Doc. No. AML/PDR/GHG/2024-25 **Version No. 1**

Table of Contents:

Report on Dated:	10.04.2025	**Report No.**	02/2024-2025
Period Covered:	April-2024 to March-2025	**Report Prepared By:**	Jeevika Mishra (EHS Executive)

A. Introduction Of Organization:

With a legacy of more than 60 years, Ashapura is a leading multi-mineral solutions provider with a global footprint, having a wide network of operations in several states within India and in other countries.

Our captive mineral resources, state-of-the-art manufacturing base, cutting edge research capabilities, logistical prowess and 2,800 dynamic, progressive, result oriented employees accord us global leadership in several segments. Our consistent quality and our ability to customize mineral solutions make us a preferred supplier to multi-nationals in more than 70 countries across the continents.

Ashapura means “Fulfilling Aspirations”; we believe that sustainable growth occurs only when we fulfill aspirations of all our stakeholders such as customers, employees, shareholders, the environment and the society as a whole.

Our products are mined from one of Purest Mines and Kaolinite reserves available in Gujarat and are processed using advanced technologies for enhancing the quality of products, they are further refined to remove impurities by the levigated method. These washed materials are then passed through a series of automated processes under the supervision of our highly qualified production and quality control team and experienced engineers.

Our stringent control on ‘process’ flow ensures a final product with ‘High Brightness’, Excellent Fineness (Narrow Particle Size Distribution) and Consistent performance in every batch. Our state-of-the-art centralised R&D facility, along with a well-equipped Paint & QC laboratory, coupled with a team of experienced chemists and scientists, works diligently to get the following benefits for perfect paint/coating formulations.

Kaolin division:

We are the 2nd largest manufacturer of Kaolin in India and are amongst the top companies in the world engaged in developing and marketing of Kaolin. We have set a state-of–the–art processing plant in Bhuj with infrastructure to produce both Hydrous and Calcined Kaolin.

With the help of highly qualified & technically sound personnel Ashapura’s kaolin products resonates with “consistent quality” due to extensive emphasis on preprocess, in process and before dispatch quality checks.

With Logistics playing a key role in the entire value chain, our experienced logistics team with their extensive network of Service providers customize the transportation needs of every customer through single mode or multi modal logistics in cost effective and time bound manner.

Processing Capacity:

Ashapura owns extensive mining and mineral processing facilities with kaolin reserves of approximately 50 lakh MT &kaolin processing capabilities of 1,60,000 MT/Annum

Exporting Worldwide:
AML has its operations into countries such as: -Belgium, UAE, Malaysia, France, Italy, South Africa etc. and it exports its products into more than 70 countries across the world.

B. Purpose

The purpose of this report is to assist in understanding the accounting and reporting of GHG emission. It is commitment to transparency and its defense of a sustainable growth that respect to environment. The purpose of this report is to know the ghg inventory level, and work towards reducing our ghg emissions as a responsible organization and work towards meeting the net zero target by 2040.

C. Organizational Boundaries

The initial stage in establishing a carbon footprint involves defining the organizational boundaries. This process recognizes that companies exhibit diversity not only in their legal framework but also in their organizational structure, encompassing activities ranging from in-house operations to alliances, subcontractors, and various other forms of engagement. Through the definition of organizational limits, a company chooses a method to aggregate its greenhouse gas (GHG) emissions

We have considered emission from,

ASHAPURA MINECHEM LIMITED

Works: Survey No. 437 & 438, Padhhar-MP05. Bhuj-Bhachau Highway, Near Mamuara Patiya, Village-Paddhar, Tal.Bhuj-Kutch-370105

D. Reporting Boundary

The company has criteria determined by the organization to define significant emissions.

Scope 1 emissions (direct emissions): Emissions that result from the activities that the organization controls. Examples of the processes that can generate them:
• Stationary combustion through LPG/PNG/NG/FO consumption and diesel.
• Mobile combustion through Fuels used in Owned vehicles.
• Fugitive emissions that result from intentional or unintentional releases such as refrigerants used in air conditioning.

Scope 2 emissions (indirect emissions): emissions from the organization due to the use of electricity acquired from outside.

The period covered under this report is from **April'2024 to March'25** and will be updated once a year.

