



Certificate No: CPCB-UPC-II/Nemistar Biopolymers/Karnataka/812

Dated: 03.02.2026

To

M/s NEMISTAR BIOPOLYMERS
Plot No. 68P, Harohalli Industrial Area, Phase 1 & 2, Ramanagara,
Bengaluru, Karnataka

Subject: Certificate to manufacturer for Manufacturing / Selling of Compostable Plastic and Carry bags - regarding

Sir,

With reference to Application No. Nemistar Biopolymers/Karnataka/812 dated 03 Feb 2026, it is hereby certified that **M/s Nemistar Biopolymers**, having its plant located at **Plot No. 68P, Harohalli Industrial Area, Phase 1 & 2, Ramanagara, Bengaluru, Karnataka**, is fulfilling the criteria prescribed under the revised Standard Operating Procedure (SOP) for issuance of certificates accordance with provisions '4(h)' and '11(c)' of Plastic Waste Management Rules, 2016 (as amended), for manufacturing and selling of compostable carry bags in the Indian Market as a '**Manufacturer**'.

Accordingly, a Certificate for manufacturing and selling of compostable plastic bags in Indian market is hereby issued, with the following conditions:

- i. The end product "**Compostable plastics**" shall be manufactured using the raw materials "**PLA and PBAT**" and strictly following the production process outlined in **Annexure I**.
- ii. Each carry bag and commodities made from compostable material or compostable plastic shall bear the label "**COMPOSTABLE**", in accordance with **IS/ISO:17088** - Specifications for Compostable Plastic, printed in both English and the relevant Regional language. Each carry bag and commodity shall also have printed QR Code and Certificate Number of "**Manufacturer**".
- iii. The manufacturer shall generate a QR code based on the details (Name, Plant address, CPCB certificate no. etc.) provided in the certificate issued by CPCB. This QR code shall be affixed to each carry bag and commodities manufactured at the certified unit. The "Verifiable" details linked to the QR code shall be shared with the respective SPCB/PCC and CPCB within one month of issue of this Certificate.
- iv. This certificate issued by CPCB shall remain valid without requirement of renewal. However, a fresh application shall be filed with CPCB for grant of certificate, in case any change in raw material, production process or product specifications.
- v. The manufacturer shall submit a six-monthly report detailing raw material procurement and product sales to the respective SPCB/PCC and CPCB in the prescribed format, as per SOP.
- vi. The "Manufacturer" shall comply with provisions of PWM Rules and guidelines issued from time to time by the MoEF&CC and the CPCB.

Contd.....

'परिवेश भवन' पूर्वी अर्जुन नगर, दिल्ली - 110032.
Parivesh Bhawan, East Arjun Nagar, Delhi - 110 032.

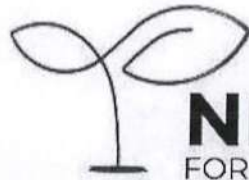
दूरभाष /Tel : 43102030, 22305792, वेबसाइट/Website: www.cpcb.nic.in

vii. If the certified Manufacturer is found non-complying with the provisions of the PWM Rules, 2016 (as amended), this certificate shall stand cancelled forthwith.

Encl: As above.

11.7.2022
(G. Thirumurthy)
Director & DH UPC-II

जी. थिरुमूर्ति / G. Thirumurthy
वैज्ञानिक 'ब' / Scientist 'B'
केंद्रीय प्रदूषण नियंत्रण बोर्ड
Central Pollution Control Board
पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय, भारत सरकार
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NEMISTAR
FOR A BETTER TOMORROW



