

BEFORE THE NATIONAL GREEN TRIBUNAL SOUTHERN ZONE BENCH AT
CHENNAI

ORIGINAL APPLICATION No. 39 of 2024 (SZ)

IN THE MATTER OF

Mr. Jonatt Jose

... Applicant

Versus

The Secretary and 8 Ors.

... Respondents

ADDITIONAL AFFIDAVIT FILED ON BEHALF OF 5TH RESPONDENT

DATE: 29.08.2024



M/S PRASAD VIJAYAKUMAR (Ms. No. 1254/1999)

VIGNESH SEKAR (Ms. No. 3281/2018)

PRANAV. R (Ms. No. 3700/2023)

No. 52 Law Chambers, High Court Buildings

Chennai- 600 104

9003271435

COUNSEL FOR RESPONDENT No. 5

BEFORE THE NATIONAL GREEN TRIBUNAL SOUTHERN ZONE BENCH AT
CHENNAI

ORIGINAL APPLICATION No. 39 of 2024 (SZ)

IN THE MATTER OF

Mr. Jonatt Jose
Choorakkal House,
Nalukettu Po,
Thrissur District,
Kerala, 680308

.... Applicant

VERSUS

1) The Secretary
Ministry of Environment & Forests & Climate Change
Paryavaran Bhavan, CGO Complex,
Lodhi Road, New Delhi,
110 003

2) The Chairman
Central Pollution Control Board,
Parivesh Bhavan,
CBD Cum Office Complex, East Arjun Nagar,
New Delhi- 110032

3) The Chairman,
The Kerala State Pollution Control Board,
Pattom Po,
Thiruvananthapuram,
Kerala- 695004

4) The Secretary,
Directorate of Environmental & Climate Change,
4th Floor, KSRTC Bus Terminal,
Thampanoor, Thiruvananthapuram- 695 001

5) The Manager,
Carborundum Universal Limited,

Nalukettu Po,
Thrissur District
Kerala- 680 308

6) Pollution Control Officer,
Majestic Square Building,
3rd Floor, Paravathani P.O,
Thrissur,
Kerala- 680 655

7) The Health Inspector,
Thrissur District Office of Health,
5th Circle, North Bus Stand,
Thrissur, Kerala- 680020

8) The District Collector,
Thrissur Collector,
District Collector Office,
1st Floor, Civil Station,
Ayyanthole, Thrissur,
Kerala- 680003

9) The President,
Koratty Grama Panchayath,
Koratty Bazar Road,
Near Devamatha Hospital,
Devamatha Avenue,
Koratty, Kerala- 680308

.... Respondents

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It is certified that all the documents contained in the above annexure are true copies

Date: 29.08.2024

Counsel for 5th Respondent

BEFORE THE NATIONAL GREEN TRIBUNAL SOUTHERN ZONE BENCH AT
CHENNAI

ORIGINAL APPLICATION No. 39 of 2024 (SZ)

IN THE MATTER OF

Mr. Jonatt Jose
Choorakkal House,
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1) The Secretary
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Paryavaran Bhavan, CGO Complex,
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Parivesh Bhavan,
CBD Cum Office Complex, East Arjun Nagar,
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3) The Chairman,
The Kerala State Pollution Control Board,
Pattom Po,
Thiruvananthapuram,
Kerala- 695004

4) The Secretary,
Directorate of Environmental & Climate Change,
4th Floor, KSRTC Bus Terminal,
Thampanoor, Thiruvananthapuram- 695 001

5) The Manager,
Carborundum Universal Limited,

For CARBORUNDUM UNIVERSAL LIMITED


Authorised Signatory

Nalukettu Po,
Thrissur District
Kerala- 680 308

6) Pollution Control Officer,
Majestic Square Building,
3rd Floor, Paravathani P.O,
Thrissur,
Kerala- 680 655

7) The Health Inspector,
Thrissur District Office of Health,
5th Circle, North Bus Stand,
Thrissur, Kerala- 680020

8) The District Collector,
Thrissur Collector,
District Collector Office,
1st Floor, Civil Station,
Ayyanthole, Thrissur,
Kerala- 680003

9) The President,
Koratty Grama Panchayath,
Koratty Bazar Road,
Near Devamatha Hospital,
Devamatha Avenue,
Koratty, Kerala- 680308

.... Respondents

ADDITIONAL AFFIDAVIT ON BEHALF OF 5TH RESPONDENT

I, Premanath, S/o Late T.V.Ravindranathan, Aged about 49 years, do hereby solemnly and sincerely affirm and state as follows:

1. It is respectfully submitted that I am the Senior General Manager- Manufacturing in the 5th Respondent herein and as such I am well acquainted

For CARBORUNDUM UNIVERSAL LIMITED

Authorised Signatory

For CARBORUNDUM UNIVERSAL LIMITED


Authorised Signatory

with the facts of the case. I am duly authorised by the 5th Respondent herein to swear to this affidavit.

2. I state that the 5th Respondent is filing this additional counter to bring to the attention of this Hon'ble Tribunal of certain developments that have taken place after the last date of hearing i.e., 30.04.2024.
3. I state that the Director of Factories and Boilers through its hygiene lab conducted an air monitoring study dated 05.04.2024 to check the ambient air quality measurement both inside the furnace shop floor and outside the furnace and submitted a report dated 05.04.2024 which is annexed herewith as ("**Annexure 21**") which, *inter alia*, found as follows:-
 - A. All the parameters monitored were observed to be within limit as per industrial hygiene standards. The result submitted by the factory were also found to be within limit.
 - B. A real time ambient air quality monitoring system has been found to be installed in the main gate of the factory.
 - C. The factory management has informed that they are planning to install a fume extraction system with hood and stack arrangement for the furnaces in the near future.
 - D. The emission levels of Carbon Monoxide (CO), Nitric Oxide (NO), and Hydrogen Sulphide (H₂S) were measured and found to be below the permissible limits.

FOR CARBORUNDUM UNIVERSAL LIMITED

Authorised Signatory

For CARBORUNDUM UNIVERSAL LIMITED


Authorised Signatory

4. The Respondent No. 7 Health Department also conducted a health study of local people residing in Wards 6 & 7 of Koratty Village (where the factory of the 5th Respondent is situated) on 16th April 2024. The Report dated 27th April 2024 which is annexed herewith as (“**Annexure 22**”) found as follows:-

(i) No foul smell or offensive odour was identified during the inspection.

(ii) On verifying the data collected by the filed staff available at Family Health Centre, Nalukettu (Primary Health Centre of the concerned area), no such spike of health problems mentioned in the complaint was noticed.

(iii) The Company has a valid consent to operate from Kerala Pollution Control Board up to 30.06.2028.

(iv) The Company informed that they are planning to install a stack within 6 months for the furnace to reduce the chance of air pollution.

5. Similarly, the Respondent No. 3 Kerala State Pollution Control Board conducted a 24 Hours Ambient Air Monitoring Study on 24.04.2024 at the factory boundaries of the answering Respondent as well as at the courtyard of the Petitioner’s house. The report dated 27.04.2024 which is annexed herewith as (“**Annexure 23**”) found as follows:-

For CARBORUNDUM UNIVERSAL LIMITED


Authorised Signatory

| Sl. No. | Pollutant | Concentration in Ambient Air | National Ambient Air Quality Standard |
|---------|---------------------------|-------------------------------|---------------------------------------|
| 1. | Particulate Matter PM 10 | 45 $\mu\text{g}/\text{m}^3$ | 100 |
| 2. | Particulate Matter PM 2.5 | 42.9 $\mu\text{g}/\text{m}^3$ | 60 |

| Sl.No. | Time Duration | SO ₂ | NO _x |
|--------|---------------------------------|------------------------------|-------------------------------|
| 1. | 10:45 am – 10:45 am (24 hrs) | 2.6 $\mu\text{g}/\text{m}^3$ | 10.6 $\mu\text{g}/\text{m}^3$ |

6. The National Standards on SO₂, NO₂ and CO emission levels duly approved by the 2nd Respondent Central Pollution Control Board which is annexed herewith as ("Annexure 24"). The same has also been notified in the official Gazette on 18.11.2009 which is annexed herewith as ("Annexure 25") and the relevant extract is as follows:-

For CARBORUNDUM UNIVERSAL LIMITED

Authorised Signatory

For CARBORUNDUM UNIVERSAL LIMITED

Authorised Signatory

| Pollutants | Time Weighted Average | Concentration in Ambient Air in Industrial, Residential, Rural and other Areas |
|--|-----------------------|--|
| Sulphur Dioxide (SO ₂), µg/m ³ | Annual | 50 |
| | 24 Hours | 80 |
| Nitrogen Dioxide (NO ₂), µg/m ³ | Annual | 40 |
| | 24 Hours | 80 |
| Carbon Monoxide (CO) | 8 Hours | 02 |
| | 1 Hour | 04 |
| Particulate Matter (Size less than 10µm) or PM ₁₀ , µg/m ³ | Annual | 60 |
| | 24 Hours | 100 |
| Particulate Matter (Size less than 2.5µm) or PM _{2.5} , | Annual | 40 |
| | 24 Hours | 60 |

7. The Comparison of National Standards of SO₂, NO₂ and CO from the manufacturing process of 5th Respondent herein is as follows:-

