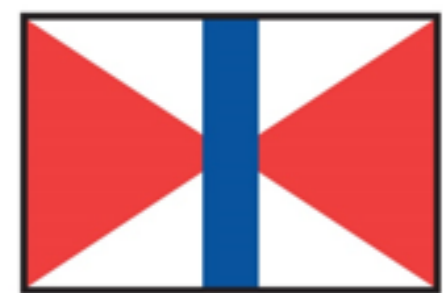




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A LEADING PROVIDER OF SUSTAINABLE SHIPPING SOLUTIONS SINCE 1872



SWIRE SHIPPING

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SPREP

Secretariat of the Pacific Regional
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The Moana Taka Partnership

Tue 21 August 2018





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My attendance at UNEA-3 in Nairobi in Dec 2017, sponsored by Singapore Ministry of the Environment and Singapore Environment Council,



led to fortuitous meeting between CNCo – SPREP/UNEP and University of Wollongong



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“Moana Taka” Partnership *(as in ‘Ocean, Circulate’)*



Majuro landfill, Republic of the Marshall Islands. © Tim Hartley

Marine debris affects Pacific economies; biodiversity; health; and resilience. There is limited local industry or capacity to meet the population’s demands with sustainable materials, making import regulations critical.

“ Pacific environments require global commitments to sustainable consumption and production. ”

– Hon Alexander Teabo, Minister for Ministry of Environment, Lands and Agricultural Development, Kiribati



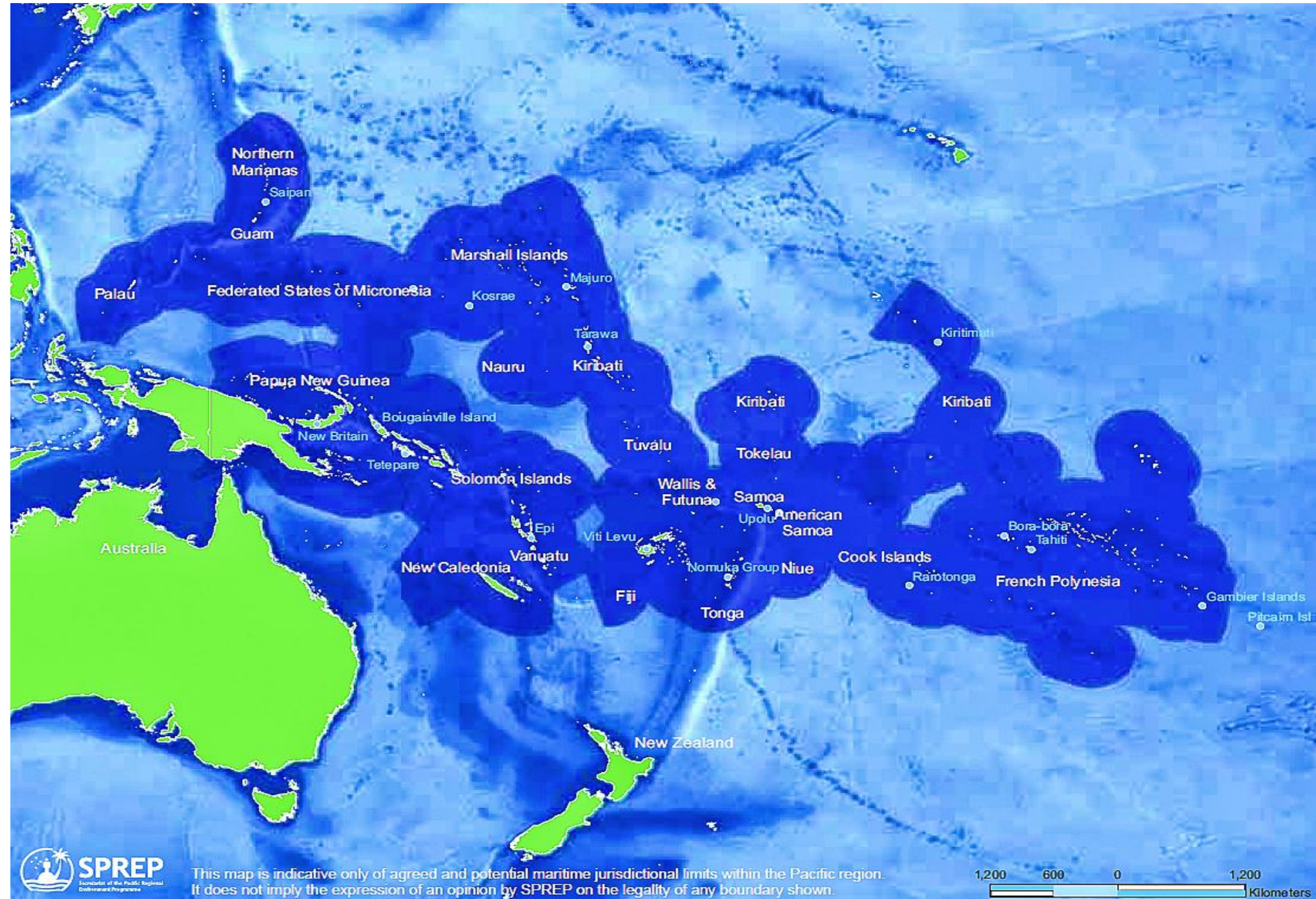
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Moana Taka Partnership:

