

GC III/786/ MoEF/ RO/ 2023-24

22. 05.2023

To

The Director (S)  
Ministry of Environment, Forests & Climate Change  
Integrated Regional Office,  
1st Floor,  
Additional Office Block For GPOA  
Shastri Bhavan, Haddows Road,  
Nungambakkam, Chennai 600 006

Dear Sir,

Sub. : Submission of Half yearly Report – Mar 23

Ref. : F- No. J-11012/77/96- IA II (I) dated 29.07.1997.

and F- No J- 11011/417/2006 IA II(I) dt. 18<sup>th</sup> July, 2007, and 25.06.2018

With reference to the above we are sending herewith the Half yearly report ending March 23 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 upto March 2027, copy of the same is attached.

Kindly acknowledge the receipt of the same.

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



Authorised Signatory

Encl. : As above

# CalciTech India Pvt Ltd (Now Global Calcium Pvt Limited Unit III)

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 March 23

| S. No. | Specific Conditions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Compliance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.     | The gaseous emissions (SO <sub>2</sub> , NO <sub>x</sub> , 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 SO <sub>2</sub> , NO <sub>x</sub> 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 in the process. 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 installed. All electrolytic cells shall be connected to a common scrubber which shall be connected to stack. Bag filters shall                                                                                                                                                                                                                                                                                 | We have changed the electrolysis process to Enzyme route to avoid Bromine evolution in the process and this process also was stopped from 2015 onwards. The scrubber used for Bromine                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

|    |                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                           |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | be provided to stack and spray drier. The scrubber water after neutralization shall be sent to ETP for further treatment.                                                                                                                                                                                                                                                                                                              | 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. | <p>The company shall undertake following Waste Minimization measures</p> <ul style="list-style-type: none"> <li>• Metering and control of quantities of active ingredients to minimize waste.</li> <li>• Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.</li> <li>• Use of automated filling to minimize spillage.</li> </ul>                                                | <p>We have undertaken the following Waste Minimization measures:</p> <ul style="list-style-type: none"> <li>• We have provided electronic weighing scale for raw material and finished products.</li> <li>• There are no by-products are being produced in the process.</li> <li>• We are collecting the products directly from the Blender to bags and avoiding the spillage.</li> </ul> |
|    | <ul style="list-style-type: none"> <li>• Use of "Close Feed" system into batch reactors.</li> <li>• Venting equipment through vapour recovery system.</li> </ul> <p>Use of high pressure hoses for equipment clearing to reduce wastewater generation.</p>                                                                                                                                                                             | <p>We are using closed feed system into batch reactors.</p> <p>We are not using any solvent in the process and because of this there is no venting.</p> <p>We are using High-pressure hoses for equipment cleaning.</p>                                                                                                                                                                   |
| 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 <sup>3</sup> /day and prior permission shall be obtained. The effluent generation shall not exceed 37m <sup>3</sup> /day. All the wastewater containing high BOD and low COD shall be treated aerobically and anaerobically (Primary and secondary treatment) in existing ETP and then passed through Reverse Osmosis (RO) plant. No high COD effluent shall be | <p>Water is supplied by M/s SIPCOT authorities. The present water consumption is less than 60m<sup>3</sup>/day.</p> <p>There is no process effluent. The water is used only for washing the equipments in the production block and floor washing. This water is sent to ETP for further treatment. The effluent water generation is maximum 38 m<sup>3</sup>/day. All</p>                 |

|     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
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|     | <p>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.</p>                   | <p>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</p> <p>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</p> <p>All the treated water is recycled and reused. No effluent is discharged outside the premises and zero discharge is followed.</p> <p>No organic solvent is used.</p> <p>The domestic waste water is sent to existing ETP for further treatment.</p> |
| 9.  | <p>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 &amp; Handling) Rules.</p> | <p>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.</p> <p>Sodium Bromide is not used in the process from 2012 onwards.</p> <p>Ash is disposed to brick manufacturers. Waste oil is sent to the authorized recyclers.</p> <p>We obtained the Hazardous waste authorization valid upto 31<sup>st</sup> March 2027. Copy attached.</p>                                                                                                                                                                                                                                                                                                   |
| 10. | <p>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 through and recycling and reusing the treated wastewater.</p>                                                                                                                                                                                               | <p>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.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

|     |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 southern side of compound wall, around ETP areas including turfing/lawn. On World Environment day we have planted 90 trees with guard along the SIPCOT road front side and backside of our premises. Photo attached.. |
| 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 <sub>2</sub> , NOX <sub>x</sub> , 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.<br><br>SPM, SO <sub>2</sub> , 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.                                                                                                                                         |
| 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. |

|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                     |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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. | About Rs. 2.2 crore was incurred for environmental protection measures. The fund allocated was not diverted for any other purposes.                                                 |
| 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. |

# CalciTech India Pvt Ltd (Now Global Calcium Pvt Limited Unit III)

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

Ref : MoEF Letter No. J-11012/77/96- IA II (I) dated 29.07.1997.

## Half yearly Compliance report upto March 23

| S. No | Description                                                                                                                                                             | Compliance                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.    | The project authorities must strictly adhere to the stipulations made by the Tamil Nadu Pollution Control Board and the State Government                                | We are adhering to the stipulations made by Tamil Nadu Pollution Control Board and State Government.                                                                                                                                                                                                                                                                                                                                               |
| 2.    | No expansion or modification of the plant should carried out without the 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. We have gone for expansion after getting Environment Clearance from the Ministry during July 2007.                                                                                                                                                                                                                                              |
| 3.    | The existing ETP should be upgraded to treat the additional pollution load from the proposed expansion. The treated effluent should be used for green belt development. | The existing ETP upgraded and the treated water is passed through RO Plant. RO permeate is reused in the process and reject is sent to Multiple Effect Evaporator (MEE) and ATFD.. Recently we have installed a lamella Clarifier with Lime soda process to reduce the Hardness in the treated water before RO plant. All the treated water is recycled and reused. No effluent is discharged outside the premises and zero discharge is followed. |
| 4.    | The Quality of the treated effluent should be regularly monitored.                                                                                                      | The ETP inlet and outlet effluent quality is being monitored external agency on monthly basis. Regular monitoring is carried out for relevant parameters such as pH, BOD, COD, TDS, TSS, DO, etc. in house.                                                                                                                                                                                                                                        |
| 5.    | Boiler stack emission and ambient air quality be regularly monitored and the monitored data should be submitted to the State Pollution Control Board once               | We are monitoring the Boiler stack emission and ambient air quality through external agency on monthly basis in upwind direction and down wind direction and by TNPCB on Half yearly basis. Monitored datas are being                                                                                                                                                                                                                              |

|   |                                                                                                        |                                                                                                            |
|---|--------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
|   | in three months and once in six months to the Regional Office of the Ministry at Bangalore.            | submitted to The Regional Office. We have connected the on line stack monitoring to TNPCB Care Air Centre. |
| 6 | The Funds earmarked for environmental production measures should not be directed for any other purpose | We have implemented all the environmental protection measures as recommended                               |