The carbon footprint quantification is carried out as per ISO 14064-1 standard, the detailed calculations are carried out in MS excel and attached to this report

Inventory Year: April 2024 to March 2025

Responsible person for reporting:

Mr. Anand Parmar (Unit Head) is responsible for preparing the annual GHG emission report and gathering data for one year and producing reports of GHG emissions.

E. Data selection and collection used for the quantification

GHG Scope	Data type	Unit	Data source	Frequency of collection
Direct emissions (Scope 1)	LPG consumption	MT	Gas Bill	Monthly
	Diesel (HSD) Consumption	Kilo Liters	Diesel Bill	Monthly
	Furnace Oil Consumption	Kilo Liters	Purchase Bill	Monthly
Indirect emission (Scope 2)	Electricity consumption	Kwh	Bills from electricity service provider reports	Monthly

F. Conversion Factors used for the Calculation

Data type	Input Unit	Output Unit CO2e	Conversion Factor	Reference
Scope 1				
Diesel	KL	TCO2e	2.69	India GHG Program / IPCC Chart Rev.01 April 2022
LPG	MT	TCO2e	2.20	India GHG Program / IPCC Chart Rev.01 April 2022
Furnace Oil	KL	TCO2e	2.994	India GHG Program / IPCC Chart Rev.01 April 2022
Scope 2				
Electricity	KWH	MT	0.71	India GHG Program / IPCC Chart Rev.01 April 2022

G. Scope 1 Direct GHG Emission Co2 equivalent

	Type & Its Consumption			Month	Scope Co2 Emission
	Diesel (KL)	LPG (MT)	Furnace Oil (KL)		
	5.01	4.75	250	**April-24**	**776**
	6.47	5.70	246	**May-24**	**770**
	6.98	7.84	363	**June-24**	**1128**
	7.40	10.45	264	**July-24**	**842**
	7.11	12.26	302	**Aug-24**	**959**
	6.58	15.20	148	**Sep-24**	**504**
	6.05	12.54	306	**Oct-24**	**969**
	4.02	12.35	101	**Nov-24**	**351**
	4.89	13.44	393	**Dec-24**	**1229**
	4.76	12.11	419	**Jan-25**	**1302**
	5.15	9.60	294	**Feb-25**	**922**
	4.32	6.18	0	**Mar-25**	**30**
Total	**68.78**	**122**	**3085**		**9781**

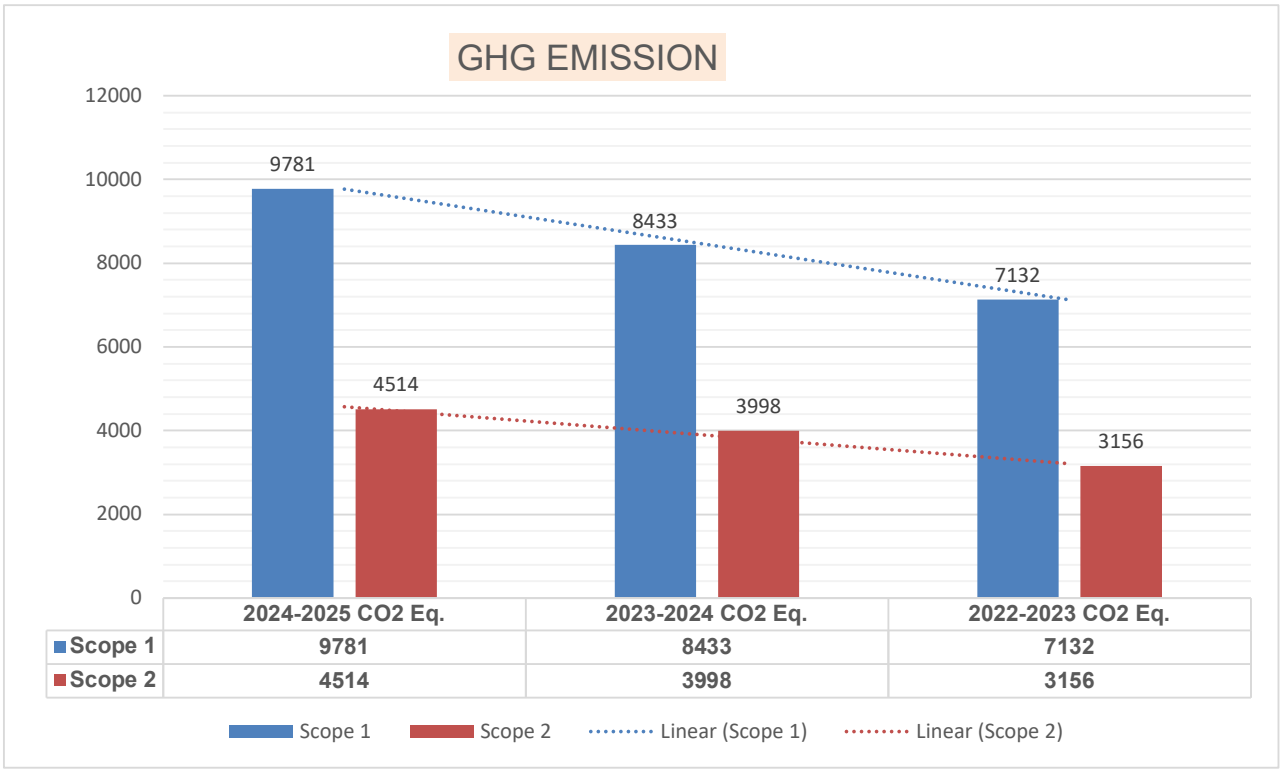
H. Scope 2 Indirect GHG Emission Co2 equivalent