For CARBORUNDUM UNIVERSAL LIMITED


Authorised Signatory

For CARBORUNDUM UNIVERSAL LIMITED
Authorised Signatory

| Pollutants | Time Weighted Average | Concentration in Ambient Air in Industrial, Residential, Rural, and other Areas | Concentration in Ambient Air of 5 th Respondent Factory for the latest month (June-2024) |
|--|-----------------------|---|---|
| Sulphur Dioxide (SO ₂), µg/m ³ | Annual 24 Hours | 50 80 | 7.4 |
| Nitrogen Dioxide (NO ₂), µg/m ³ | Annual 24 Hours | 40 80 | 14.2 |
| Carbon Monoxide (CO) | 8 Hours 1 Hour | 02 04 | 0.8 |
| Particulate Matter (Size less than 10µm) or PM ₁₀ , µg/m ³ | Annual 24 Hours | 60 100 | 56.3 |
| Particulate Matter (Size less than 2.5µm) or PM _{2.5} , | Annual 24 Hours | 40 60 | 28.7 |

For CARBORUNDUM UNIVERSAL LIMITED

Authorised Signatory

For CARBORUNDUM UNIVERSAL LIMITED

Authorised Signatory

A perusal of the above table clearly shows that the emission levels of SO₂, CO and NO₂ is well below the national standards which proves beyond a shadow of doubt that the present petition alleging environmental pollution is absolutely baseless and without any merit.

8. It is respectfully submitted that the 3rd Respondent KSPCB issued a letter dated 02.05.2024 in which they had directed 5th Respondent to implement certain measures. The letter is annexed herewith as ("**Annexure 26**"). In response to this, the answering Respondent issued a letter dated 12.06.2024 in which it set out the action taken by 5th Respondent to the directions given by 3rd Respondent. In so far as the direction to install hood and stack in a movable arrangement above the furnace is concerned, the 5th Respondent has already started the process of installing the hood and stack. The 5th Respondent has also applied for consent to establish vide Application No. 10061450 to the 3rd Respondent and is awaiting the same. A copy of the Application for consent to establish is annexed herewith as ("**Annexure 27**"). To this, the 3rd Respondent has sent a Letter No. PCB/TSR/IC/176/07 dated 09.07.2024 is annexed herewith as ("**Annexure 28**") stating that consent to establish need not be awaited as the installation of control measures are already set out in consent to operate dated 09.01.2024 issued by the 3rd Respondent. The 5th Respondent had also applied for approval for setting up of hood and stack arrangement from the Factories and Boilers Department and the approval was obtained on 20.07.2024 vide Permit No.169/2024. The copy of the approval is annexed as ("**Annexure 29**").

For CARBORUNDUM UNIVERSAL LIMITED


Authorised Signatory

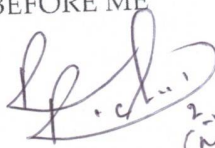
In view of the above facts, it is most respectfully prayed that this Hon'ble Tribunal may be pleased to dismiss this Application as devoid of merits and pass such other order as this Hon'ble Tribunal deems fit and proper in the circumstances of the case and thus render justice.

For CARBORUNDUM UNIVERSAL LIMITED


Authorised Signatory

Solemnly affirmed at Chennai, on
This 28th day of August 2024 and
Signed his name in my presence
After reading the contents herein

BEFORE ME


ADVOCATE
*(Sd/- 16/10/20)
AB cara q mudi, 4/11
adgar, ch-20.*



ഫാക്ടറീസ് ആൻറ് ബോയിലേഴ്സ് ജോയിന്റ് ഡയറക്ടറുടെ (മെഡിക്കൽ) കാര്യാലയം,
ഒക്കുപേഷണൽ ഹെൽത്ത് ആന്റ് റിസർച്ച് സെന്റർ, ആശ്രാമം, കൊല്ലം -691 002.

ഫോൺ: 0474-2765130 , ഇ- മെയിൽ: jdfbmedical.fab@kerala.gov.in

DFB/JDM/48/2024-B

തീയതി: 15.04.2024

സ്വീകർത്താവ്

ഡയറക്ടർ

ഫാക്ടറീസ് ആന്റ് ബോയിലേഴ്സ്

തിരുവനന്തപുരം - 695 011

സർ,

വിഷയം:- കാർബൊറണ്ടും യൂണിവേഴ്സൽ ലിമിറ്റഡ്, കൊരട്ടി ഫാക്ടറിയിൽ
പരിശോധന നടത്തി റിപ്പോർട്ട് സമർപ്പിക്കുന്നത് - സംബന്ധിച്ച്.

സൂചന: 1. 25.03.2024 ലെ ഡയറക്ടറുടെ DFB/3107/2023-G3 നമ്പർ കത്ത്.

2. ശ്രീ. കെ ശ്രീകുമാർ, കെമിക്കൽ ഇൻസ്പെക്ടർ സമർപ്പിച്ച റിപ്പോർട്ട്

സൂചന (1) കത്തിലെ നിർദ്ദേശപ്രകാരം മേൽ വിഷയം സംബന്ധിച്ച് IHL
ഉപകരണങ്ങൾ ഉപയോഗിച്ച് ടി ഫാക്ടറിയിൽ പരിശോധന നടത്തി സൂചന (2)
പ്രകാരം കെമിക്കൽ ഇൻസ്പെക്ടർ, ശ്രീ. കെ. ശ്രീകുമാർ സമർപ്പിച്ച റിപ്പോർട്ട് തുടർ
നടപടികൾക്കായി ഇതോടൊപ്പം അയക്കുന്നു.

വിശ്വസ്തതയോടെ

Signed by

Dr Ruben C Cyril

Date: 16-04-2024 15:05:17

ഡോ. റുബൻ സി. സിറിൾ

ജോയിന്റ് ഡയറക്ടർ ഫാ.&ബോ.(മെഡിക്കൽ)

ഉള്ളടക്കം- റിപ്പോർട്ട്

10 A

**Joint Director (Medical) Factories and Boilers, Occupational Health and Research Centre,
Ashramam, Kollam – 691002**

Ref: DFB/JDM/48/2024-B

Date: 15.04.2024

**To,
The Director, Factories and Boilers
Thiruvananthapuram - 695011**

Subject: Inspection and Submission of Report at Carborundum Universal Limited, Koratty

References:

1. Director's Letter No. DFB 3107 2023-G3 dated 25-03-2024
2. Report Submitted by Shri. K. Sreekumar, Chemical Inspector

Dear Sir,

As per the Director's letter referenced above, an inspection was conducted at Carborundum Universal Limited, Koratty, using IHL equipment. Based on reference (2) mentioned in the letter, the Chemical Inspector, Shri. K. Sreekumar, has submitted his report. The report is attached herewith for your further actions.

**Signed by
Dr. Ruben C. Cyril
Joint Director (Medical)
Factories and Boilers**

**Report of Air Monitoring Study Conducted at Carborandum Universal Limited,
Nalukettu, Koratty on 05-04-2024**

- Ref:- 1. Ltr. No. DFB/3107/2023-G3 dated, 25-03-2024 of the Director of Factories & Boilers.
2. Result of Air Monitoring submitted by Chemist, IHL, dated 05-04-2024.

Air Monitoring Study has been carried out in the above factory on 05-04-2024 with the facilities available at present in IHL as directed by letter referred above. Result of Monitoring is given in tables 1 & 2 below. All the parameters monitored were observed to be within limit as per industrial hygiene standards. The results submitted by the factory forwarded along with ref. (1) were also found to be within limit. A real time ambient air quality monitoring system has been found to be installed in the main gate of the factory. The factory management has informed that they are planning to install a fume extraction system with hood and stack arrangement for the furnaces in near future.

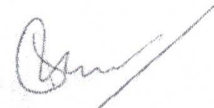
Result of Air Monitoring

Table 1: Chemical Hazards

| Sl.No | Name of substance | Plant/Location | Level measured (ppm) | PEL (Permissible Exposure Limit) (ppm) | Remarks |
|-------|--------------------------------------|-----------------------|----------------------|--|--------------|
| 1. | VOCs | Furnace area | 1.2 - 1.3 | 500 | Within limit |
| 2. | Hydrogen Sulphide (H ₂ S) | Furnace area | 0 | 10 | Within limit |
| 3. | NO | Furnace area | 0 | 25 | Within limit |
| 4. | Carbon monoxide (CO) | Furnace area | 12-50 | 50 | Within limit |
| 5. | VOCs | Outside furnace plant | 0 | 500 | Within limit |
| 6. | Hydrogen Sulphide (H ₂ S) | Outside furnace plant | 0 | 10 | Within limit |
| 7. | Nitric Oxide (NO) | Outside furnace plant | 0 | 25 | Within limit |
| 8. | Carbon monoxide (CO) | Outside furnace plant | 0 - 1 | 50 | Within limit |

Table 2: Level of Total dust

| Sl.No | Plant/Location | Name of substance | Level measured (mg/m ³) | PEL (Permissible Exposure Limit) mg/m ³ | Remarks |
|-------|-----------------------------------|-------------------|-------------------------------------|--|--------------|
| 1 | Macro Grain plant grading, sizing | Total dust | 3.07 | 10 | Within limit |
| 2 | Macro grain plant Screening | Total dust | 6.15 | 10 | Within limit |
| 3 | Micro grit plant milling sizing | Total dust | 8.00 | 10 | Within limit |



Sreekumar K.
Chemical Inspector
Industrial Hygiene Laboratory
O/o Joint Director of Factories & Boilers (Medical)
Asramom, Kollam.