26 Pacific Island Countries and Territories (“PICT”) represented in this region, responsible for managing 10% of the world ocean. 8 million people dependent on imports, with limited land mass and few options to properly process or recycle waste on the islands.



This map is indicative only of agreed and potential maritime jurisdictional limits within the Pacific region. It does not imply the expression of an opinion by SPREP on the legality of any boundary shown.

1,200 600 0 1,200
Kilometers



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Pacific countries are heavily impacted by waste from local and global sources, with high dependence on imported products and with small-scale markets far from overseas recycling centres:

- Waste enters the region on ocean currents or on fishing vessels, cruise ships, and container ships:
We are part of the problem – we need to be part of the solution
- Port waste-reception facilities are in place for five countries (Fiji, French Polynesia, New Caledonia, Papua New Guinea, and Samoa), with ADB interest in adding Lautoka in Fiji and Republic of the Marshall Islands (RMI).

Pacific leaders are taking such local action as they can:

- In 2017, Pacific leaders stated the intention to ban the import and re-use of asbestos and to take measures to ban plastic microbeads, a subset of the microplastics problem. Leaders are moving to ban or levy key materials
- Illegal discharge of plastic waste constituted 71% of >10,000 known violations in the past decade. 71% of the incidents were from vessels of distant water fishing nations. The most prevalent (60–80%) types of marine debris are plastic materials, considered a priority marine pollution issue facing the Pacific region.



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But: there is a huge imbalance between the location of the vast quantities of waste collecting in the Pacific Island Countries and Territories (PICT) and the location of suitable, dedicated waste management plants.

The waste comprises (*inter alia*):

- Asbestos Containing Material (ACM)
- Discarded “single use plastics”
- E-waste, typically end-of-life electrical and electronic products
- Medical waste
- Polychlorinated Bi-Phenols (PCBs)
- Residual Ozone Depleting Substances / Freons (ODS)
- Persistent Organic Pollutants (POPs)
- Waste Oils

Where not disposed of properly, they either pollute the limited land territory, and thus poison the humans living there, or get blown/washed to sea, and pollute that and the sea food in it.



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Swire Shipping has a *general* imbalance of full boxes bringing finished goods (and their associated plastic packaging) *INTO* the PICT, and a *general* paucity of export cargoes leaving the region. But we still need to reposition our current empties.

EXAMPLES ONLY.....

