories Act and maintaining records.
13.	A full fledged environmental laboratory shall be set up for monitoring for environmental parameter specifically Bromine, SPM, SO_2, NOX, BOD, COD, TDS and heavy metals.	A full-fledged laboratory is established to monitor COD, TDS, pH, DO. In addition to this, third party monitoring and PCB monitoring is also carried out. Bromine is not monitored because it is not used in the process. SPM, SO2, NOX, BOD, COD & TDS are monitored through external agency.
14.	Annual safety audit shall be conducted.	Annual safety audit is conducted through the internal safety team.

General Conditions

S. No.	General Conditions	Compliance
1	The project Authorities must strictly adhere the stipulations made by TNPCB and the State Government	We complied all the stipulations made by TNPCB and the State Government is being implemented. We have obtained the consent renewal and valid upto 31.3.2027.
2	No further expansion or modification in the plant shall be carried out without prior approval of the Ministry of Environment and forests.	We have not carried any expansion or modification in the plant without approval from the Ministry. However we applied for EC and obtained on 11.08.2023 for expansion and addition of Land area ie 19 A. We obtained the Consent to Establish from TNPCB

3.	Adequate number of influent and effluent quality monitoring stations shall be set up in consultation with the TNPCB. Regular monitoring shall be carried out for relevant parameters	The ETP inlet and outlet effluent quality is being monitored weekly twice, external agency on monthly basis in consultation with TNPCB. Regular monitoring is carried out for relevant parameters such as pH, BOD, COD, TDS, TSS, DO, etc., in house.
4	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA report	We have implemented all the environmental protection measures and safeguards as recommended in the EIA/EMP report.
5	As proposed in EIA/EMP, Rs 0.146 Crores earmarked towards environmental protection measures shall be exclusively used to implement the conditions stipulated by the MoEF and State Government. A time bound action plan along with the implementation schedule to comply with all the conditions stipulated herein shall be submitted to the Ministry's Regional Office at Bangalore. The funds so provided shall not be diverted for any other purpose.	We are contributing to many projects like Education, health, awareness etc., we have incurred Rs. 288.41 lakhs during 2023-24 as a group including our Parent unit
6	The implementation of the project vi-a-vis Environmental action plans will be monitored by Ministry's Regional office at Bangalore/TNPCB/CPCB. A six monthly compliance report status report shall be submitted to the monitoring agencies.	We are submitting six monthly compliance report to Regional office of the Ministry, Chennai regularly.
7.	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	We had given advertisement in two local news papers (Indian Express – English; Dinamalar – Tamil) and submitted a copy of the same to Regional Office, Bangalore.
8	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 land development work in the EIA report	We have not informed the same to the Regional Office, Bangalore by oversight as we have not obtained any financial assistance from any institution and managed with internal funds.