99786/2024

ജില്ലാ മെഡിക്കൽ ഓഫീസ് (ആരോഗ്യം), തൃശൂർ

പിൻകോഡ് : 680 001 , ഫോൺ : 0487 2333242

ഇ - മെയിൽ : dmotsr.hsd@kerala.gov.in , dmohtsr@gmail.com

DMOH-TSR/2102/2023-C6

തീയതി : 27/04/2024

പ്രേഷക

ജില്ലാ മെഡിക്കൽ ഓഫീസർ(ആരോഗ്യം), തൃശൂർ

സ്വീകർത്താവ്

ജില്ലാ കളക്ടർ ,
തൃശൂർ

സർ ,

വിഷയം : ആരോഗ്യവകുപ്പ് -പൊതുജനാരോഗ്യം -കൊരട്ടി ഗ്രാമപഞ്ചായത്ത് കാർബോറാണ്ടം യൂണിവേഴ്സിറ്റി എന്ന സ്ഥാപനത്തിൽ നിന്നുള്ള മലിനീകരണം - ബഹു. ദേശീയ ഹരിത ട്രൈബ്യൂണലിൽ ശ്രീ ജോനാഥ് ജോസ് ഫയൽ ചെയ്ത 39/2024 അപേക്ഷയുമായി ബന്ധപ്പെട്ട വിവരങ്ങൾ നൽകുന്നത്- സംബന്ധിച്ച്

സൂചന : ജില്ലാ കളക്ടറേറ്റിൽ നിന്ന് വന്ന കത്ത് നമ്പർ സി10-12593/23 .
തീയതി 16.03.2024

സൂചന പ്രകാരം ആവശ്യപ്പെട്ട റിപ്പോർട്ട് ഇതോടൊപ്പം ഉള്ളടക്കം ചെയ്ത സമർപ്പിക്കുന്നു .

ഉള്ളടക്കം : റിപ്പോർട്ട്

വിശ്വസ്തയോടെ

ജില്ലാ മെഡിക്കൽ ഓഫീസർ(ആരോഗ്യം), തൃശൂർ

Signed by

Sreedevi T P

Date: 27-04-2024 13:48:38

14

199785/2024

District medical office of Health , Thrissur

Pin : 680 001 , Phone : 0487 2333242

E - mail : dmotsr.hsd@kerala.gov.in , dmohtsr@gmail.com

No. DMOH-TSR/2102/2023-C6

Before the National Green Tribunal at Chennai Regional Branch

In the matter of :

Mr. Jonat Jose : Applicant

versus

The secretary , : Respondants

Ministry of Environment & Forests & Climate Change

& 8 Others

Report submitted by the District Medical Officer (Health) , Thrissur as per the direction of District Collector , Thrissur is as follows :

An inspection was conducted at the Company and its premises on 16/04/2024 by a team from District Medical Office (Health) Thrissur and concerned health institution of that area . The team submitted a report after detailed verification based on the complaint. The finding/remarks of the enquiry team are furnished below :-

- No foul smell or offensive odour was identified during the inspection . The team also spoke with the residents nearby the company .They complained regarding the offensive odour at times.
- On verifying the data collected by the field staff , available at Family Health Centre , Nalukett (Primary Health Centre of the concerned area) , no such spike of health problems mentioned in the complaint was noticed .

199785/2024

- The company has a valid consent to operate from Kerala Pollution Control Board up to 30/06/2028
- The company informed that they are planning to install a stack within 6 months for the furnace to reduce the chance of air pollution

The above facts are true and correct to the best of my knowledge , information and belief .

Dated this 27th of April 2024

Signed by Dr. Sreedevi T. P.
District Medical Officer (Health) , Thrissur
Date: 27-04-2024 14:29:47

Telephone No : 0487 - 2963939

E-mail: kspcbtr@gmail.com



കേരള സംസ്ഥാന മലിനീകരണ നിയന്ത്രണ ബോർഡ്

മജസ്റ്റിക് സ്ക്വയർ, മൂന്നാം നില, പാവട്ടാനി, എല്ലക്കര പി.ഒ., തൃശ്ശൂർ-680655

KERALA STATE POLLUTION CONTROL BOARD

Majestic Square, 3rd Floor, Paravattani, Ollakkara P.O., Thrissur-680655

PCB/TSR/IC/176/07

Date: 27.04.2024

From

Environmental Engineer

To

M/s. Carborandum Universal LTD,
Nalukettu
Koratty,
Thrissur.

Sub:- Analysis of Ambient Air Quality monitoring – invoice towards sampling, transportation and analysis charges- Reg.

Ref:- Inspection conducted in the unit by Board officers on 24.04.2024

Sir,

I am forwarding herewith the copy of analysis of report of the sample collected from Carborandum Universal LTD, Nalukettu, Koratty, Thrissur on 24.04.2024 and invoice for Rs. 8600 towards charge for sampling and analysis. You are requested to make the payment immediately as DD drawn in favour of Kerala State Pollution Control Board, Thrissur along with a covering letter.

Yours faithfully,

ENVIRONMENTAL ENGINEER

Encl: as above

AMBIENT AIR QUALITY MONITORING AND ANALYSIS CHARGES**INVOICE**

PCB/TSR/IC/176/07

Date: 27.04.2024

Name of Industry: M/s. Carborandum Universal LTD,
Nalukettu
Koratty,
Thrissur

| A. Sampling charges | | | | |
|----------------------------|---|---------------|-----------------------------|-----------------|
| Sl.no | parameters | Rate (Rs.) | Number of determinations | Amount (Rs.) |
| 1. | Sampling (24 hrs) for suspended particular matter and gaseous pollutants. | 6000 | 1 | 6000 |
| | | | Total amount | 6000 |

| B. Analysis charges | | | | |
|--|---|-----|--------------|-------------|
| 1. | Suspended particulate matter | 600 | 1 | 600 |
| 2. | Respirable Suspended particulate matter | 600 | 1 | 600 |
| 3. | Nitrogen oxide | 600 | 1 | 600 |
| 4. | Sulphur dioxide | 600 | 1 | 600 |
| | | | Total amount | 2400 |
| | C. Transportation charges | | | 200 |
| Total amount to be remitted (A+B+C) | | | | 8600 |

(Rupees Eight thousand six hundred only)


 ENVIRONMENTAL ENGINEER



Telephone No: 0487 - 2963939

E-mail: kspcbtsr@gmail.com

കേരള സംസ്ഥാന മലിനീകരണ നിയന്ത്രണ ബോർഡ്
മജസ്റ്റിക് സ്ക്വയർ, മൂന്നാം നില, പരവട്ടാനി, ഒല്ലൂക്കര പി.ഒ., തൃശ്ശൂർ-680655
KERALA STATE POLLUTION CONTROL BOARD
Majestic Square, 3rd Floor, Paravattani, Ollukkara P.O., Thrissur-680655

File No: PCB/TSR/IC/176/07

Date: 27.04.2024

Report of Ambient Air Quality Monitoring

Name and Address of the Unit : M/s. Carborandum Universal LTD,
Nalukettu
Koratty,
Thrissur.

Date of Ambient Air Quality Monitoring : 24.04.2024

Monitoring Station : Boundary of the Unit near the entrance

| Sl. No | Pollutant | Concentration in Ambient air | National Ambient Air Quality Standard |
|--------|---------------------------|-------------------------------|---------------------------------------|
| 1 | Particulate Matter PM 10 | 45 $\mu\text{g}/\text{m}^3$ | 100 |
| 2 | Particulate Matter PM 2.5 | 42.9 $\mu\text{g}/\text{m}^3$ | 60 |