What type of waste	Qty	Source Port (where)	To Port (Market)	Frequency	What type of waste	Qty	Source Port (where)	To Port (Market)	Frequency
Asbestos (m3)	No data	American Samoa (Pago)	We know that Cook Islands and Niue have shipped asbestos to New Zealand. Most likely port is Auckland.	Once off shipment	Used Lubricants and Oil (litres)	No data	American Samoa	Use their own Oil	
	6,520	Cook Islands (Avarua)		Once off shipment		55000	Cook Islands (Rarotonga)	Auckland	2 per year
	3,557	FSM (Each of the 4 states)		Once off shipment		21,650	- Chuuk	Phillipines	1 - 2 per year
	2,305	Fiji (Suva and Lautoka)		Once off shipment		47,682	- Kosrae	Phillipines	2 per year
	No data	French Polynesia (Papeete)				891,600	- Pohnpei	Phillipines	4 shipments per year
	39,992	Kiribati (Tawara)		Once off shipment		65,750	- Yap	Phillipines	2 per year
	860	Marshall Islands (Majuro)		Once off shipment		0	Fiji	No need for shipment	
	52,874	Nauru				No data	French Polynesia ¹	Fiji	
	No data	New Caledonia				No data	Guam	Use their own oil	
	46,428	Niue (Avatiu)		Once off shipment		8,000	Kiribati (Tawara)	Fiji	once per year
	2,514	Palau (Koror)		Once off shipment		1,108,350	Marshall Islands (Majuro)	Phillipines	4 shipments per year
	No data	PNG				30,000	Nauru	Fiji	1 - 2 per year
	5,260	Samoa (Apia)		Once off shipment		4,000	Niue (Avatiu)	Auckland	1 every 2years
	3,150	Solomon Islands (Honiara)		Once off shipment		No data	New Caledonia	Use their own Oil	
	No data	Tokelau				550,780	Palau (Koror)	Phillipines	4 shipments per year
	4,850	Tonga (Nukualofa)		Once off shipment		Audit is being done	Papua New Guinea	??	
	251	Tuvalu (Funafuti)		Once off shipment		200,000	Samoa (Apia)	Fiji or Auckland	4 shipments per year
19,330	Vanuatu (Port Vila)	Once off shipment		500000	Solomon Islands (Honiara)	Fiji	4 shipments per year		
0	Wallis and Futuna			6,200	Tokelau	No need for shipment	part of Samoa vol		
Total Asbestos	187,891			200000	Tonga (Nukualofa)	Fiji	4 shipments per year		
				14,500	Tuvalu (Funafuti)	Fiji	once per year		
				250000	Vanuatu (Port Vila)	Fiji	4 shipments per year		
				100,000	Wallis and Futuna	Fiji	1 - 2 per year		
				Total Used Oil Volume	4,053,512				



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So we are working with **SPREP** to best to achieve a win-win-win situation:

1. **SPREP** will advise us where in PICT the various classes of waste are, and how much of each exist;
2. **SPREP** will separately advise us where the best recycling plant/s for each waste class are located;
3. **SSA** will then see which of these port pairs best match our MT repositioning requirements, *and* on which port pair sailings we have capacity,
4. **SPREP** will then establish for each port pair as we take them up as to whom has responsibility for:
 - Stuffing, craneage, stevedores, raising b/l and other dox req'd, import fees, unstuffing, storage, box cleaning (mind-bearing we can't have waste-filled boxes waiting for months to be unloaded and unavailable back to us) and so on;
 - This will use the established model we have for *pro bono* charity shipments.



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The Moana Taka Partnership Charter

The China Navigation Company Ltd. (CNCo) / Swire Shipping Agencies (SSA), and The Secretariat of the Pacific Regional Environment Programme (SPREP) based in Apia, Samoa, have entered into an agreement, “The Moana Taka Partnership” (MTP), seeking to work together to reduce the various waste streams collecting in the Pacific Islands Countries and Territories (PICT).

CNCo will provide the shipping container to load the waste stream, **free** (subject to pick up and return, in clean state, within normal commercial timings), & will provide **free shipment** of the container between relevant ports, on a “FIO” basis.

SPREP will be administering the scheme.