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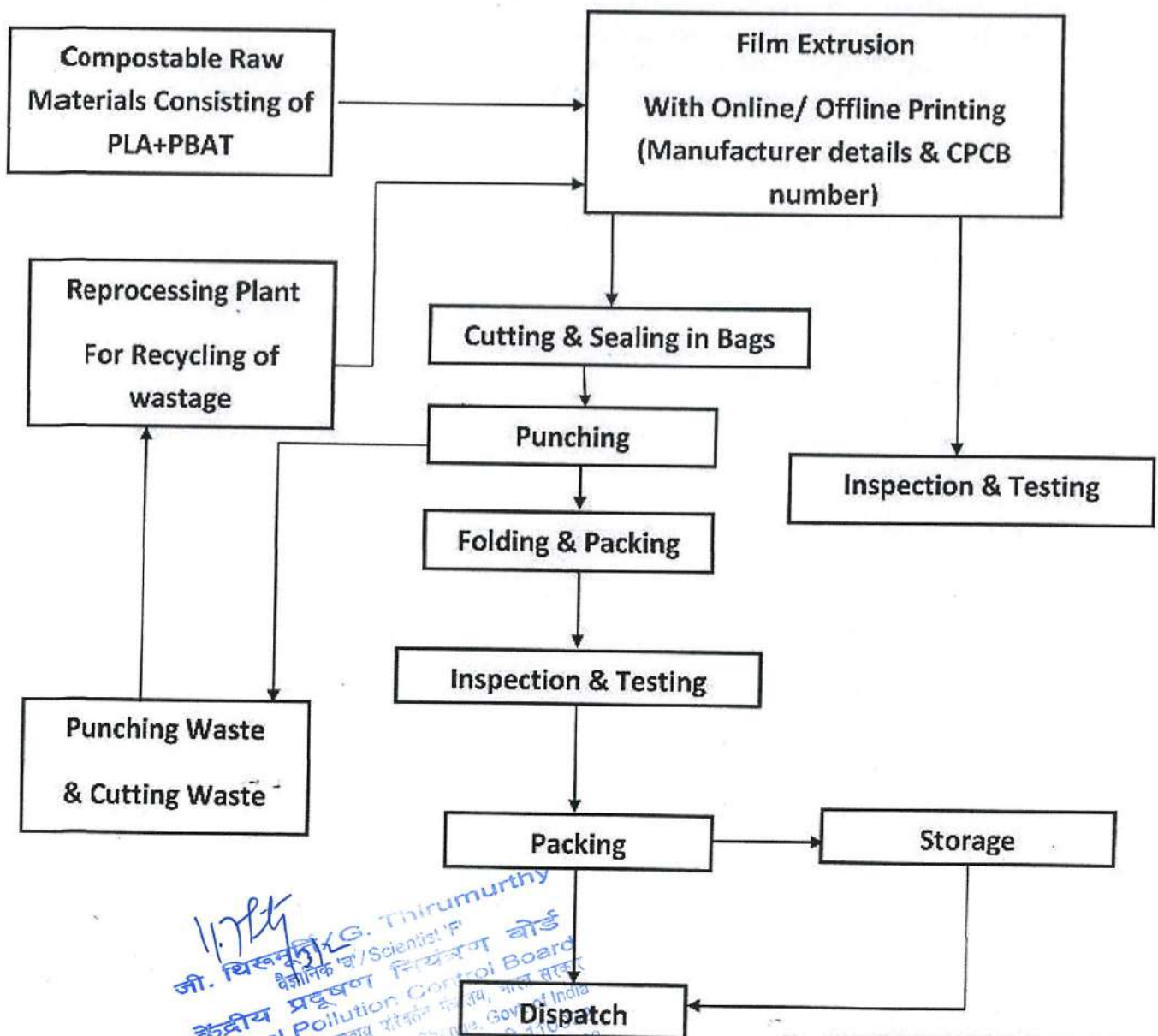
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PROCESS FLOW CHART

COMPOSTABLE BAGS



11.7.24
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 केंद्रीय प्रदूषण नियंत्रण बोर्ड
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 Thirumathi, E. ... Delhi-110059

For NEMISTAR BIOPOLYMER'S

[Signature]
Partner



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Compostable Bags – Process Flow

1. Raw Material Preparation

- **Materials:** Compostable resins (like PLA, PBAT, or starch-based granules).
- **Input:** Biodegradable polymers and natural starch.
- **Activity:** Weighing and mixing of raw materials.
- **Purpose:** Ensure correct resin-to-additive ratio for consistent product quality.

2. Extrusion (Blown Film Process)

- **Machinery:** Blown film extrusion machine.
- **Activity:** Melt and extrude the resin into a thin film tube using heat and pressure.
- **Output:** Continuous rolls of film in tube form.
- **Quality Check:** Film thickness, uniformity, and clarity are inspected.

3. Film Cooling & Winding

- **Process:** The extruded film is cooled by air rings and then passed through rollers.
- **Winding:** Film is rolled into large jumbo rolls for further processing.

4. Printing (If Required)

- **Method:** Flexographic or rotogravure printing.
- **Activity:** Apply logos, product info, and regulatory marks (e.g., compostable certification).
- **Checkpoints:** Print alignment, color accuracy, and smudge resistance.

5. Cutting & Bag Making

- **Machines:** Heat sealing and cutting machines.
- **Activity:** Cut the film into desired sizes and seal the edges to make bags (T-shirt bags, garbage bags, compostable etc.).
- **Customization:** Handles, gussets, and perforations as required.

6. Quality Control

- **Inspection:** Dimensional accuracy, seal strength, load testing.
- **Defect Check:** Holes, seal leaks, print defects.

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7. Packing & Labeling

- **Process:** Bags are counted, stacked, and packed into cartons.
- **Labeling:** Product info, batch number, certifications (e.g., EN13432, IS/ISO 17088).

8. Dispatch

- **Logistics:** Boxes/cartons are stored and dispatched as per order schedule.

For **NEMISTAR BIOPOLYMER'S**

[Signature]
Partner

[Signature]
21/2

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