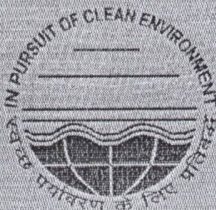
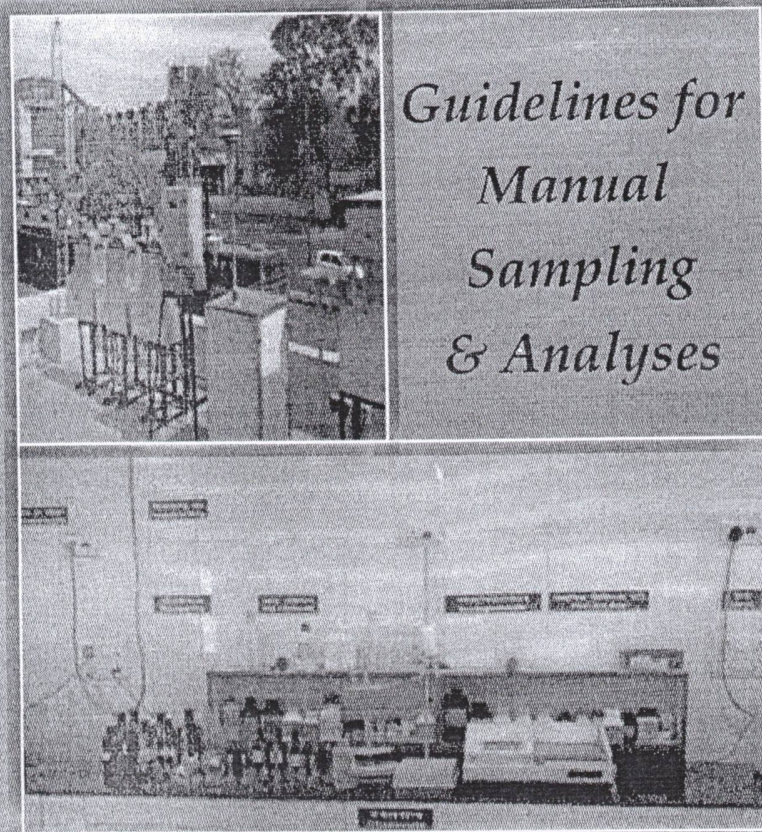
| Sl. No | Time duration | SO ₂ | NO _x |
|--------|--------------------------------|------------------------------|-------------------------------|
| 1 | 10.45 am – 10.45am (24 hrs) | 2.6 $\mu\text{g}/\text{m}^3$ | 10.6 $\mu\text{g}/\text{m}^3$ |

Illegible Signature
Assistant Scientist
Kerala State Pollution Control Board

National Ambient Air Quality Series:
NAAQMS/36/2012-13

Guidelines for the Measurement of Ambient Air Pollutants

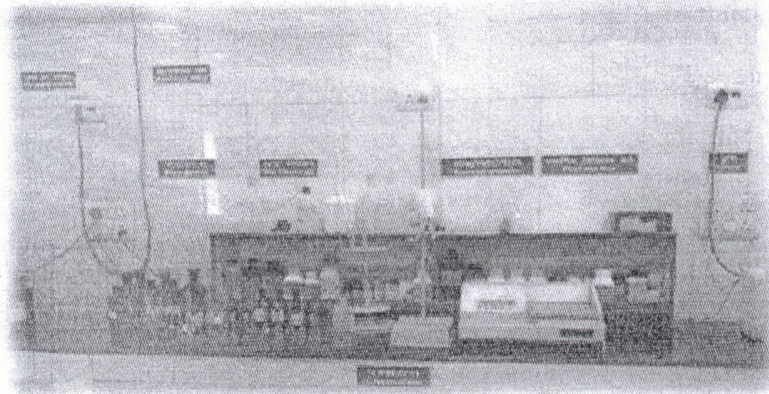
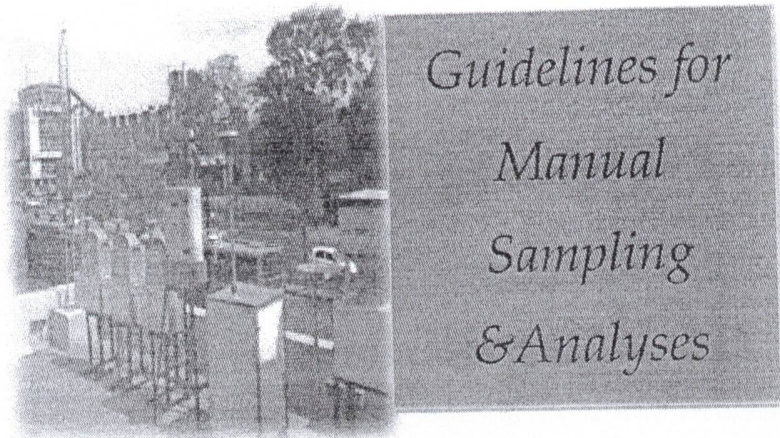
Volume-I



CENTRAL POLLUTION CONTROL BOARD
Ministry of Environment & Forests
Website: <http://www.cpcb.nic.in>

Guidelines for the Measurement of Ambient Air Pollutants

VOLUME-I



CENTRAL POLLUTION CONTROL BOARD
Ministry of Environment & Forests
Parivesh Bhawan, East Arjun Nagar, Delhi- 110032
Website: <http://www.cpcb.nic.in>

NATIONAL AMBIENT AIR QUALITY STANDARDS (2009)

| Pollutants | Time Weighted Average | Concentration in Ambient Air | | Methods of Measurement |
|--|-----------------------|--|--|--|
| | | Industrial, Residential, Rural and other Areas | Ecologically Sensitive Area (Notified by Central Government) | |
| Sulphur Dioxide (SO ₂), µg/m ³ | Annual * | 50 | 20 | -Improved West and Gaeke Method -Ultraviolet Fluorescence |
| | 24 Hours ** | 80 | 80 | |
| Nitrogen Dioxide (NO ₂), µg/m ³ | Annual * | 40 | 30 | -Jacob & Hochheiser modified (NaOH-NaAsO ₂) Method -Gas Phase Chemiluminescence |
| | 24 Hours ** | 80 | 80 | |
| Particulate Matter (Size less than 10µm) or PM ₁₀ , µg/m ³ | Annual * | 60 | 60 | -Gravimetric -TEOM -Beta attenuation |
| | 24 Hours ** | 100 | 100 | |
| Particulate Matter (Size less than 2.5µm) or PM _{2.5} , µg/m ³ | Annual * | 40 | 40 | -Gravimetric -TEOM -Beta attenuation |
| | 24 Hours ** | 60 | 60 | |
| Ozone (O ₃) µg/m ³ | 8 Hours * | 100 | 100 | -UV Photometric -Chemiluminescence -Chemical Method |
| | 1 Hour ** | 180 | 180 | |
| Lead (Pb) µg/m ³ | Annual * | 0.50 | 0.50 | -AAS/ICP Method after sampling on EPM 2000 or equivalent filter paper -ED-XRF using Teflon filter |
| | 24 Hours ** | 1.0 | 1.0 | |
| Carbon Monoxide(CO), mg/m ³ | 8 Hours ** | 02 | 02 | -Non dispersive Infrared (NDIR) Spectroscopy |
| | 1 Hour ** | 04 | 04 | |
| Ammonia (NH ₃), µg/m ³ | Annual * | 100 | 100 | -Chemiluminescence -Indophenol method |
| | 24 Hours ** | 400 | 400 | |
| Benzene (C ₆ H ₆), µg/m ³ | Annual * | 05 | 05 | -Gas Chromatography (GC) based continuous analyzer -Adsorption and desorption followed by GC analysis |
| Benzo(a)Pyrene (BaP) Particulate phase only, ng/m ³ | Annual * | 01 | 01 | -Solvent extraction followed by HPLC/GC analysis |
| Arsenic (As), ng/m ³ | Annual * | 06 | 06 | -AAS/ICP Method after sampling on EPM 2000 or equivalent filter paper |
| Nickel (Ni), ng/m ³ | Annual * | 20 | 20 | -AAS/ICP Method after sampling on EPM 2000 or equivalent filter paper |

* Annual Arithmetic mean of minimum 104 measurements in a year at a particular site taken twice a week 24 hourly at uniform intervals.

** 24 hourly or 8 hourly or 1 hourly monitored values, as applicable, shall be complied with 98% of the time in a year. 2% of the time, they may exceed the limits but not on two consecutive days of monitoring.

NOTE: Whenever and wherever monitoring results on two consecutive days of monitoring exceed the limits specified above for the respective category, it shall be considered adequate reason to institute regular or continuous monitoring and further investigations.

भारत का राजपत्र

The Gazette of India

असाधारण

EXTRAORDINARY

भाग III—खण्ड 4

PART III—Section 4

प्राधिकार से प्रकाशित

PUBLISHED BY AUTHORITY

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नई दिल्ली, बुधवार, नवम्बर 18, 2009/कार्तिक 27, 1931

No. 217]

NEW DELHI, WEDNESDAY, NOVEMBER 18, 2009/KARTIKA 27, 1931

राष्ट्रीय परिवेशी वायु गुणवत्ता मानक

केन्द्रीय प्रदूषण नियंत्रण बोर्ड

अधिसूचना

नई दिल्ली, 18 नवम्बर, 2009

सं. सी-29016/20/90/पी.सी.आई.-1—वायु (प्रदूषण निवारण एवं नियंत्रण) अधिनियम, 1981 (1981 का 14) की धारा 16 की उपधारा (2) (एच) द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए तथा अधिसूचना संख्या का.आ. 394(ई), दिनांक 11 अप्रैल, 1994 और का.आ. 935 (ई) दिनांक 14 अक्टूबर, 1998 के अतिक्रमण में केन्द्रीय प्रदूषण नियंत्रण बोर्ड द्वारा तत्काल प्रभाव से राष्ट्रीय परिवेशी वायु गुणवत्ता मानक अधिसूचित करता है, जो इस प्रकार है—