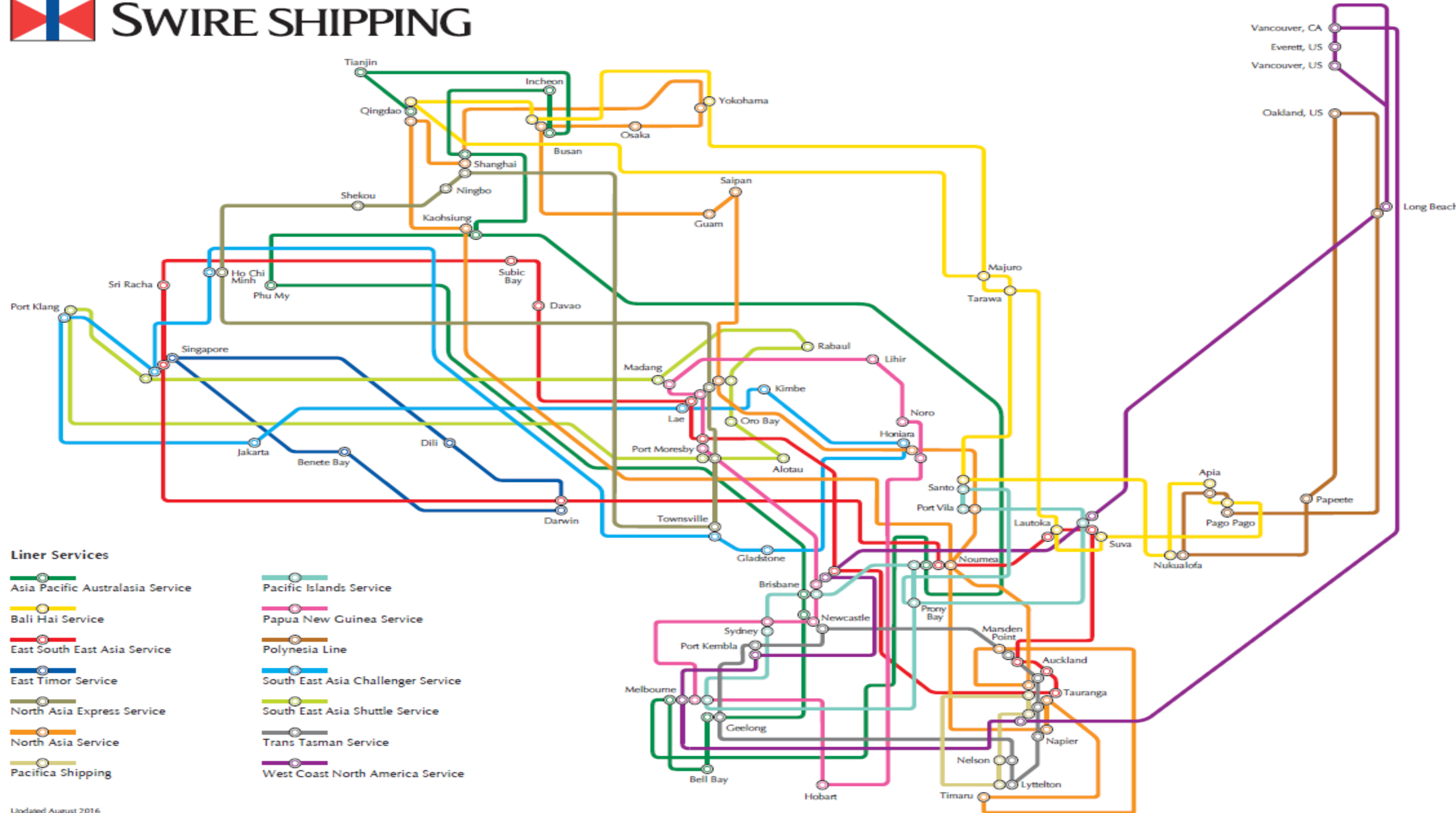
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