**TAMIL NADU POLLUTION CONTROL BOARD**  
**REPORT OF ANALYSIS.**

1. Name of the Industry : M/s.Global Calcium Pvt Ltd (Unit-III)
2. Address of the Industry : SIPCOT Phase-I,  
Hosur.
3. Category / Classification : Red/Large
4. Land use classification : Industrial
5. Date of Survey : 23.12.2022 & 24.12.2022
6. Duration of Survey : 24 Hours.

**Meteorological Conditions.**

| Ambient Temperature (°C)   | Min       | Max | Relative Humidity(%)     | Min | Max |
|----------------------------|-----------|-----|--------------------------|-----|-----|
|                            | 23        | 29  |                          | 46  | 64  |
| Weather condition          | Clear sky |     | Rain Fall(mm)            | Nil |     |
| Predominant Wind Direction | NE-SW     |     | Mean Wind Speed (Km/hr.) | 7.2 |     |

**Ambient Air Quality Survey Results**

| SINo. | Location                                    | Direction | Distance (m) | Height (m) | Pollutants Concentration (µg/m <sup>3</sup> ) |                            |                 |                 |
|-------|---------------------------------------------|-----------|--------------|------------|-----------------------------------------------|----------------------------|-----------------|-----------------|
|       |                                             |           |              |            | PM (10) µg/m <sup>3</sup>                     | PM (2.5) µg/m <sup>3</sup> | SO <sub>2</sub> | NO <sub>2</sub> |
| 1     | Scaffolding near Industry Main Gate         | NE        | 180          | 2          | 28                                            | 8                          | 18              | 23              |
| 2     | Scaffolding near Vehicle Movement Area      | E         | 90           | 2          | 65                                            | -                          | 26              | 31              |
| 3     | Scaffolding near Raw Material handling Area | SE        | 110          | 2          | 32                                            | -                          | 11              | 19              |
| 4     | Scaffolding near 3 T Wood Boiler Area       | SW        | 80           | 2          | 45                                            | 21                         | 20              | 29              |
| 5     | Scaffolding near Spray Drier Area           | NW        | 150          | 2          | 46                                            | -                          | 13              | 18              |
| 6     | Scaffolding near Production Plant           | S         | 70           | 2          | 28                                            | -                          | 28              | 36              |

*Ajayabharathi*  
9/1/2023

**Environmental Scientist**

*K. Rajaraman* 9/1/23

**Deputy Chief Scientific officer**  
**District Environmental Laboratory**  
**Tamil Nadu Pollution Control Board**  
**Hosur.**





**TAMIL NADU POLLUTION CONTROL BOARD**  
**REPORT OF ANALYSIS.**

1. Name of the Industry : M/s. Global Calcium Pvt Ltd (Unit-III)
2. Address of the Industry : SIPCOT Phase-I,  
Hosur.
3. Date of Survey : 23.12.2022 & 24.12.2022

**Stack Monitoring Survey Results**

| Sl.No | Stack attached to                                                            | Stack Temp °K | Velocity in (m/sec) | Discharge rate in(Nm <sup>3</sup> /hr) | Pollutants Concentration (mg/Nm <sup>3</sup> ) |                 |                 |
|-------|------------------------------------------------------------------------------|---------------|---------------------|----------------------------------------|------------------------------------------------|-----------------|-----------------|
|       |                                                                              |               |                     |                                        | PM                                             | SO <sub>2</sub> | NO <sub>x</sub> |
| 1     | Spray Drier<br>Fuel: Electric Power<br>APC: Stack                            | 384           | 21.63               | 38456                                  | 38                                             | <MDL            | <MDL            |
| 2     | 3.0 T/Hr Boiler<br>Fuel: Firewood<br>APC: Stack                              | 456           | 18.63               | 3098                                   | 31                                             | 13              | 63              |
| 3     | 2 T/Hr Boiler<br>Fuel: Firewood<br>APC: Stack                                | 462           | 18.75               | 1368                                   | 38                                             | 11              | 69              |
| 4     | Diesel Generator 380 KVA<br>Fuel: HSD<br>APC: Stack with Acoustic Enclosures | 329           | 15.83               | 1621                                   | 40                                             | 16              | 51              |
| 5     | AHU Exhaust<br>Fuel: Electric Power<br>APC: Stack                            | 322           | 8.85                | 925                                    | 28                                             | 14              | 59              |

*Sudhakarathas*  
9/1/2023  
Environmental Scientist

*K. Rajaraman* 9/1/23  
Deputy Chief Scientific officer  
District Environmental Laboratory  
Tamil Nadu Pollution Control Board  
Hosur.