	Electricity Consumption	Consumption Unit KWH	Month	Scope Co2 Emission
	532395	KWH	**April-24**	**378**
	550555	KWH	**May-24**	**391**
	619504	KWH	**June-24**	**440**
	481015	KWH	**July-24**	**342**
	556010	KWH	**Aug-24**	**395**
	424241	KWH	**Sep-24**	**301**
	644767	KWH	**Oct-24**	**458**
	316027	KWH	**Nov-24**	**224**
	707467	KWH	**Dec-24**	**502**
	402905	KWH	**Jan-25**	**286**
	585397	KWH	**Feb-25**	**416**
	537841	KWH	**Mar-25**	**382**
Total	**6358124**			**4514**

I. Overall summary of GHG Emissions (CO2 equivalent)

	FY April to March		
Emission Type	**2024-2025 TCO2 Eq.**	**2023-2024 TCO2 Eq.**	**2022-2023 TCO2 Eq.**
Scope 1	**9781**	**8433**	**7132**
Scope 2	**4514**	**3998**	**3156**
Total GHG Emission (Scope 1 & 2)	**14295**	**12431**	**10288**
Total Production	**29098 MT**	**39905 MT**	**25496 MT**
Scope 1 & Scope 2 Emission Intensity	**0.49 TCo2e/MT**	**0.31 TCo2e/MT**	**0.40 TCo2e/MT**

Objective		
	Base Year April 2023 to March 2024	**Target till 31st March 2030**
Scope-1 5% Co2 emission reduction till 31st March 2030	**8433**	**8011**
Scope-2 5% Co2 emission reduction till 31st March 2030	**3998**	**3798**



J. GHG REDUCTION STRATERGIES & SUMMARY:

Energy Management

- Switch to renewable energy sources (solar, wind, biomass) for plant operations.
- Upgrade to energy-efficient equipment (high-efficiency pumps, variable frequency drives, LED lighting).
- Waste heat recovery systems in kilns and dryers.
- Automation & smart controls to optimize power usage.
- Energy audits at regular intervals.

Process Optimization

- Kiln optimization to reduce fuel consumption (better insulation, burner efficiency).
- Adopt low-carbon fuels (natural gas, biomass briquettes, hydrogen blends).
- Closed-loop water system to reduce pumping energy.
- Dry beneficiation techniques where feasible to reduce energy-intensive wet processes.

Employee Awareness & Engagement

- Training programs on energy conservation and GHG reduction.
- Suggestion schemes for workers to propose efficiency improvements.
- Awareness campaigns on climate impact of operations.

GHG Reduction summary:

Area	Key source of GHGs	Reduction Strategies	Expected Impact
Energy Use	Electricity, fuel oil, diesel	Renewable energy, VFDs, efficient motors, WHR	10–25% reduction in CO_2
Process Emissions	Kiln firing, calcination	Low-carbon fuels, kiln optimization	15–30% reduction
Water & Utilities	Pumping, treatment	Closed-loop systems, efficient pumps	5–8% reduction

So, overall potential reduction is 5 to 7% in next 5 years.

Report Approved By

Anand Parmar

ASHAPURA MINECHEM LTD. KAOLIN DIVISION PADDHAR

Unit Head