राष्ट्रीय परिवेशी वायु गुणवत्ता मानक

| क्र. सं. | प्रदूषक | समय आधारित औसत | परिवेशी वायु में सामान्य | | |
|----------|---|-----------------------|---|---|---|
| | | | औद्योगिक, शहरी, ग्रामीण और अन्य क्षेत्र | पारिस्थितिकीय संवेदनशील क्षेत्र (केन्द्र सरकार द्वारा अधिसूचित) | प्रवाहन की पद्धति |
| (1) | (2) | (3) | (4) | (5) | (6) |
| 1 | सल्फर डाई आक्साइड (SO ₂), µg/m ³ | वार्षिक* 24 घंटे** | 50 80 | 20 80 | -उच्च वेस्ट और हाईक -परवेगनी परिवेष्टी |
| 2 | नाइट्रोजन डाई आक्साइड (NO ₂), µg/m ³ | वार्षिक* 24 घंटे** | 40 80 | 30 80 | -उपरोक्त क्षेत्रों और हाईवाइजर (सोडियम-आर्सेनाईट) -रासायनिक संदीप्ति |
| 3 | विभिन्न पदार्थ (10पाइकन से कम आकारोंवा PM ₁₀ , µg/m ³ | वार्षिक* 24 घंटे** | 60 100 | 60 100 | -हस्तगत विस्तारण -रोयम -बीटा संयुक्त पद्धति |

| | | | | | |
|----|---|-----------------------|-------------|-------------|--|
| 4 | विविक्त पदार्थ (2.5 माइक्रोन से कम आकार या $PM_{2.5}$, $\mu g/m^3$) | वार्षिक* 24 घंटे** | 40 60 | 40 60 | -इसात्मक विश्लेषण -टोयम -बीटा तनुकरण पद्धति |
| 5 | ओजोन (O_3) $\mu g/m^3$ | 8 घंटे** 1 घंटा** | 100 180 | 100 180 | -परदेगनी द्विपिकाल -रासायनिक संवेष्टि -रासायनिक पद्धति |
| 6 | सीसा (Pb) $\mu g/m^3$ | वार्षिक* 24 घंटे** | 0.50 1.0 | 0.50 1.0 | ई.पी.एम. 2000 या समरूप फिल्टर पेपर का प्रयोग करके AAS/ICP पद्धति -टेफ्लॉन फिल्टर पेपर का प्रयोग करते हुए ED-XRF |
| 7 | कार्बन मोनोक्साइड (CO) mg/m^3 | 8 घंटे** 1 घंटा** | 02 04 | 02 04 | -अविषेक्षी अवरक्त (NDIR) स्पेक्ट्रम मापन |
| 8 | अमोनिया (NH_3) $\mu g/m^3$ | वार्षिक* 24 घंटे** | 100 400 | 100 400 | -रासायनिक संवेष्टि -इण्डोफिनॉल ब्लू पद्धति |
| 9 | बेन्जीन (C_6H_6) $\mu g/m^3$ | वार्षिक* | 05 | 05 | - गैस क्रोमेटोग्राफी आधारित सतत विश्लेषक -अधिशोधन तथा निशोधन के बाद गैस क्रोमेटोग्राफी |
| 10 | बेन्जो (ए) पाईरीन (BaP) केवल विविक्त कण, ng/m^3 | वार्षिक* | 01 | 01 | -विलायक निष्कर्षण के बाद HPLC/GC द्वारा विश्लेषण |
| 11 | आर्सेनिक (As) ng/m^3 | वार्षिक* | 06 | 06 | -असंवितरक अवरक्त स्पेक्ट्रोमिती ई.पी.एम. 2000 या समरूप फिल्टर पेपर का प्रयोग करके ICP/AAS पद्धति |
| 12 | निकल (Ni) ng/m^3 | वार्षिक* | 20 | 20 | ई.पी.एम. 2000 या समरूप फिल्टर पेपर का प्रयोग करके ICP/AAS पद्धति |

* वर्ष में एक समान अंतरालों पर सप्ताह में दो बार प्रति 24 घंटे तक किसी एक स्थान विशेष पर लिये गये न्यूनतम 104 मापों का वार्षिक अंकगणीतीय औसत ।

** वर्ष में 98 प्रतिशत समय पर 24 घंटे या 8 घंटे या 1 घंटा के मानीटर मापमान, जो लागू हो, अनुपालन किये जाएंगे । दो प्रतिशत समय पर यह मापमान अधिक हो सकता है, किन्तु क्रमिक दो मानीटर करने के दिनों पर नहीं ।

टिप्पणी:

1. जहाँ कभी और जहाँ भी किसी अपने-अपने प्रवर्ग के लिये दो क्रमिक प्रबोधन दिनों पर मापित मूल्य, ऊपर विनिर्दिष्ट सीमा से अधिक हो तो इसे नियमित या निरंतर प्रबोधन तथा अतिरिक्त अन्वेषण करवाने के लिये पर्याप्त कारण समझा जायेगा ।

संत प्रसन्न गौतम, अध्यक्ष
[विज्ञापन-III/4/184/09/असा.]

टिप्पणी: राष्ट्रीय परियोजना वायु गुणवत्ता मानक संबंधी अधिसूचनाएँ, केन्द्रीय प्रदूषण नियंत्रण बोर्ड द्वारा भारत के राजपत्र आसाधरण में अधिसूचना संख्या का.आ. 384 (ई), दिनांक 11 अप्रैल, 1994 एवं का. आ. 935 (ई), दिनांक 14 अक्टूबर, 1998 द्वारा प्रकाशित की गयी थी ।

**NATIONAL AMBIENT AIR QUALITY STANDARDS
CENTRAL POLLUTION CONTROL BOARD
NOTIFICATION**

New Delhi, the 18th November, 2009

No. B-29016/20/90/PCI-L—In exercise of the powers conferred by Sub-section (2) (h) of section 16 of the Air (Prevention and Control of Pollution) Act, 1981 (Act No.14 of 1981), and in supersession of the Notification No(s). S.O. 384(E), dated 11th April, 1994 and S.O. 935(E), dated 14th October, 1998, the Central Pollution Control Board hereby notify the National Ambient Air Quality Standards with immediate effect, namely:-

NATIONAL AMBIENT AIR QUALITY STANDARDS

| S. No. | Pollutant | Time Weighted Average | Concentration in Ambient Air | | |
|--------|--|-----------------------|---|--|--|
| | | | Industrial, Residential, Rural and Other Area | Ecologically Sensitive Area (notified by Central Government) | Methods of Measurement |
| (1) | (2) | (3) | (4) | (5) | (6) |
| 1 | Sulphur Dioxide (SO ₂), µg/m ³ | Annual* 24 hours** | 50 80 | 20 80 | - Improved West and Gaeke -Ultraviolet fluorescence |
| 2 | Nitrogen Dioxide (NO ₂), µg/m ³ | Annual* 24 hours** | 40 80 | 30 80 | - Modified Jacob & Hochheiser (Na-Arsenite) - Chemiluminescence |
| 3 | Particulate Matter (size less than 10µm) or PM ₁₀ µg/m ³ | Annual* 24 hours** | 60 100 | 60 100 | - Gravimetric - TOEM - Beta attenuation |
| 4 | Particulate Matter (size less than 2.5µm) or PM _{2.5} µg/m ³ | Annual* 24 hours** | 40 60 | 40 60 | - Gravimetric - TOEM - Beta attenuation |
| 5 | Ozone (O ₃) µg/m ³ | 8 hours** 1 hour** | 100 180 | 100 180 | - UV photometric - Chemiluminescence - Chemical Method |
| 6 | Lead (Pb) µg/m ³ | Annual* 24 hours** | 0.50 1.0 | 0.50 1.0 | - AAS/ICP method after sampling on EPM 2000 or equivalent filter paper - ED-XRF using Teflon filter |
| 7 | Carbon Monoxide (CO) mg/m ³ | 8 hours** 1 hour** | 02 04 | 02 04 | - Non Dispersive Infra-Red (NDIR) spectroscopy |
| 8 | Ammonia (NH ₃) µg/m ³ | Annual* 24 hours** | 100 400 | 100 400 | -Chemiluminescence -Indophenol blue method |

| (1) | (2) | (3) | (4) | (5) | (6) |
|-----|--|---------|-----|-----|---|
| 9 | Benzene (C ₆ H ₆) µg/m ³ | Annual* | 05 | 05 | - Gas chromatography based continuous analyzer - Adsorption and Desorption followed by GC analysis |
| 10 | Benzo[a]Pyrene (BaP) - particulate phase only, ng/m ³ | Annual* | 01 | 01 | - Solvent extraction followed by HPLC/GC analysis |
| 11 | Arsenic (As), ng/m ³ | Annual* | 06 | 06 | - AAS /ICP method after sampling on EPM 2000 or equivalent filter paper |
| 12 | Nickel (Ni), ng/m ³ | Annual* | 20 | 20 | - AAS /ICP method after sampling on EPM 2000 or equivalent filter paper |

* Annual arithmetic mean of minimum 104 measurements in a year at a particular site taken twice a week 24 hourly at uniform intervals.

** 24 hourly or 08 hourly or 01 hourly monitored values, as applicable, shall be complied with 98% of the time in a year. 2% of the time, they may exceed the limits but not on two consecutive days of monitoring.

Note. — Whenever and wherever monitoring results on two consecutive days of monitoring exceed the limits specified above for the respective category, it shall be considered adequate reason to institute regular or continuous monitoring and further investigation.

SANT PRASAD GAUTAM, Chairman
[ADVT-III/4/184/09/Exty.]