**TAMIL NADU POLLUTION CONTROL BOARD**  
**REPORT OF ANALYSIS.**

|                           |                         |                                        |                         |            |
|---------------------------|-------------------------|----------------------------------------|-------------------------|------------|
| 1                         | Name of the Industry    | M/s. Global Calcium Pvt Ltd (Unit-III) |                         |            |
| 2                         | Address of the Industry | SIPCOT Phase-I,<br>Hosur.              |                         |            |
| 3                         | Date of Survey          | 23.12.2022 & 24.12.2022                |                         |            |
| Category                  |                         | Red/Large                              | Land use Classification | Industrial |
| Type of Survey            |                         | Ambient                                | Time of Survey          | Day        |
| Meteorological conditions |                         | Clear Sky                              |                         |            |

**Logging Parameters**

|                  |                       |                 |                         |
|------------------|-----------------------|-----------------|-------------------------|
| Instrument Used  | <b>CASELLA</b>        | Serial No.      | <b>CELL: 63X2206850</b> |
| Logging Interval | 10 Minutes each point | Measuring Range | 50 – 110 dBA            |
| Weighting        | "A"                   | Time Weighting  | FAST                    |
| Sound Incidence  | Frontal               | Time in hrs.    | 11.00 - 12.10           |

**Report of Noise Level Monitoring**

| Sl.No | Location                  | Direction | Distance (Km) | Duration (Min) | Sound Level in dB(A) |      |      |
|-------|---------------------------|-----------|---------------|----------------|----------------------|------|------|
|       |                           |           |               |                | Leq                  | Min  | Max  |
| 1     | Near Vehicle Parking Area | NE        | 80            | 10             | 55.2                 | 46.3 | 59.6 |
| 2     | Near Spray Drier Area     | E         | 85            | 10             | 51.4                 | 48.2 | 58.2 |
| 3     | Near Production Plant-I   | SE        | 110           | 10             | 58.6                 | 41.7 | 65.3 |
| 4     | Near Production Plant-II  | SW        | 119           | 10             | 56.3                 | 45.6 | 61.5 |
| 5     | Near Boiler 3 T Area      | NW        | 95            | 10             | 53.1                 | 43.8 | 57.6 |

*Lidya bhaskar*  
9/1/2023

**Environmental Scientist**

*K. Rajaraman* 9/1/23

**Deputy Chief Scientific officer**  
**District Environmental Laboratory**  
**Tamil Nadu Pollution Control Board**  
**Hosur.**



**TEST REPORT**

|                                      |                                                                     |
|--------------------------------------|---------------------------------------------------------------------|
| <b>Test Report No &amp; Date</b>     | <b>CTL/CH/N-34498/2022-23 &amp; 04.04.2023</b>                      |
| <b>Sample Number</b>                 | <b>N-34498/22-23</b>                                                |
| <b>Name of the Customer</b>          | <b>M/s. Global Calcium Pvt. Ltd Unit - III</b>                      |
| <b>Address</b>                       | No.19 & 19B, SIPCOT Complex,<br>Hosur - 635 126.                    |
| <b>Sample Drawn by</b>               | Laboratory                                                          |
| <b>Sample Name</b>                   | Ambient Air                                                         |
| <b>Sample Description</b>            | <b>Ambient Air Quality</b>                                          |
| <b>Sampling Location</b>             | <b>NEAR MAIN SECURITY GATE</b>                                      |
| <b>Sample Drawn on</b>               | 29.03.2023 & 09.45 to 17.45                                         |
| <b>Sample Received on</b>            | 30.03.2023                                                          |
| <b>Sampling Plan &amp; Procedure</b> | CTL/QSP/F-89 & IS 5182 (Part V) and (Part XIV)                      |
| <b>Sample Quantity</b>               | 1 No                                                                |
| <b>Equipment used for Sampling</b>   | Envirotech - RDS Sampler S.No - 3240 DTG 2019 Due Date : 13.12.2023 |
| <b>Analysis Started on</b>           | 30.03.2023                                                          |
| <b>Analysis Completed on</b>         | 04.04.2023                                                          |

**ENVIRONMENTAL CONDITION:**

|                     |           |
|---------------------|-----------|
| Relative Humidity   | 64%       |
| Ambient Temperature | 33°C      |
| Wind Direction      | W         |
| Weather Condition   | Clear Sky |

**Test Results:**

The above sample tested as received, and results are as follows:

| SL.NO | PARAMETERS                               | METHODS                         | UNITS             | RESULTS      | NAAQS* |
|-------|------------------------------------------|---------------------------------|-------------------|--------------|--------|
| 1     | PARTICULATE MATTER (PM <sub>2.5</sub> )  | IS 5182 Part 24 - 2019          | µg/m <sup>3</sup> | 30.0         | 60     |
| 2     | PARTICULATE MATTER (PM <sub>10</sub> )   | IS 5182 Part 23 - 2006 (R.2017) | µg/m <sup>3</sup> | 64.5         | 100    |
| 3     | SULPHUR DIOXIDE (SO <sub>2</sub> )       | IS 5182 Part 2 - 2001 (R.2017)  | µg/m <sup>3</sup> | 11.2         | 80     |
| 4     | OXIDES OF NITROGEN (NO <sub>2</sub> )    | IS 5182 Part 6 - 2006 (R.2017)  | µg/m <sup>3</sup> | 26.0         | 80     |
| 5     | OZONE (O <sub>3</sub> )                  | CTL/SOP/AIR/08 - 2016           | µg/m <sup>3</sup> | 30.1         | 180    |
| 6     | LEAD (Pb)                                | IS 5182 PART 22 - 2004 (R.2019) | µg/m <sup>3</sup> | BDL(DL:0.1)  | 1      |
| 7     | CARBON MONOXIDE (CO)                     | CTL/SOP/AIR/23 - 2016           | mg/m <sup>3</sup> | BDL(DL:1.15) | 4      |
| 8     | AMMONIA (NH <sub>3</sub> )               | IS 5182 Part 25 - 2018          | µg/m <sup>3</sup> | 24.5         | 400    |
| 9     | ARSENIC (As)                             | CTL/SOP/AIR/06 - 2016           | ng/m <sup>3</sup> | BDL(DL:1.0)  | 6      |
| 10    | NICKEL (Ni)                              | IS 5182 Part 26 - 2020          | ng/m <sup>3</sup> | BDL(DL:5.0)  | 20     |
| 11    | BENZENE (C <sub>6</sub> H <sub>6</sub> ) | IS 5182 PART 11 - 2006 (R.2017) | µg/m <sup>3</sup> | BDL(DL:1.0)  | 5      |
| 12    | BENZO(a)PYRENE                           | IS 5182 PART 12 - 2004 (R.2019) | ng/m <sup>3</sup> | BDL(DL:0.5)  | 1      |

\*National Ambient Air Quality Standards - CPCB

BDL - Below Detection Limit(D.L - Detection Limit)

