



OceanCycle® Processor Certification for Ocean & Ocean-bound Plastics:

Definitions & Standards V 3.0

Mission

To reduce global ocean plastic pollution by bringing trust and transparency to the marketplace for ocean and ocean-bound materials through the establishment of global standards, and the certification of ocean and ocean-bound supply chains.

As a social enterprise, OceanCycle, Inc (OCI) is dedicated to building an ecosystem that creates value for both plastics recovered from the ocean and plastic prevented from entering the ocean with a heavy focus on prevention. For this ecosystem to develop, OCI believes that manufacturers, brands, and consumers need to have confidence in how their material is sourced and assured that materials they are using are in fact what they are claimed to be. For this reason, OCI has established this certification to ensure proper chain of custody and ethical sourcing standards. In addition, OCI provides on the ground support to processors and collection networks to scale operations and troubleshoot problems so that models can be replicated globally.

Scope

To define the requirements and standards that OCI uses in certifying ocean and ocean-bound plastics, and in ensuring companies are following proper chain of custody procedures in the collection, processing, labeling, and transportation of plastics.

Applicability

OceanCycle, Inc works with plastic processors, manufacturers and brands to evaluate current supply chains and ensure our standards are followed. For a product to use OCI's certification mark, the applicant must demonstrate that its materials have been sourced from an unbroken chain of custody validated by our staff or an approved certification partner. Each change in legal ownership of a material or product will require a series of documents passed from one organization to the other and should be kept for a minimum of (5) years.

Businesses covered under this standard include:

- a. Plastic Waste Collectors – Individuals who collect material from areas at risk of ocean plastic pollution.
- b. Material Aggregators – Those involved in the collection and sourcing of raw material in large volumes. Some aggregators buy directly from individual collectors.
- c. Processors – Those involved in processing raw materials into flake, regrind, or resins.

NOTE: Manufacturers making finished good with certified material should refer to *OceanCycle Certification – Manufacturing Supplemental 3.0* for standards and certification criteria.

Terms

- Ocean Plastic – Plastic recovered from the ocean
- Ocean-bound/prevented ocean plastic/diverted ocean plastic – Plastic waste recovered from within 50 kilometers (30 miles) of an ocean coastline or major waterway that feeds into the ocean in a geographic region that lacks formal waste management. Except in the case of a sea, material collected from major waterways may be no further than 200km from the mouth or end point of that waterway (e.g. plastic material collected from the Nile River coastline must be within 200km of the mouth of the Nile).
- Major waterway – Sea, rivers, tributaries, estuaries, and artificial canals with a direct path to the ocean.
- Formal waste management – Government supported waste collection done through public service providers or private companies. Characteristics of formal collection may include government taxes to support waste management, waste bins, or curbside collection¹.
- Informal waste management – Plastic collection systems developed in the absence of government support. This may consist of individuals or small unregistered 'firms' that are active as waste pickers, waste collectors, itinerant buyers and recyclers². Additional characteristics may include:
 - Community does not fully recognize the value of plastics.
 - Limited capacity and organization to efficiently collect material locally.
 - Limited value-added processing capability to turn plastics back into flakes and resins to be used in manufacturing.
 - Lack of efficient and cost-effect transportation to bring plastics from collection points to processing centers.
- Chain of custody (CoC) – Documentation that provides traceability to the material source such as point of collection or place of purchase.
- Raw material – Collected and unprocessed plastic.
- Plastic Waste Collector (collector) – Individual person who collects plastic waste and sells it to a small collection center, aggregator or processor.
- Flake – Post-consumer plastic that has been shredded and washed into small fragments
- Regrind pellets – Post-consumer plastic that has undergone at least one previous processing method such as molding or extrusion and ground into chips.
- Resin – Plastic compounds that serve as the basis of all plastics.
- Finished good – Products that have completed the manufacturing process and are ready to be sold or distributed to an end user.