Note: The notifications on National Ambient Air Quality Standards were published by the Central Pollution Control Board in the Gazette of India, Extraordinary vide notification No(s). S.O. 384(E), dated 11th April, 1994 and S.O. 935(E), dated 14th October, 1998.

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Annexure 6

Carborandum
Annexure R6- (a)



☎: General: 0484-2207783-84 Chief Environmental Engineer: 0484-2207782
 e-mail: pebroekm@gmail.com web: kspcb.kerala.gov.in
 കേരള സംസ്ഥാന മലിനീകരണ നിയന്ത്രണ ബോർഡ്
KERALA STATE POLLUTION CONTROL BOARD
 മേഖലാ ഓഫീസ്, ഗാന്ധിനഗർ, കടവന്ത്ര പി.ഒ., എറണാകുളം-682020
 REGIONAL OFFICE, GANDHI NAGAR, KADAVANTHRA P.O., ERNAKULAM-682020



PCB/RO-EKM/TSR/GEN/05

02.05.2024

03/05/2024

From Chief Environmental Engineer

To
 M/s Carborundum Universal Limited
 Post Bag no 3
 Koratty, Thrissur
 680 308

Subj: - OA No 39 of 2024 (SZ) filed by Sri Jonatt Jose regarding Carborundum Universal Limited Koratty, Thrissur -Reg.

Ref: - Inspection conducted by the Board officials on 19.04.2024

Sir,

Your attention is invited to the above subject matter. With reference to the inspection conducted by the Board officials on 19.04.2024, you are directed to implement the following measures and report to this office.

1. Installation and commissioning of hood and stack in a movable arrangement for the furnace shall be completed urgently. The proposal shall be submitted to this office with copy to District Office, Thrissur.
2. Overall housekeeping of the unit shall be improved and maintained.
3. Gunny bags with material seen kept open in the backside of the unit during inspection shall be stored in an enclosed earmarked area with periodical removal.
4. Spilled dust material shall be removed immediately.
5. Display board of CAAQMS installed near the main gate of the unit shall be redirected so as to be visually accessible to the public.
6. The CAAQMS of the unit shall be connected to CPCB server, and additionally H₂S shall be included as a parameter for CAAQMS monitoring.

AEE

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21/05/2024

7. Two more ambient air quality monitoring stations shall be installed within the unit premises in a 120° arrangement.
8. The dust found to be spread inside and outside the plant shall be removed then and there using vacuum cleaner or similar methods. A dust free environment shall be maintained.
9. All roads inside the plant shall be tarred or concreted.

Yours faithfully,

CHIEF ENVIRONMENTAL ENGINEER

Copy to:

✓ Environmental Engineer, District Office- Thrissur



Form IV A/IA
KERALA STATE POLLUTION CONTROL BOARD

APPLICATION FOR CONSENT/AUTHORISATION/REGISTRATION
(INDUSTRIES/ESTABLISHMENTS)

PART I

NAME AND ADDRESS OF INDUSTRY/ESTABLISHMENT : CARBORUNDUM UNIVERSAL LIMITED

CARBORUNDUM UNIVERSAL LIMITED ,PB.NO.3,NALUKETTU P.O,KORATTY

I am the occupier of above industry/establishment. I hereby apply for clearance/s under :

| NAME OF STATUTE | ESTABLISH | OPERATE | RENEW/AUTORENEW |
|---|-----------|---------|-----------------|
| Water (Prevention and Control of Pollution) Act, 1974 | ✓ | | |
| Air (Prevention and Control of Pollution) Act, 1981 | | | |
| Environment (Protection) Act, 1986 | | | |

* The entries in the application/s are true to the best of my knowledge,information and belief. I have signed hereunder,at the end of the application and on enclosure in affirmation of that.

* I undertake to furnish any information, explanation and/or clarification within 15 days of it being called for to make my application complete. I understand that the date on which the application is made complete in all respect will only be counted as the date of the application.

* I agree to abide by the conditions of the Consent/Authorisation/Registration and the pertinent legal provisions.

* I undertake to render access to functionaries and empowered officers of the Board to inspect the industry/establishment and its premises and peruse records thereof.

Any change in line of activity/pollution load will be effected only after obtaining the Consent/ Authorisation/Registration for which a fresh application will be made.

Place: THRISSUR

Name: PREMANATH K.N

Date:

PART II

GENERAL INFORMATION

1.

| | REGISTERED OFFICE/ ADMINISTRATIVE OFFICE | OCCUPIER |
|----------------|---|---|
| Postal Address | CARBORUNDUM UNIVERSAL LIMITED ,PB.NO.3,NALUKETTU P.O.,KORATTY | PREMANATH K.N 66/5, PARVATHY, THEJUS NAGAR , NORTH KALAMASSERY POST 683104 |
| PIN | 680308 | 680308 |
| Telephone | 9447489500 | |
| Fax | | |
| e-mail | kuruvillarajeshj@cumi.murugappa .com | ranjithpb@cumi.murugappa.com |
| Website | www.cumi.murugappa.com | www.cumi.murugappa.com |

2.

| | OWNERSHIP | AREA In SQUARE METRE | ADDRESS OF LESSOR, IF ON LEASE |
|---------------|--|-------------------------|--------------------------------------|
| Built up area | null | null | |
| Total area | null | null | |
| Survey No. | 1114 12 -1149 1,893 1-1153 1-1150 2 3-1115 1 2-111 4 1 4- 1118 1 2- 1169 1 3 | Ward NO.& Name | 6 & Valungamuri |
| | | | |

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| | | | |
|----------------|------------------------------|---|---------------------------------|
| Village | Muringoor Thekkummury | Panchayat/ Municipality/ Corporation | Koratty Grama panchayath |
| Taluk | Mukundapuram | District | THRISSUR |

(Possession certificate from Taluk Office in support of ownership of land shall be furnished in case of application for stone crushers)

3.

| | |
|-------------------|-------------------------------|
| Management | Public Limited Company |
| Scale | Large |
| Category | ORANGE |

4. Particulars of last clearance/s obtained :

| CLEARANCE | GRANT/ REFUSAL, No., Date, Validity |
|-------------------------------|--|
| Consent Under Water Act | |
| Consent Under Air Act | |
| ICE/ICO/ICO(R) | KSPCB/TS/ICO/10041755/2023 |
| Authorisation under BMW Rules | |
| Registration under HW Rules | |

5. Date of Commissioning: 1985-11
(if new, anticipated date)

6. Nearest building/water body within 100m:

| | OWNERSHIP , USE ,DISTANCE (In Meter) (to be marked on site plan) |
|---------------------------------|--|
| From The Building | |
| From Effluent Treatment Plant | |
| Dug well/tube/pond | |
| Stream/river/lake/backwater/sea | |

7. Raw materials(including fuels & lubricants)and products

(A)

| RAW MATERIAL | QUANTITY PER DAY | UNIT |
|--|------------------|------|
| Raw petroleum Coke/ | 0.83 | TPH |
| Quartz | 1.0 | TPH |
| Silicon carbide grains, brown fused alumina grains, white fused alumina grains, special ceramic grains | 1.042 | TPH |
| Silicon carbide crude | 0.833 | TPH |

(B)

| PRODUCT | UNIT | QUANTITY PER DAY |
|--|------|------------------|
| Silicon carbide macro grains | TPH | 1.67 |
| Microgrits of SiC and special ceramics | TPH | 1 |

8. In case of manufacture of plastic carry bag/container :

(Plastic Manufacture and Usage Rules)

| Types | QUANTITY | Minimum sizes of carry bags(not be less than 8 * 12) | Status of compliance with Rules 5,6,7&8 |
|-----------|----------|--|---|
| -- N/A -- | | | |

9. Total manpower:

10. Working season:

11. No. of working days per year days / shifts: null

12. Number of staff quarters within the premises :
Number of residents: null

13. Production process:
(Attach flow sheet and project report)

14. Gross Fixed Capital Investment(Rs in lakhs): 3355.08
(Rs. in Lakhs)

| AMOUNT(Rs.) | MODE OF PAYMENT | Receipt No. | PERIOD |
|-------------|-----------------|-------------|----------------------|
| | | | null Year null Month |

PART III
WASTE WATER MANAGEMENT

1. Water consumption details:

| Sl.No. | PURPOSE | CONSUMPTION l/d |
|-----------|---------|--------------------|
| -- N/A -- | | |

2. Source/s of water with quantity(KL/D):

| Sl.No. | Source Type | Source Name | Quantity KL/D |
|-----------|-------------|-------------|------------------|
| -- N/A -- | | | |

3. Effluent treatment details:

| Sl.No. | Uses | Effluent Generation(KL/D) | Treatment Arrangement Status | Treatment Details |
|-----------|------|------------------------------|------------------------------------|-------------------|
| -- N/A -- | | | | |

4. Effluent quantity and quality:

| OUTLET NUMBER | QUANTITY (m ³ /d) | QUALITY | | | RECIPIENT BODY |
|---------------|------------------------------|-----------|------|---------------|----------------|
| | | PARAMETER | UNIT | CONCENTRATION | |
| -- N/A -- | | | | | |