**Remarks:** The Ambient air quality level complies as per Prescribed limits of NAAQ-CPCB standard in the above location

Statement of conformity is applied considering Decision rule as per CTL/QSP/16

**\*\*\*END OF REPORT\*\*\***

  
Verified by

**For Chennai Testing Laboratory Pvt Ltd**



Authorised Signatory

**G. MANIKANDAN**  
Head - Environment Division  
(CHEMICAL)

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**TEST REPORT**

|                                      |                                                                     |
|--------------------------------------|---------------------------------------------------------------------|
| <b>Test Report No &amp; Date</b>     | <b>CTL/CH/N-34499/2022-23 &amp; 04.04.2023</b>                      |
| <b>Sample Number</b>                 | <b>N-34499/22-23</b>                                                |
| <b>Name of the Customer</b>          | <b>M/s. Global Calcium Pvt. Ltd Unit - III</b>                      |
| <b>Address</b>                       | No.19 & 19B, SIPCOT Complex,<br>Hosur - 635 126.                    |
| <b>Sample Drawn by</b>               | Laboratory                                                          |
| <b>Sample Name</b>                   | Ambient Air                                                         |
| <b>Sample Description</b>            | <b>Ambient Air Quality</b>                                          |
| <b>Sampling Location</b>             | <b>NEAR DG YARD</b>                                                 |
| <b>Sample Drawn on</b>               | 29.03.2023 & 10.00 to 18.00                                         |
| <b>Sample Received on</b>            | 30.03.2023                                                          |
| <b>Sampling Plan &amp; Procedure</b> | CTL/QSP/F-89 & IS 5182 (Part V) and (Part XIV)                      |
| <b>Sample Quantity</b>               | 1 No                                                                |
| <b>Equipment used for Sampling</b>   | Envirotech - RDS Sampler S.No - 3239 DTG 2019 Due Date : 13.12.2023 |
| <b>Analysis Started on</b>           | 30.03.2023                                                          |
| <b>Analysis Completed on</b>         | 04.04.2023                                                          |

**ENVIRONMENTAL CONDITION:**

|                     |           |
|---------------------|-----------|
| Relative Humidity   | 64%       |
| Ambient Temperature | 33°C      |
| Wind Direction      | W         |
| Weather Condition   | Clear Sky |

**Test Results:**

The above sample tested as received, and results are as follows:

| SL.NO | PARAMETERS                               | METHODS                         | UNITS             | RESULTS      | NAAQS* |
|-------|------------------------------------------|---------------------------------|-------------------|--------------|--------|
| 1     | PARTICULATE MATTER (PM <sub>2.5</sub> )  | IS 5182 Part 24 - 2019          | µg/m <sup>3</sup> | 22.1         | 60     |
| 2     | PARTICULATE MATTER (PM <sub>10</sub> )   | IS 5182 Part 23 - 2006 (R.2017) | µg/m <sup>3</sup> | 50.4         | 100    |
| 3     | SULPHUR DIOXIDE (SO <sub>2</sub> )       | IS 5182 Part 2 - 2001 (R.2017)  | µg/m <sup>3</sup> | 7.0          | 80     |
| 4     | OXIDES OF NITROGEN (NO <sub>2</sub> )    | IS 5182 Part 6 - 2006 (R.2017)  | µg/m <sup>3</sup> | 15.0         | 80     |
| 5     | OZONE (O <sub>3</sub> )                  | CTL/SOP/AIR/08 - 2016           | µg/m <sup>3</sup> | 22.5         | 180    |
| 6     | LEAD (Pb)                                | IS 5182 PART 22 - 2004 (R.2019) | µg/m <sup>3</sup> | BDL(DL:0.1)  | 1      |
| 7     | CARBON MONOXIDE (CO)                     | CTL/SOP/AIR/23 - 2016           | mg/m <sup>3</sup> | BDL(DL:1.15) | 4      |
| 8     | AMMONIA (NH <sub>3</sub> )               | IS 5182 Part 25 - 2018          | µg/m <sup>3</sup> | 26.4         | 400    |
| 9     | ARSENIC (As)                             | CTL/SOP/AIR/06 - 2016           | ng/m <sup>3</sup> | BDL(DL:1.0)  | 6      |
| 10    | NICKEL (Ni)                              | IS 5182 Part 26 - 2020          | ng/m <sup>3</sup> | BDL(DL:5.0)  | 20     |
| 11    | BENZENE (C <sub>6</sub> H <sub>6</sub> ) | IS 5182 PART 11 - 2006 (R.2017) | µg/m <sup>3</sup> | BDL(DL:1.0)  | 5      |
| 12    | BENZO(a)PYRENE                           | IS 5182 PART 12 - 2004 (R.2019) | ng/m <sup>3</sup> | BDL(DL:0.5)  | 1      |

\*National Ambient Air Quality Standards - CPCB

BDL - Below Detection Limit(D.L - Detection Limit)


**Remarks:** The Ambient air quality level complies as per Prescribed limits of NAAQ-CPCB standard in the above location

Statement of conformity is applied considering Decision rule as per CTL/QSP/16

**\*\*\*END OF REPORT\*\*\***

  
Verified by

**For Chennai Testing Laboratory Pvt Ltd**

  
Authorised Signatory

**G. MANIKANDAN**  
Head - Environment Division  
(CHEMICAL)

Page 1 of 1

**TEST REPORT**

|                                      |                                                         |
|--------------------------------------|---------------------------------------------------------|
| <b>Test Report No &amp; Date</b>     | CTL/CH/N-34500/2022-23 & 04.04.2023                     |
| <b>Sample Number</b>                 | N-34500/22-23                                           |
| <b>Name of the Customer</b>          | M/s. Global Calcium Pvt. Ltd Unit - III                 |
| <b>Address</b>                       | No.19 & 19B, SIPCOT Complex,<br>Hosur - 635 126.        |
| <b>Sample Drawn by</b>               | Laboratory                                              |
| <b>Sample Name</b>                   | Stack Emission                                          |
| <b>Sample Description</b>            | <b>Stack Emission</b>                                   |
| <b>Sampling Location</b>             | <b>Stack attached with BOILER -3 TON</b>                |
| <b>Sample Drawn on</b>               | 29.03.2023                                              |
| <b>Sample Received on</b>            | 30.03.2023                                              |
| <b>Sampling Plan &amp; Procedure</b> | CTL/QSP/F-89 & IS 11255                                 |
| <b>Sample Quantity</b>               | 1 No                                                    |
| <b>Equipment used for Sampling</b>   | Kane 905 S.No 090519403 Calibration Due Date:02.02.2024 |
| <b>Analysis Started on</b>           | 30.03.2023                                              |
| <b>Analysis Completed on</b>         | 04.04.2023                                              |