¹ Katusiimeh, M. W., Burger, K., & Mol, A. P. J. (2013). Informal waste collection and its co-existence with the formal waste sector: The case of Kampala, Uganda. *Habitat International*, 38, 1–9.
<https://doi.org/10.1016/j.habitatint.2012.09.002>

² *ibid*



- Mass balance – Calculation of the input and output of certified materials used throughout collection, processing, and manufacturing process.
- Product – Flake, regrind pellets, resin, or finished goods made with ocean or ocean-bound plastic.

Plastic Definition and Collection Requirements

1. Collection of raw material – In order for a product to be considered a certified plastic product (CPP), organizations must ensure that the collected material meets the following criteria:
 - 1.1. Plastic waste recovered from within 50 kilometers (30 miles) of an ocean coastline or major waterway that feeds into the ocean in a geographic region that lacks formal waste management. Except in the case of a sea, material collected from major waterways may be no further than 200km from the mouth or end point of that waterway. In addition, a minimum of 10 percent of the country's waste is mismanaged (see Table 1).
 - 1.2. Exceptions:
 - a. A community that has some formal waste management (e.g. governmental municipal collection) but that collection is overwhelmed by population growth or poor waste management practices causing significant environmental leakage (e.g. Bali)
 - b. Areas that can reasonably demonstrate and document a significant risk to wildlife if plastic contaminates its ecosystem (e.g., certain areas of Alaska and Hawaii, protected waterways, wildlife reserves, etc.)
2. Treatment of workers
 - 2.1. Follow basic guidelines for the treatment of workers according to United Nations Labor Guidelines³.
 - a. Safety – Workers are provided adequate safety equipment such as gloves or masks when necessary.
 - b. Health – Workers are provided proper working conditions conducive to maintaining health. (e.g. access to potable water, bathroom facilities, areas to wash hands, shade and proper lighting)
 - c. Work hours
 - i. Workers are not forced to work or required to work more than 12 hours in a day
 - ii. Workers are provided adequate breaks and areas for breaks
 - iii. Workers are not forced to work more than 6 consecutive days
 - d. Child Labor - No harmful child labor as defined in the Save the Children Position paper on Child Labour⁴. Children may not be engaged in work that is at the expense of their education, safety, or right to thrive and develop to their fullest potential.
 - i. Children may not engage in harmful work in accordance with the United Nations Convention on the Rights of a Child, article 32.

³ <https://www.unglobalcompact.org/what-is-gc/our-work/social/labour>

⁴ Save the Children International. (2013). Save the children position statement on the protection of children from harmful work. Save the Children's Resource Centre. Retrieved from https://resourcecentre.savethechildren.net/pdf/sc_position_statement_children_and_harmful_work1.pdf/.

- ii. Minimum age for employment on a country-by-country basis is defined by ILO Convention 138 on the Minimum age for Employment
 - e. Forced labor - All forced labor is prohibited based upon the ILO Forced Labour Convention, 1930 (No. 29), defined as "all work or service which is exacted from any person under the threat of a penalty and for which the person has not offered himself or herself voluntarily."
 - f. Fair pay – Workers shall be paid a fair wage for their labor or the material they provide.
3. Material and product records
- 3.1. The organization shall keep up-to-date records on all suppliers providing materials used for ocean plastic products. These records shall include supplier names, materials supplied, collection locations, dates of purchase, and quantities supplied.
 - 3.2. The organization shall implement procedures to confirm that suppliers are delivering specified ocean and ocean-bound plastic materials and are maintaining proper CoC.
 - 3.3. The organization shall ensure that only eligible ocean and ocean-bound plastic materials are used in products labeled as ocean or ocean-bound plastic products.
 - 3.4. The organization shall periodically audit suppliers to make sure standards are being maintained.
4. Consumer safety – Organizations shall ensure that resins and finished goods adhere to the following substances standard.
- 4.1. Hazardous substances
 - a. The ocean and ocean-bound plastics shall not contain persistent organic pollutants listed in the Stockholm Convention.
 - b. The ocean and ocean-bound plastics shall not contain any compound that would deem it a hazardous waste under 40 CFR 261.24.
 - 4.2. Required tests
 - a. Facilities shall test the material either on-site or through a third party to confirm the material does not contain substances that are outlined in 4.1.a-b.
5. Material handling – The organization shall implement a segregation system to ensure that ocean and ocean-bound plastic materials are not mistakenly mixed in with other non-ocean/non-ocean-bound plastic materials. If the material is purposefully mixed to create a blended resin, the specific percentages shall be documented.
6. Blend and processing
- 6.1. Blend – The minimum blend for a CPP is 30% certified material in a finished good, resin, flake, or regrind. The organization shall maintain records to verify these claims.
 - 6.2. Mass balance calculation – The organization shall develop a consistent process to calculate and report the production of the final product that tracks the balance of certified material used throughout the production process.
 - 6.3. Processing – The processing organization shall maintain records for each batch of resin that includes:
 - i. A unique verifiable identifier
 - ii. The location source of the material
 - iii. The type of source material