** In case of discharge to land, extent and survey number shall be provided)*

5. Recycle/Reuse of treated waste water:

| QUANTITY (l/d) | USE |
|----------------|-----|
| -- N/A -- | |

6. Water Budget:

(Account for difference between water consumption and effluent generated)

7. Details of rain water harvesting :

PART IV

AIR POLLUTION MANAGEMENT

1. Fuel consumption:

| FUEL | CONSUMPTION tpd/kld | USE |
|-----------|---------------------|-----|
| -- N/A -- | | |

2. Fugitive emission:

| Sl.No. | Sources | Control Measures |
|--------|---------|------------------|
| | | |

-- N/A --

3. Stack details:

| StackNo. | Material of Construction | Dimension | | | Height above roof level,m (for generation only) | Source of Emission | | | Fuel | |
|----------|----------------------------|------------|-------------------|----------------------|---|--------------------------------------|----------|------|---------|-----------------------|
| | | Height (m) | Diameter Top (cm) | Diameter Bottom (cm) | | Equipment | Capacity | Unit | Type | Quantity (tpd or kld) |
| 1 | REINFORCED CEMENT CONCRETE | 60.0 | 1.6 | 2.2 | 50.0 | CYCLONE, WET DUST EXTRACTION SYSTEM. | 1.67 | TPH | NO FUEL | |

4. Emission Details:

| Stack No. | Stack Name. | Design Flow (Nm ³ /h) | Concentration in mg/Nm ³ , at 12% CO ₂ correction | | | | |
|-----------|-------------|----------------------------------|---|-----------------|-----------------|-------|--------|
| | | | PM | SO ₂ | NO _x | CO | Others |
| 1 | Numbers | 120000 | 150.0 | 400.0 | 400.0 | 100.0 | 0 |

5. Emission control & monitoring:

| Stack No. | Stack Name. | Port Hole (Y/N) | Platform (Y/N) | Ladder (Y/N) | On-Line Monitoring | | Sources | Sources Measures |
|-----------|-------------|-----------------|----------------|--------------|--------------------|----------------|---------|--|
| | | | | | Continuous (Y/N) | Periodic (Y/N) | | |
| 1 | Numbers | Yes | Yes | Yes | | | Furnace | GAS COLLECTION HOOD, CYCLONE SEPERATOR, WET DUST SUPPRESSOR. |

6. Ambient air quality:

(applicable for large scale red category units only)

| Location | Air quality (microgram/m ³) | | | | | | Sound (dB(A)Leq) | |
|----------|---|-----------------|-----------------|------|------------------|--------|---------------------|----|
| | SPM | So ₂ | NO _x | RSPM | H ₂ S | Others | D* | N* |
| | | | | | | | | |

(D* Day time- 6 a.m to 10 p.m; N* Night time- 10 p.m to 6 a.m.)

PART V

SOLID WASTE MANAGEMENT

HAZARDOUS WASTE MANAGEMENT

1. Activity for which authorisation is sought:
2. Details of hazardous waste as defined in the Hazardous Wastes Rules:

| Sl.No. | Type of Waste | Category of waste | Quantity | Quality |
|--------|---------------|-------------------|----------|---------|
| | | | | |

3. Mode of Hazardous Waste:

| Sl.No. | Type of waste | Mode of | | |
|--------|---------------|---------|-----------|----------|
| | | Storage | Treatment | Disposal |
| | | | | |

4. Details of Registration Obtained from Central Pollution Control Board:
(In the case waste re-processors/refiners only, attach copy of Registration Certificate)

5. Isolated storage of hazardous chemicals: N/A
(Schedule II of the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989)

| Chemical | Use | Mode of Storage | Capacity in t |
|----------|-----|-----------------|---------------|
| | | | |

6. Whether emergency plans are prepared for taking

*on-site measures Yes/No :N/A

*off-site measures Yes/No :N/A

7. NON-HAZARDOUS WASTE MANAGEMENT

| Category | Quantity(in t/y) | Details of storage treatment & disposal |
|-----------|------------------|---|
| -- N/A -- | | |

OTHER PARTICULARS

8. Green-belt details(%):

(also to be shown in site plan)

9. Details of litigation pending, if any, against pollution due to your establishment:

10. Details of separate energy meters, if provided, for pollution control equipments:

11. Details of stand-by power, if provided, for pollution control equipments:

12. Any other pertinent matter:

Accompaniments :

1. BUILDING PLAN

2. Site planing(in A4/A3)showing residences/structures, water bodies, roads etc, within 100m radius of the industry(200m in case of crusher industry)

3. LETTER

4. CAPITAL INVESTMENT

5. SAMATHAPATHRAM

6. Details of production process

7. Process flow diagram

8. Copy of Address Proof

9. Copy of possession certificate

10. Copy of Land Tax Receipt(Self attested)

11. Affidavit in Rs. 100/- stamp paper or C.A.'s certificate regarding undepreciated value of the fixed assets of the industry/project clearly indicating the value of Land, Plant & Machinery and other Miscellaneous Fixed Assets etc. on a particular date(alongwith a copy of the balancesheet of the industry/project as applicable)

INSTRUCTIONS

1. The Application is to be made by the occupier.

2.State NA if any item is not applicable.

3.The gross fixed capital investment shall include the cost of land, building, plant, machinery, etc. without depreciation upto the date of application. If the land is on lease 20 times of the annual lease amount shall be taken as cost of land.

4.Consent fee shall be paid for a period of 5 years. In case fees under Water act, Air Act,BMW Rules,Plastic rules are already paid for part of the period,proportionate fees for the balance period are to be paid.For the purpose of calculation of consent fee,part of a year shall be counted as one year.

5.The consent fees is to be paid online.

6.The water consumption in part III shall not exceed that specified in the schedule of the Water Cess Rules, 1978. In case that is exceeded, the reason thereof is to be stated.

7.The analytical part in Part III and Part IV shall be supported by reports of analysis done by laboratory approved by the Board.

8.Pollution prevention, control and monitoring facilities may be got designed and installed preferably by consultants approved by the Board.

9.The following documents are available at the Board offices on request, free of cost.

(a)Chart of consent fee payable.

(b)Categorisation of industries into red/orange/green

(c) Schedule of Water Cess rules, 1978.

(d) List of laboratories/consultants approved by the Board.

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Attachment for Compliance with Hazardous Wastes
(Management and Handling) Rules, 1989

Form-I

[(See Rule 2(b), 5(2), (3) and (6) (ii)]

**APPLICATION FOR AUTHORISATION/RENEWAL OF AUTHORISATION
FOR COLLECTION / RECEPTION / TREATMENT / TRANSPORT / STORAGE /
DISPOSAL OF HAZARDOUS WASTES**

From : CARBORUNDUM UNIVERSAL LIMITED
CARBORUNDUM UNIVERSAL LIMITED ,PB.NO.3,NALUKETTU P.O,KORATTY

To,

The Member Secretary,

Kerala State Pollution Control Board

Sir,

I/We hereby apply for authorisation / renewal of authorisation under sub-rule (3) of Rule 5 of the Hazardous Waste (Management and Handling) Rules, 1989 for collection/ reception/ treatment/ transport/ storage/ disposal of hazardous wastes.

(FOR OFFICE USE ONLY)

1. Code. No:

2. Whether the unit is situated in a critically polluted area as identified by Ministry of Environment & Forests :

TO BE FILLED IN BY APPLICANT

PART - A

GENERAL

3. (a) Name of the Owner/Occupier: PREMANATH K.N

(b) Name and address of the unit and location of activity: CARBORUNDUM UNIVERSAL LIMITED
CARBORUNDUM UNIVERSAL LIMITED ,PB.NO.3,NALUKETTU P.O,KORATTY

(c) Authorisation required for (please tick mark appropriate activity/ activities):

(d) In case of renewal of authorisation, previous authorisation number and date:

4. (a) Whether the unit is generating hazardous waste as defined in the Hazardous Wastes (Management and Handling) Rules, 1989

(b) If so, the Category No.

5. (a) Total capital invested on the project: null

(b) Year of commencement of production: null

(c) Whether the industry works general/2 shifts/round the clock:null

6. (a) List and quantum of products and by-products:

| PRODUCT | UNIT | QUANTITY PER DAY |
|--|------|------------------|
| Silicon carbide macro grains | TPH | |
| Microgrits of SiC and special ceramics | TPH | |

| By-PRODUCT | UNIT | QUANTITY PER DAY |
|------------|------|------------------|
| -- N/A -- | | |

(b) List and quantum of raw materials used:

| RAW MATERIAL | UNIT | QUANTITY PER DAY |
|---------------------|------|------------------|
| Raw petroleum Coke/ | TPH | 0.83 |
| Quartz | TPH | 1.0 |

| | | |
|--|-----|-------|
| Silicon carbide grains, brown fused alumina grains, white fused alumina grains, special ceramic grains | TPH | 1.042 |
| Silicon carbide crude | TPH | 0.833 |

7. Furnish a flow diagram of manufacturing process showing input and output in terms of products and waste generated including for captive power generation and demineralised Water.