**PHYSICAL PARAMETERS:**

|                                           |        |
|-------------------------------------------|--------|
| STACK HEIGHT (m)                          | 30     |
| STACK TEMPERATURE (K)                     | 405.0  |
| STACK VELOCITY (m/s)                      | 13.4   |
| STACK GAS FLOW RATE (Nm <sup>3</sup> /hr) | 9673.3 |
| DIAMETER OF STACK AT PORTHOLE (m)         | 0.60   |
| *APCM STATUS AT THE TIME OF SAMPLING      | Nil    |

**Test Results:**

The above sample tested as received, and results are as follows:

| SL.NO | PARAMETERS                                               | METHOD                                         | UNITS              | RESULTS     | TNPCB LIMITS |
|-------|----------------------------------------------------------|------------------------------------------------|--------------------|-------------|--------------|
| 1     | OXIDES OF NITROGEN NO <sub>x</sub> (as NO <sub>2</sub> ) | IS 11255 PART 7 2005 (R 2017)                  | mg/Nm <sup>3</sup> | 61          | **           |
| 2     | SULPHUR DIOXIDE (SO <sub>2</sub> )                       | IS 11255 PART 2 1985 (R 2019)                  | mg/Nm <sup>3</sup> | 122         | **           |
| 3     | PARTICULATE MATTER(PM)                                   | IS 11255 PART 1 1985 (R 2019)                  | mg/Nm <sup>3</sup> | 67.2        | 150          |
| 4     | CARBON MONOXIDE (CO)                                     | CTL/SOP/STACK/10 - 2016<br>(Flue Gas Analyser) | %                  | BDL(DL:0.2) | **           |
| 5     | CARBON DIOXIDE (CO <sub>2</sub> )                        |                                                | %                  | 11.5        | **           |
| 6     | OXYGEN (O <sub>2</sub> )                                 |                                                | %                  | 9.0         | **           |

\*Air Pollution Control Measures

\*\*Depending on the local situation, state pollution control board will prescribe the standards.

**Remarks:** The Stack Monitoring level complies as per Prescribed limits of TNPCB standard in the above location

Statement of conformity is applied considering Decision rule as per CTL/QSP/16

**\*\*\*END OF REPORT\*\*\***

  
Verified by

For Chennai Testing Laboratory Pvt Ltd

  
Authorised Signatory  
**G. MANIKANDAN**  
Head - Environment Division  
(CHEMICAL)

**TEST REPORT**

|                                      |                                                                                                                                           |
|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Test Report No &amp; Date</b>     | CTL/CH/N-34501/2022-23 & 04.04.2023                                                                                                       |
| <b>Sample Number</b>                 | N-34501/22-23                                                                                                                             |
| <b>Name of the Customer</b>          | M/s. Global Calcium Pvt. Ltd Unit - III                                                                                                   |
| <b>Address</b>                       | No.19 & 19B, SIPCOT Complex,<br>Hosur - 635 126.                                                                                          |
| <b>Sample Drawn by</b>               | Laboratory                                                                                                                                |
| <b>Sample Name</b>                   | Indoor Air                                                                                                                                |
| <b>Sample Description</b>            | <b>Indoor Air Quality (Fugitive emissions)</b>                                                                                            |
| <b>Sampling Location</b>             | <b>PLANT-5 REACTOR ROOM</b>                                                                                                               |
| <b>Sample Drawn on</b>               | 29.03.2023                                                                                                                                |
| <b>Sample Received on</b>            | 30.03.2023                                                                                                                                |
| <b>Sampling Plan &amp; Procedure</b> | CTL/QSP/F-89 & CTL/SOP/AIR/024                                                                                                            |
| <b>Sample Quantity</b>               | 1 No                                                                                                                                      |
| <b>Equipment used for Sampling</b>   | Envirotech - Handy Sampler S.No - 897 DTI 2018 Due Date -05.10.2023<br>Gas Alert Micro 5PID Analyser - SK316-001592 Due Date - 22.05.2023 |
| <b>Analysis Started on</b>           | 30.03.2023                                                                                                                                |
| <b>Analysis Completed on</b>         | 04.04.2023                                                                                                                                |

|                                 |      |
|---------------------------------|------|
| <b>Environmental Parameters</b> |      |
| RELATIVE HUMIDITY               | 57%  |
| AMBIENT TEMPERATURE             | 31°C |


**Test Results:**

The above sample tested as received, and results are as follows:

| SL.NO | PARAMETERS                          | METHODS               | UNITS             | RESULTS       | LIMITS |
|-------|-------------------------------------|-----------------------|-------------------|---------------|--------|
| 1     | SUSPENDED PARTICULATE MATTER(SPM)   | NIOSH - 0500          | mg/m <sup>3</sup> | 0.038         | 15     |
| 2     | RESPIRABLE PARTICULATE MATTER (RPM) | NIOSH - 0600          | mg/m <sup>3</sup> | 0.021         | 5      |
| 3     | ARSENIC                             | CTL/SOP/AIR/06 - 2016 | mg/m <sup>3</sup> | BDL(DL:0.001) | 0.1    |
| 4     | OZONE                               | CTL/SOP/AIR/08 - 2016 | mg/m <sup>3</sup> | 0.037         | 0.2    |
| 5     | CHLORINE                            | IS 5182 Part 19 -1982 | mg/m <sup>3</sup> | BDL(DL:0.05)  | 3      |
| 6     | CARBON MONOXIDE (CO)                | NIOSH - 6604          | mg/m <sup>3</sup> | BDL(DL:1.15)  | 50     |
| 7     | CARBON DIOXIDE (CO <sub>2</sub> )   | CTL/SOP/AIR/21 - 2016 | ppm               | 416           | 5,000  |