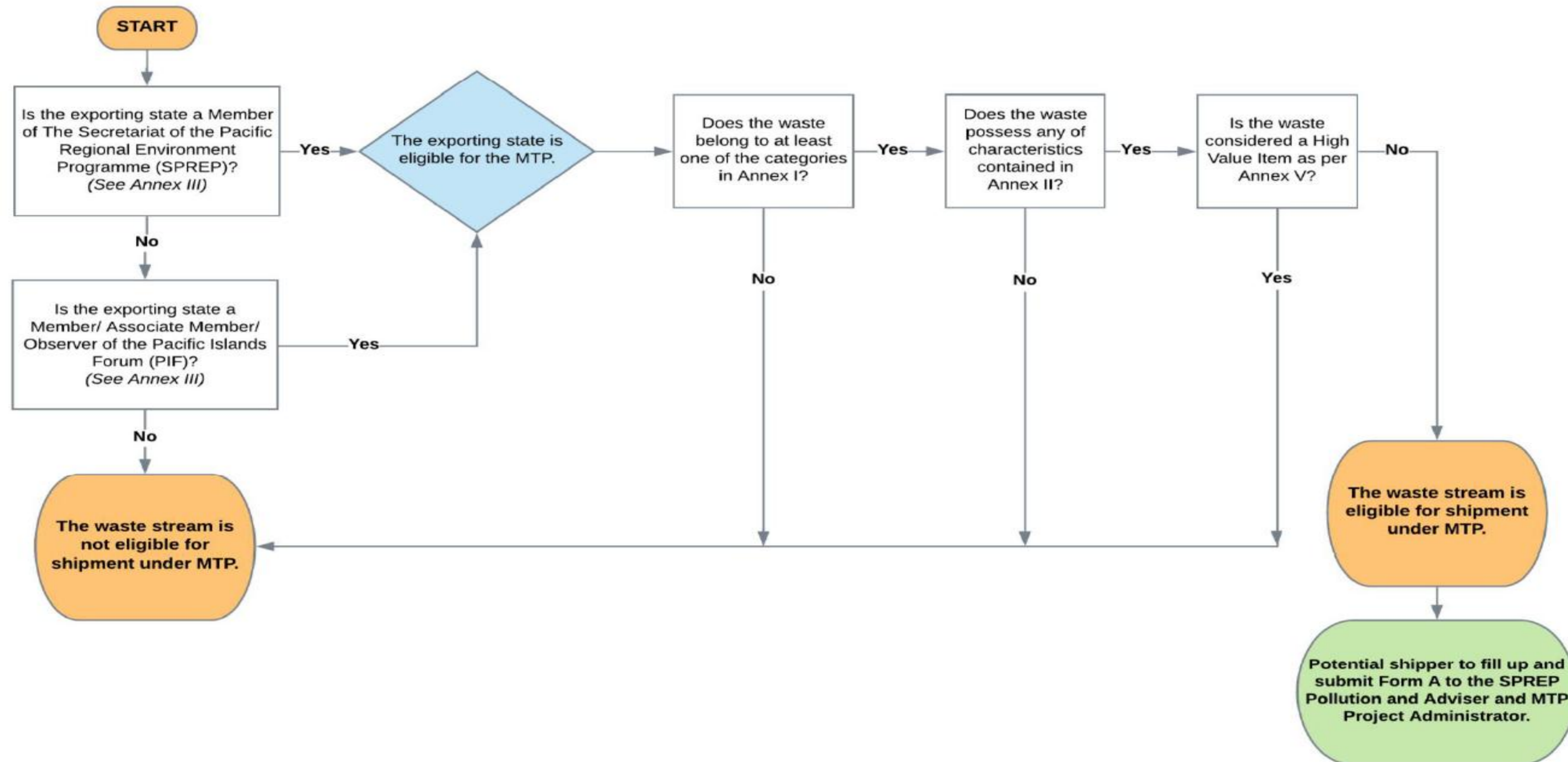