- iv. Date processed
 - v. Any blends that were made with the ocean plastic material
 - vi. The source of the non-ocean plastic material blended
 - vii. The final blend percentages of the resin
 - viii. The final amount of material produced
7. Complaint and non-compliance procedures for ocean plastic suppliers/processors
- 7.1. The organization shall put a process in place to review and remedy complaints against non-compliance with CPP policies and procedures. At a minimum the process will ensure:
- a. Receipt of the complaint is acknowledged within ten (10) business days and reported to OCI.
 - b. Investigation of the complaint is initiated within fifteen (15) days.
 - c. If a complaint is validated, provide a remedy within two (2) months. If more time is needed to complete the investigation, the organization must notify OCI with an explanation.
 - d. Provide a notice of the remedy to both the complainant and OCI.
- 7.2. Once made aware of a potential issue, the organization shall take steps to ensure that the potential non-conforming materials are identified, quarantined, and not sold while the investigation is conducted.
- 7.3. Should the investigation validate the complaint, the organization shall:
- a. Notify all direct customers in writing within five (5) business days of the non-conforming material and maintain records of that notice.
 - b. Work with manufacturers on any needed recall.
 - c. Implement a plan to ensure that the infraction does not occur again.
 - d. Provide a full report to OCI about the remediation plan and organizations affected by the infraction.
- 7.4. If these procedures are not followed, it will result in the revocation of any certification by OCI.

Documentation Guidelines

8. Material Aggregator/Collection Centers – Either a single location or multiple locations where raw material is brought together and prepared for transport to a processing facility.
- 8.1. The organization shall create and maintain a process to ensure that material collection is done correctly, and that material is properly tracked. At a minimum, the organization should:
- a. Keep records that document individuals and organizations providing material, type of material, quantity, price paid, and date of purchase.
 - b. Hold periodic meetings with plastic waste collectors to ensure any safety and labor concerns are being addressed.
9. Shipment Labeling guidelines
- 9.1. Bag labels – Bags/super sacks/containers with finished product shall be clearly labeled with the OceanCycle Certified logo prior to shipment. This can be directly printed on the bags/containers, or a label may be used.
- 9.2. Packing slips – Shall clearly denote that the material is certified by OCI.



- 9.3. Collection receipts – Organization must be able to show a receipts system where collection centers issue receipts to suppliers and receipts are issued for the transfer of materials up until it arrives to the processing location (e.g. collection centers issue receipts to collectors, aggregation center issues a receipt to the collection center and the processors issue receipts to the aggregation center). This system of receipts may be either paper or electronic and should be kept for a period of (5) years.

NOTE: In cases where raw material is collected by volunteers, the organization shall document the date range of collection, materials collected, quantity, sponsoring organization, and the destination of the material. If given or sold to a material aggregator, a receipt with details shall be generated and incorporated into the processor's CoC plan.

10. Processor – Organization that purchases raw material and processes collected plastics into resins.

10.1. The organization shall create a process to ensure that it is purchasing material from organizations following proper procedures. At a minimum, that organization shall:

- a. Keep records that document individuals and organizations providing material, type of material, quantity, price paid, and date of purchase.

11. Use of Transfer Certificates – Transactions between organizations, both certified and not certified, shall be recorded by transfer certificates checked and approved by OCI.