  
Verified by

For Chennai Testing Laboratory Pvt Ltd

  
Authorised Signatory  
**G. MANIKANDAN**  
Head - Environment Division  
(CHEMICAL)

CIN: U93000TN2000PTC043869

**TEST REPORT**

|                                  |                                                |
|----------------------------------|------------------------------------------------|
| <b>Test Report No &amp; Date</b> | <b>CTL/CH/N-34501/2022-23 &amp; 04.04.2023</b> |
|----------------------------------|------------------------------------------------|

| SL.NO | PARAMETERS    | METHODS               | UNITS             | RESULTS       | LIMITS |
|-------|---------------|-----------------------|-------------------|---------------|--------|
| 8     | ZINC OXIDE    | CTL/SOP/AIR/06 - 2016 | mg/m <sup>3</sup> | BDL(DL:0.005) | 5      |
| 9     | CALCIUM OXIDE |                       | mg/m <sup>3</sup> | BDL(DL:0.005) | 5      |
| 10    | BROMINE       | CTL/SOP/AIR/30 - 2017 | mg/m <sup>3</sup> | BDL(DL:0.05)  | 0.7    |
| 11    | ETHYL ALCOHOL | OSHA - 100            | mg/m <sup>3</sup> | BDL(DL:1.5)   | 1900   |

\*Occupational Safety and Health Standards  
BDL - Below Detection Limit(D.L - Detection Limit)


**\*\*\*END OF REPORT\*\*\***

**For Chennai Testing Laboratory Pvt Ltd**



Authorised Signatory  
**G. MANIKANDAN**  
Head - Environment Division  
(CHEMICAL)

Page 2 of 2



Verified by



**TEST REPORT**

|                                      |                                                                                            |
|--------------------------------------|--------------------------------------------------------------------------------------------|
| <b>Test Report No &amp; Date</b>     | CTL/CH/N-34502/2022-23 & 04.04.2023                                                        |
| <b>Sample Number</b>                 | N-34502/22-23                                                                              |
| <b>Name of the Customer</b>          | M/s. Global Calcium Pvt. Ltd Unit - III                                                    |
| <b>Address</b>                       | No.19 & 19B, SIPCOT Complex,<br>Hosur - 635 126.                                           |
| <b>Sample Drawn by</b>               | Laboratory                                                                                 |
| <b>Sample Name</b>                   | Noise                                                                                      |
| <b>Sample Description</b>            | <b>AMBIENT NOISE</b>                                                                       |
| <b>Sample Drawn on</b>               | 29.03.2023                                                                                 |
| <b>Sampling Plan &amp; Procedure</b> | CTL/QSP/F-89 & IS 9989                                                                     |
| <b>Equipment used for Sampling</b>   | Sound Level Meter Make - Lutron<br>Instrument S.NO:Q641689 Calibration Due Date:14.02.2024 |

**Test Results:**

The above sample tested as received, and results are as follows:

| SL.NO | LOCATION                      | NOISE LEVEL dB (A) |      |      | LIMITS* | NOISE LEVEL dB (A) |      |      | LIMITS* |
|-------|-------------------------------|--------------------|------|------|---------|--------------------|------|------|---------|
|       |                               | Day Noise          |      |      |         | Night Noise        |      |      |         |
|       |                               | Min                | Max  | Leq  | Leq     | Min                | Max  | Leq  | Leq     |
| 1     | NEAR SECURITY GATE            | 66.9               | 68.8 | 68.0 | 75      | 57.5               | 64.0 | 61.5 | 70      |
| 2     | NEAR DG ROOM                  | 58.7               | 62.8 | 60.9 |         | 55.0               | 58.0 | 56.5 |         |
| 3     | NEAR ETP RO PLANT             | 70.6               | 73.6 | 72.4 |         | 66.0               | 69.0 | 67.6 |         |
| 4     | NEAR CHILL WATER STORAGE TANK | 67.8               | 72.6 | 70.9 |         | 61.0               | 65.0 | 63.3 |         |

\* CPCB Limits (Day & Night Time)

\*\*\*END OF REPORT\*\*\*

  
Verified by

For Chennai Testing Laboratory Pvt Ltd



Authorised Signatory

**G. MANIKANDAN**  
Head - Environment Division  
(CHEMICAL)

Page 1 of 1



## TAMILNADU POLLUTION CONTROL BOARD



**AUTHORISATION No. 22HFC35138126 dated 02/12/2022**

**Proceeding No. T1/TNPCB/F.0065HSR/HWA/RL/HSR/2022 dated 02/12/2022**

Sub: Tamil Nadu Pollution Control Board – Hazardous Waste Authorization-Fresh- M/s. GLOBAL CALCIUM PRIVATE LTD., UNIT III, S.F.No. Plot No. 19 & 19 B, MUKONDAPALLI Village, HOSUR Taluk, Krishnagiri District - Authorization under Rule 6 (2) of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 enacted under Environment (Protection) Act, 1986 – Issued- Reg.

Ref: 1. Application No. 35138126 dated: 05/02/2021 under HOWM Rules, 2016  
2. HWA-IR.No.0065HSR/HWA/RL/JCEE-M/HSR/2022 dated: 31/10/2022

### FORM 2

[See rule 6 (2)]

## FORM FOR GRANT OR RENEWAL OF AUTHORISATION TO THE OCCUPIERS, RECYCLERS, REPROCESSORS, REUSERS, USER AND OPERATORS OF DISPOSAL FACILITIES

1. Number of authorization: 22HFC35138126 and dated : 02/12/2022
2. The Director of M/s. GLOBAL CALCIUM PRIVATE LTD., UNIT III is hereby granted an Authorisation based on the enclosed signed Inspection report for Generation & Handling of hazardous or other wastes or both on the premises situated at S.F.No. Plot No. 19 & 19 B, MUKONDAPALLI Village, HOSUR Taluk, Krishnagiri District.