PART-B

PERTAINING TO SEWAGE AND TRADE EFFLUENT

8. Quantity and source of water for:

| S.No | PURPOSE | CONSUMPTION(L/D) |
|-----------|---------|------------------|
| -- N/A -- | | |

9. Sewage and trade effluent discharge:

(a) quantum of discharge m³/d

(b) Is there any effluent treatment plant:

(c) If yes, a brief description of unit operations with Capacity:

Suspended solids

Dissolved solids

Chemical Oxygen Demand (COD)

Biochemical Oxygen Demand [(BOD₅/20°C)]

Oil and grease

(Additional parameters as specified by the concerned Pollution Control Board)

(e) Mode of disposal and final discharge point (enclose map showing discharge point):

(f) Parameters and Frequency of self monitoring:

PART-C

PERTAINING OF STACK (CHIMNEY) AND VENT EMISSIONS

10. (a) Number of stacks and vents with height and dia (m)

(b) Quality and quantity of stack emission from each of the above stacks-particulate matter and sulphur dioxide (SO₂) (Additional parameters as specified by the concerned Pollution Control Board):

- (c) A brief account of the air pollution control unit to deal with the emission:
- (d) Parameters and Frequency of self monitoring:

PART-D

PERTAINING TO HAZARDOUS WASTE AND HAZARDOUS CHEMICAL

11. Solid Wastes:

(a) Total Quantum of generation : N/A

(b) Quantum of hazardous waste generated and its nature, as defined under the Environment (Protection) Act, 1986. (See the Hazardous Wastes (Management and Handling) Rules, 1989):

(c) Mode of storage within the plant, method of disposal and any other information sought by the concerned Pollution Control Board:

(c) Mode of storage within the plant, method of disposal and any other information sought by the concerned Pollution Control Board:

12. (a) Hazardous Chemicals as defined under Environment (Protection) Act, 1986 ("See the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989):

(b) Whether any isolated storage is involved if yes, attach details

| Chemical | Use | Mode of Storage | Capacity in t |
|----------|-----|-----------------|---------------|
| | | | |

(c) Whether emergency plans are prepared for taking

- On site measures :

- Off site measures : No

Telephone No - 0487-2374339

E-mail: kspcbtse@gmail.com



കേരള സംസ്ഥാന മലിനീകരണ നിയന്ത്രണ ബോർഡ്

മഹജ്ജിക് സ്കൗർ, മുണ്ടം തിരു. പറവട്ടാണി, മല്ലൂക്കര പി.ഒ., തൃശ്ശൂർ-680655

KERALA STATE POLLUTION CONTROL BOARD

Majestic Square, 3rd Floor, Paravattani, Dilukkara P.O., Thrissur-680655

"ഭരണഭാഷ - മാതൃഭാഷ"

PEB/TSR/IC/176/07

09.07.2024

From

Environmental Engineer

To

The Senior General Manager
Carborundum Universal Limited,
Post Bag No. 3, Koratty,
Thrissur - 680308

KERALA STATE POLLUTION CONTROL BOARD
DISTRICT OFFICE, THRISSUR

DESPATCHED ON 09/07/2024

Sub:- Action to be taken for compliance with the consent conditions

- Ref. - 1. Consent No. KSPCB/TS/ICO/10041755/2023 dated 9/1/2024 valid up to 30.06.2028
- 2. Letter no. 486/2024-SEE-1 KSPCB dated 12/2/2024 addressed to The Member Secretary, Head Office, Thiruvananthapuram
- 3. Your Letter No. nil dated 12.06.2024

Sir,

You are directed to complete the installation of control measures and chimney for the emission from the furnace by the end of August 2024 as stated in your letter referred (2) above. Also it is informed that Consent to Establish need not be awaited as the installation of control measures are already advocated in the Consent referred (1) above issued to the unit.

Yours Faithfully



Environmental Engineer

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Annexure 29

No.DFB/1348/2024-T3/F&B/R.Dis

Office of the Director of
Factories & Boilers, Thiruvananthapuram

Dated 20-07-2024

email : director@fabkerala.gov.in

Telephone : 0471-2441597

From

Director of Factories & Boilers
Thiruvananthapuram

To

Shri/Smt SRIDHARAN RANGARAJAN (DIRECTOR)
[M/s CARBORUNDUM UNIVERSAL LIMITED]
Number 1
Jeevaratnam Nagar Main Road
Adayar
Chennai- 600020

Sir,

Sub : Approval of plans under Factories Act and Rules- CARBORUNDUM UNIVERSAL LIMITED,P.B. No.3,Nalukettu, Koratty P.O.,Thrissur Dt. 680 308. - Plans approved documents forwarding of -reg

Ref : Letter No:IFB/IJKD/165/2024-A dated 07-05-2024 of the Inspector of Factories and Boilers , Gr-I,Directorate

Your attention is invited to your application dated 09-07-2024 forwarded vide the letter referred above. One set of approved drawings is enclosed here with.

Yours faithfully

Director of Factories & Boilers
Thiruvananthapuram

Enclosure:- 1. Permit No: 169/2024
2. Plans (4 Nos.)

Copy to:- 1. Inspector of Factories and Boilers, Gr- null,Directorate with approved plans
2. Joint Director of Factories and Boilers
3. License Section

Note: An amount of Rs. 0.0/- remitted vide chalan No. Dated is credited to Government account.

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**OFFICE OF THE DIRECTOR, FACTORIES & BOILERS
THIRUVANANTHAPURAM**

Factory Plan Approval Order
Section 6(1) of Factories Act 1948, Rule-3 of Kerala Factories Rules 1951

Order No: DFB/1348/2024-T3/F&B/R.Dis. Dated 20-07-2024

Permit No: 169/2024

| | | | | | |
|----|----------------------------------|----|---|--------|-------|
| 1. | Factory Name & Address | :: | CARBORUNDUM UNIVERSAL LIMITED P.B. No.3, Nalukettu, Koratty P.O., Thrissur Dt. 680 308. | | |
| 2. | Occupier Name & Address | :: | SRIDHARAN RANGARAJAN (DIRECTOR) Number 1 Jeevaratnam Nagar Main Road Adayar Chennai- 600020 | | |
| 3. | New/Modification of the existing | :: | Modification of the existing | | |
| 4. | If Existing | :: | | | |
| | a)Registration No | :: | IJK/12/136/1988 | | |
| | b)Permit No & Date | :: | 12/2024, 08-01-2024 | | |
| | c)Office | :: | Directorate | | |
| 5. | Area | :: | | | |
| | a)Existing | :: | 13148.32 sq. m | | |
| | b)Proposed | :: | 27.93 sq. m | | |
| | c)Deletion | :: | | | |
| | d)Total | :: | 13176.25 sq. m | | |
| 6. | Workers | :: | Male | Female | Total |
| | a)Existing | :: | 175 | 24 | 199 |
| | b)Proposed | :: | 0 | 0 | 0 |
| | c)Deletion | :: | 0 | 0 | 0 |
| | c)Total | :: | | | 199 |

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7. Manufacturing Process :: Silicon Carbide various grade of fused Alumina special ceramic micro grits (20119)
8. Power ::
- a)Existing :: 9805.71 KW + (0.00 0 KVA DG Set)
- b)Proposed :: 870.96 KW +(0 KW(SB) +0.00 KVA DG Set)
- c)Deletion :: 110.00 KW + (0.00 KVA DG Set)
- d)Total :: 10566.67 KW0 KW(SB) +
9. Factory Location ::
- a)District :: Thrissur
- b)Taluk :: Chalakkudy
- c)Village :: Kizhakkumuri
- d)Survey No :: 893,1115/1-1,1115/2,1115/3,1115/4,1118/1,1118/2-1,1119/1-1, 1119/3,1149/1-1,1150/ 2, 1150/3-1,1150/3-2,1150/3-3,1150/3-4,1151/2-2,1153/2-4, 1153/2-5,1153/2-
- e)Panchayat/Municipality/Corporation :: Koratty

Following conditions should be satisfied before starting the manufacturing process. In addition to this, permit is valid in accordance to the directions given by the factory inspector after inspection.

1. Validity of the permit is one year from the date of of approval.
2. If the construction of factory is not completed during the specified period, the permit has to revalidated.
3. Construction of building for the factory shall be done in accordance with the plan approved vide the above permit. If any change is required, new plan shall got approved. Application for factory license can be submitted only after getting such approval.
4. According to Kerala Factories Rule 3(4)factory manager/occupier shall submit a Stability Certificate in Form No.3 along with the application for license to this office. Original Certificate shall be submitted to the concerned Inspector. (Validity period of Stability Certificate is 5 Years)
5. As per Rule 4 and 5 of Kerala Factories Rules manufacturing process shall be carried on only after getting the Factory License

Director of Factories and Boilers

Digitally signed by P PRAMOD
Date: 2024.07.20 16:12:45 IST
Reason: Approval
Location: Kerala

**BEFORE THE NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE BENCH AT CHENNAI**

O.A No. 39 of 2024 (SZ)

Mr. Jonatt Jose

.... Applicant

Vs

The Secretary and Ors.

.... Respondents

ADDITIONAL AFFIDAVIT

M/S PRASAD VIJAYAKUMAR (Ms. No. 1254/1999)

VIGNESH SEKAR (Ms. No. 3281/2018)

PRANAV. R (Ms. No. 3700/2023)

9003271435

COUNSEL FOR RESPONDENT No. 5