- a. All certificates will be backed-up by traceability documentation developed and agreed to during the audit process.
- b. Transfer Certificates will be issued through OCI's online portal. Organizations that pass the certification process will be provided access to the portal at time of certification.
- c. All documentation shall be uploaded for approval within seven (7) business days of shipment.
- d. As of January 1, 2022, all transactions will require an OCI issued transfer certificate to be considered a certified shipment, sale, or transfer.

NOTE: In some cases, the processor may also be the aggregator. In this case the processor shall adhere to both standards.

Control of Certified Plastic Product Claims

12. Product labeling – Once material processors successfully pass an audit by OCI, they are given certification documents and are allowed to use the term OceanCycle Certified on their products, website, and other promotional material. Claims will be strictly monitored by OCI and mislabeling non-certified material as OceanCycle Certified will be grounds for revoking certification.

NOTE: For guidelines about material claims and regulations please see OceanCycle Terms and Conditions document.

13. Brand guidelines can be accessed at <https://oceancycle.co/brand-guidelines/>

TABLE 1⁵

Country	Economic status ¹	Coastal population ²	Waste generation rate [kg/person/day] ³	% Plastic in waste stream ⁴	% Inadequately managed waste ⁵
Korea, North	LI	17,327,483	0.6	9	88
Bangladesh	LI	70,874,124	0.43	8	87
Cambodia	LI	1,391,254	0.6	11	87
Burma/Myanmar	LI	18,988,522	0.44	17	87
Solomon Islands ⁸	LMI	618,678	0.79	13	86
Pakistan ⁸	LMI	14,581,952	0.79	13	86
Vietnam ⁸	LMI	55,858,245	0.79	13	86
Papua New Guinea	LMI	2,747,514	0.79	13	86
India	LMI	187,493,433	0.34	3	85
Somalia	LI	5,971,169	0.6	9	85
Congo, Dem rep. of	LI	1,076,056	0.5	9	85
Liberia	LI	2,148,271	0.6	14	84
Kiribati	LMI	94,487	0.79	13	84
Mozambique	LI	9,566,559	0.14	11	84
Madagascar	LI	7,062,413	0.8	2	84
Sierra Leone	LI	2,887,017	0.45	9	84
The Gambia	LI	1,324,214	0.53	9	84
Guinea	LI	1,996,496	0.6	5	84
Togo	LI	1,991,642	0.52	11	84
Tanzania	LI	6,688,695	0.26	9	84
Guinea-Bissau	LI	1,208,106	0.6	9	83
Comoros	LI	938,595	2.23	9	83
Benin	LI	3,235,418	0.54	8	83
Kenya	LI	2,729,945	0.3	9	83
Sri Lanka	LMI	14,568,174	5.1	7	82
Norfolk Island	LMI	2,156	0.79	13	82
Tokelau	LMI	1,379	0.79	13	82
Mauritania	LI	1,005,481	0.5	9	82
Senegal ⁸	LMI	8,125,063	0.79	13	82
Cote d'Ivoire ⁸	LMI	6,230,583	0.79	13	82
Cameroon	LMI	1,986,723	0.77	6	81

⁵ Jambeck, J.R., Andrady, A., Geyer, R., Narayan, R., Perryman, M., Siegler, T., Wilcox, C., Lavender Law, K., (2015). Plastic waste inputs from land into the ocean, *Science*, 347, p. 768-771.