## TAMILNADU POLLUTION CONTROL BOARD

| Sl No | Schedule / Name of the Processes                                                                                                                                                    | Name of Hazardous Waste (with category No)                                         | Quantity     | Activities for which Authorization is issued                                                                       |
|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--------------|--------------------------------------------------------------------------------------------------------------------|
| 1     | Schedule I /5. Industrial operations using mineral or synthetic oil as lubricant in hydraulic systems or other applications                                                         | 5.1-Used or spent oil                                                              | 0.20 T/Annum | Generation, Collection, Storage & Sent to Authorised Recyclers for reprocessing purpose (Recyclable)               |
| 2     | Schedule I /28. Production/formulation of drugs/pharmaceutical and health care product                                                                                              | 28.1-Process Residue and wastes                                                    | 3.0 T/Annum  | Generation, Collection, Storage & Sent to Authorised HW Pre-processor for preparing for co-processing (Utilisable) |
| 3     | Schedule I /28. Production/formulation of drugs/pharmaceutical and health care product                                                                                              | 28.3-Spent carbon                                                                  | 2.0 T/Annum  | Generation, Collection, Storage & Sent to Authorised HW Pre-processor for preparing for co-processing (Utilisable) |
| 4     | Schedule I /28. Production/formulation of drugs/pharmaceutical and health care product                                                                                              | 28.4-Off specification products                                                    | 1.0 T/Annum  | Generation, Collection, Storage & Sent to Authorised HW Pre-processor for preparing for co-processing (Utilisable) |
| 5     | Schedule I /28. Production/formulation of drugs/pharmaceutical and health care product                                                                                              | 28.5-Date-expired products                                                         | 0.5 T/Annum  | Generation, Collection, Storage & Sent to Authorised HW Pre-processor for preparing for co-processing (Utilisable) |
| 6     | Schedule I /33. Handling of hazardous chemicals and wastes                                                                                                                          | 33.1-Empty barrels/containers/liners contaminated with hazardous chemicals /wastes | 3.0 T/Annum  | Generation, Collection, Storage & Sent to Authorised Utilisers for recycling (Utilisable)                          |
| 7     | Schedule I /35. Purification and treatment of exhaust air/gases, water and waste water from the processes in this schedule and common industrial effluent treatment plants (CETP's) | 35.3-Chemical sludge from waste water treatment                                    | 30.0 T/Annum | Generation, Collection, Storage & Sent to Authorised HW Pre-processor for preparing for co-processing (Utilisable) |
| 8     | Schedule I /35. Purification and treatment of exhaust air/gases, water and waste water from the processes in this schedule and common industrial effluent treatment plants (CETP's) | 35.3-Chemical sludge from waste water treatment                                    | 30.0 T/Annum | Generation, Collection & Storage of MEE/ATFD Salt in closed shed within the premises                               |

3. This authorization shall be valid for a period upto 31/03/2027.

**The Authorization is issued subject to the following general and special conditions annexed.**

JOSEPHINESAHAYARANI

**For Member Secretary  
Tamil Nadu Pollution Control Board  
Chennai**

### **A. GENERAL CONDITIONS OF AUTHORIZATION**

1. The authorised person shall comply with the provisions of the Environment (Protection) Act, 1986 and the rules made there under.
2. The authorization or its renewal shall be produced for inspection at the request of an officer authorized by Tamil Nadu Pollution Control Board.

**POLLUTION PREVENTION PAYS**





## TAMILNADU POLLUTION CONTROL BOARD

3. The person authorized shall not rent, lend, sell, transfer or otherwise transport the hazardous and other wastes except what is permitted through this Authorisation.
4. Any unauthorized change in personnel, equipment or working conditions as mentioned in the application by the person authorized shall constitute a breach of his authorization.
5. The person authorised shall implement Emergency Response procedure (ERP) for which this authorisation is being granted considering all site specific possible scenarios such as spillages, leakages, fire ,etc and their possible impacts and also carry out mock drill in this regard at regular interval of time.
6. The person authorised shall comply with the provisions outlined in the CPCB guidelines on "Implementing Liabilities for Environmental damages due to Handling and Disposal of Hazardous Wastes and Penalty".
7. It is the duty of the authorized person to take prior permission of Tamil Nadu Pollution Control Board to close down the facility.
8. The imported Hazardous and other wastes shall be fully insured for transit as well as the accidental occurrences and its clean-up operation.
9. The record of consumption and fate of the imported hazardous and other wastes shall be maintained.
10. The Hazardous and other wastes which gets generated during recycling or reuse or recovery or pre-processing or utilisation of imported hazardous or other wastes shall be treated and disposed of as per specific conditions of Authorisation.
11. The importer or Exporter shall bear the cost of import or export or mitigation of damages if any.
12. An application for the renewal of an authorization shall be made as laid down under these Rules.
13. Any other conditions for compliance as per the Guidelines issued by the MoEF and CC or CPCB from time to time.
14. Annual returns shall be filed by June 30th for the period ending 31st March of the previous financial year.

### **B. SPECIFIC CONDITIONS - HW Generator**

1. The occupier/generator shall be responsible for safe and environmentally sound management of hazardous and other wastes.
2. The occupier shall follow the following steps for the management of hazardous and other wastes. (a) prevention (b) minimization (c) reuse (d) recycling (e) recovery, utilisation including co-processing and (f) safe disposal
3. The occupier shall take all the steps while managing hazardous and other wastes - (a) To contain contaminants and prevent accidents and limit their consequences on human beings and the environment; and (b) To provide persons working in the site with appropriate training, equipment and the information necessary to ensure their safety.
4. The occupier shall store the hazardous and other wastes for a period not exceeding ninety days and shall maintain a record of sale, transfer, storage, recycling, recovery, pre-processing, co-processing and utilisation of such wastes and make these records available for inspection:
5. The hazardous and other wastes shall be stored temporally in an isolated area earmarked for the purpose within the occupier's premises (it shall not be accessible to rain water) till scientific disposal. The storage area shall be fenced properly and a sign of danger shall be placed at the storage site.
6. The containers holding the hazardous and other wastes shall be kept in good condition and made of materials which can withstand the physical and environmental conditions during storage and transportation. Only properly cleaned containers shall be used for storage of hazardous and other wastes.
7. The occupier handling hazardous or other wastes shall maintain records of such operations of generation, handling, storage and disposal as per Form 3.
8. The hazardous and other wastes generated in the establishment of the occupier shall be sent or sold to an authorised actual user or shall be disposed of in an authorised disposal facility.
9. The occupier handling hazardous or other wastes shall ensure that the hazardous and other wastes are packaged in a manner suitable for safe handling, storage and transport as per the guidelines issued by the Central Pollution Control Board from time to time
10. The labelling of package of hazardous or other wastes shall be done as per Form 8. The label shall be of non-washable material, weather proof and easily visible.