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DECISION-MAKING FLOWCHART TO DETERMINE ELIGIBILITY FOR WASTE STREAM SHIPMENT





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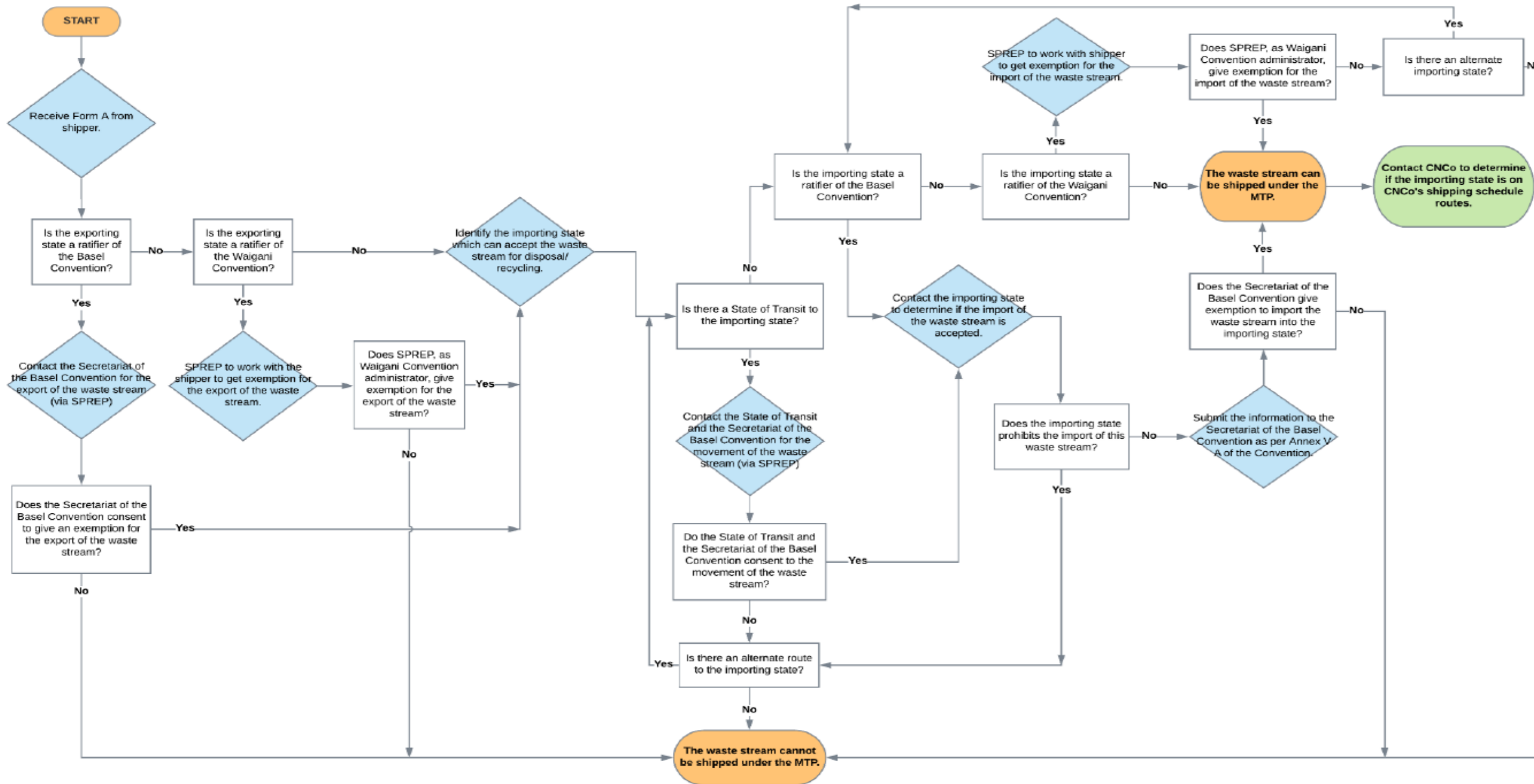
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PROCESS FLOWCHART FOR SPREP

*Assumptions: (1) The waste is an eligible waste stream; and (2) The exporting state is a member of SPREP and/or PIF.





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Moana Taka Partnership: “Addressing waste management in the Pacific”





Vinaka



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Any questions?

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