Vanuatu	LMI	251,851	3.28	9	81
Sao Tome and Principe ⁸	LMI	163,740	0.79	13	81
Ghana ⁸	LMI	7,727,702	0.79	5	81
Nigeria ⁸	LMI	27,477,112	0.79	13	81
Micronesia	LMI	154,895	0.79	13	81
East Timor	LMI	668,749	0.79	13	81
Philippines	LMI	83,446,862	0.5	15	81
Indonesia	LMI	187,223,476	0.52	11	81
Samoa	LMI	168,025	0.79	13	80
Sudan	LMI	752,529	0.79	13	80
Fiji	UMI	896,145	2.1	9	78
Tonga	LMI	102,872	3.71	6	78
Congo Rep of	LMI	847,807	0.53	13	77
Eritrea	LI	1,266,222	0.5	9	77
Marshall Islands	UMI	58,086	1.2	16	77
China	UMI	262,892,387	1.1	11	74
Cape Verde	LMI	522,245	0.5	13	74
Tuvalu	UMI	11,563	1.2	12	73
Thailand ⁸	UMI	26,043,442	1.2	12	73
Yemen	LMI	6,048,920	0.79	13	73
Djibouti	LMI	621,744	0.79	13	73
Angola	LMI	3,790,041	0.48	13	71
Nauru	UMI	15,289	1.2	12	67
Egypt	LMI	21,750,943	1.37	13	67
Maldives	LMI	392,567	2.48	13	66
Morocco	LMI	17,303,431	1.46	5	66
Namibia ⁸	UMI	155,084	1.2	12	66
Syria	LMI	3,621,997	1.37	13	65
Iraq	LMI	639,228	0.79	13	63
Tunisia ⁸	UMI	7,274,973	1.2	12	60
Algeria ⁸	UMI	16,556,580	1.2	12	58
Jordan ⁸	UMI	55,392	1.2	12	58
Palau	UMI	23,446	1.2	12	56
Malaysia	UMI	22,890,252	1.52	13	55
South Africa	UMI	12,899,201	2	12	54
Mauritius	UMI	1,255,952	2.3	10	51
Georgia	LMI	1,124,249	1.69	4	51
Iran ⁸	UMI	9,099,695	1.2	12	50

Ukraine	LMI	6,812,799	0.79	13	49
Haiti	LI	9,155,693	1	9	47
Albania	LMI	2,530,533	0.77	9	45
Nicaragua	LMI	3,482,653	1.1	13	45
Bosnia and Herzegovina	UMI	585,582	1.2	12	40
Honduras	LMI	3,324,144	1.45	13	40
Seychelles	UMI	91,361	2.98	12	37
Guyana	LMI	513,235	5.33	11	36
Cook Islands	UMI	20,934	1.2	12	36
Guatemala	LMI	2,392,442	2	14	36
Gabon	UMI	862,328	0.45	12	34
Lebanon	UMI	3,890,871	1.18	8	34
El Salvador	LMI	6,410,726	1.13	13	33
Bulgaria	UMI	1,002,695	1.28	12	31
Equatorial Guinea	UMI	351,600	1.2	12	30
Montenegro	UMI	260,336	1.2	12	30
Ecuador	LMI	6,400,048	1.13	13	30
Belize	UMI	202,429	2.87	6	29
Jamaica	UMI	2,820,558	0.18	19	27
Romania	UMI	875,170	1.04	4	26
Dominican Republic ⁸	UMI	8,232,586	1.2	12	25
Peru ⁸	UMI	13,765,608	1.2	12	25
Guadeloupe	UMI	466,166	1.2	12	25
French Guiana	UMI	167,631	1.2	12	25
Saint Helena	UMI	6,839	1.2	12	25
Libya	UMI	4,050,128	1.2	12	23
Cuba	UMI	11,333,471	0.81	11	23
Colombia ⁸	UMI	7,498,563	1.2	12	21
Saint Vincent and the Grenadines	UMI	120,149	1.7	13	21
Saint Lucia	UMI	163,227	4.35	12	20
Dominica	UMI	70,138	1.24	12	19
Panama	UMI	3,249,531	1.21	12	18
Grenada	UMI	96,121	2.71	12	18
Turkey	UMI	34,042,862	1.77	12	16
Russia	UMI	10,812,537	0.93	12	16
Costa Rica	UMI	2,479,298	1.36	19	16
Suriname	UMI	402,263	1.36	12	15

Lithuania	UMI	443,894	1.1	12	14
Latvia	UMI	1,432,078	1.03	12	14
Argentina	UMI	16,449,245	1.22	15	12
Mexico	UMI	22,647,771	1.24	7	12
Montserrat	UMI	5,173	1.2	12	12
Poland	UMI	3,272,933	0.88	11	12
Bahrain	HIC	743,574	1.1	12	10