## TAMILNADU POLLUTION CONTROL BOARD

11. The hazardous and other wastes shall be transported from the occupier's establishment to an authorised actual user or to an authorised disposal facility in accordance with the provisions of these rules.
12. The transport of the hazardous and other wastes shall be in accordance with the provisions of these rules and the rules made by the Central Government under the Motor Vehicles Act, 1988 and the guidelines issued by the Central Pollution Control Board from time to time in this regard..
13. The occupier shall provide the transporter with the relevant information in Form 9, regarding the hazardous nature of the wastes and measures to be taken in case of an emergency and shall label the hazardous and other wastes containers as per Form 8
14. The authorisation for transport shall be obtained either by the sender or the receiver on whose behalf the transport is being arranged.
15. The transporter/sender of the hazardous and other wastes shall prepare and maintain manifest in Form 10.
16. The occupier or the operator or the transporter shall immediately intimate TNPCB through telephone, e-mail about the accident and subsequently send a report in Form 11, where an accident occurs at the facility of the occupier handling hazardous or other wastes and operator of the disposal facility or during transportation
17. The occupier who intends to get its hazardous and other wastes treated and disposed of by the operator of a treatment, storage and disposal facility shall give to the operator of that facility, such specific information as may be needed for safe storage and disposal.
18. The occupier shall be liable for all damages caused to the environment due to improper handling and management of the hazardous and other wastes.
19. The occupier handling hazardous and other wastes shall submit annual returns containing the details specified in Form 4 to TNPCB on or before the 30th day of June of every year for the preceding period April to March.
20. Any increase in quantity of handling of hazardous and other wastes, any change in category of hazardous and other wastes and any change in method of handling operations shall be brought to the notice of the TNPCB and fresh authorization shall be obtained.

### ADDITIONAL SPECIFIC CONDITIONS

1. The unit shall comply with the provisions of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 as amended from time to time while handling of hazardous wastes.
2. The unit shall generate, collect, store and send the Schedule-1 HW category 5.1-Used or spent oil to TNPCB Authorized Recycler of M/s Sri Gowri Industries, Coimbatore as per the agreement executed for recycling purpose only.
3. The unit shall generate, collect, store and send the Schedule-1 HW categories 28.1\_Process residues, 28.3\_Spent carbon, 28.4\_Off specification products, 28.5\_Date expired products (if generated) & 35.3\_ETP bio-sludge to TNPCB Authorised Pre-processor of M/s. Green Gene Enviro Protection and Infrastructure Limited (GGEPIL), Ranipet as per the agreement executed for pre-processing of such hazardous wastes so as to utilise for co-processing in the cement industries.
4. The unit shall generate, collect, store and send the Schedule-1 HW category 33.1\_Empty barrels/containers contaminated with hazardous chemicals/wastes to TNPCB Authorized Utilisers of M/s Realco Recycling Company, Gummidipoondi as per the agreement executed for cleaning & recycling for the original intended purpose only.
5. It shall be ensured that the hazardous wastes shall be sent to TNPCB Authorised Recycler/Utiliser/Pre-processor having valid consent under Water & Air Acts and valid Authorisation under HOWM Rules, 2016 at all times.
6. The unit shall generate, collect and store the Schedule-1 HW category 35.3\_ATFD Salt generation from tertiary treatment (thro' RO+MEE-ATFD) of trade effluent within the premises properly till find out suitable utilisers of the same for the beneficial purpose, following SOP issued by CPCB .
7. The unit shall find out suitable beneficiaries for utilising ATFD (mixed salt) Salt generated from the ZLD of treatment system so as to avoid accumulation of the same within the premises.
8. The unit shall store the hazardous wastes in containers, barrels with labelling as per FORM-8 on impervious floor under closed shed within the premises temporarily for a period not exceeding ninety days as per the Rule 8 of HOWM Rules, 2016 before scientific disposal.





## TAMILNADU POLLUTION CONTROL BOARD

9. The unit shall maintain records in FORM-3 for the hazardous wastes generation, storage within the premises including disposal and furnish Annual Returns in FORM-4 for every financial year before 30th June to TNPCB.
10. The unit shall ensure that the transport container shall be marked and labelled as prescribed in Form-12 of the HOWM Rules, 2016.
11. The unit shall follow the procedures in respect of hazardous waste manifest system (movement document) for the transport of hazardous waste as per HOWM Rule 21.
12. The unit shall generate manifest document in Form-10 thro' online facility available in OCMMS portal [OHWMA] for transport of hazardous waste as per provisions (Rule-19) of HOWM Rules, 2016 & maintain the records & submit to TNPCB.
13. In case of environmental damages arising due to improper handling of hazardous wastes including accidental spillage during generation, storage, processing, transportation and disposal, the unit shall be liable to implement immediate response measures, environmental site assessment and remediation of contaminated soil/ groundwater/ sediment etc. as per the "Guidelines on Implementing Liabilities for Environmental Damages due to Handling & Disposal of Hazardous Wastes and Penalty" published by CPCB
14. The unit shall update information on HW details in the DISPLAY BOARD installed at the factory entrance gate regularly.
15. The unit shall operate with valid Consent under Water Act & Air Act & Authorization under HOWM Rules, 2016 at all times.

JOSEPHINESAHAYARANI

**For Member Secretary  
Tamil Nadu Pollution Control Board  
Chennai**

**To**

The Director

GLOBAL CALCIUM PRIVATE LTD., UNIT III

Plot No.19,19B,Sipcot Industrial Complex,Phase I,Hosur taluk,Krishnagiri district

Pin:635126

**Copy to:**

1. The JCEE-Monitoring, Tamil Nadu Pollution Control Board, Vellore.
2. The District Environmental Engineer, Tamil Nadu Pollution Control Board, HOSUR.

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