



**Contract to Conduct a Feasibility Study and Develop a National
Used Oil Management Plan for Samoa, Solomon Islands, Tonga
and Vanuatu**

Inception report (Samoa)



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February 2022

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Going Troppo Consulting for Araspring Consulting Ltd



1. Introduction to the AFD Programme to Develop a Used Oil Management Plan, 2022

1.1 Background to the Project

The natural environments of Pacific Island Countries and Territories (PICTs) are under increasing pressure from development and growing human populations, and the social and economic pressures associated with this growth. Increased populations and urbanisation have led to increased product importation and waste generation. Much of the waste generated cannot economically be managed due to issues of small and isolated populations; economic volatility; geographical isolation from large economies; limited institutional, financial and human capacity; and inadequacy of infrastructure to capture and process waste materials. Poor waste management poses risks to the economies of PICTs, as many rely heavily on clean environments for agricultural activities and tourism.

The Project funded by the *Agence française de Développement (AFD)*, referred to hereafter as “*Committing to Sustainable Waste Actions in the Pacific (SWAP)*”, aims to improve sanitation, environmental, social, and economic conditions in Pacific Island countries and territories through improved waste management. To achieve this, the project focuses on improving management of three waste streams: used oil, marine debris, and disaster wastes. Eight countries and territories will benefit from this project which include Fiji, French Polynesia, New Caledonia, Samoa, Solomon Islands, Tonga, Vanuatu, and Wallis and Futuna.

As part of this process, *Araspring Ltd* (New Zealand) in association with *Going Troppo Consulting* (Australia), *Pacific Reef Savers* (New Zealand) and *POPs Environmental Consultants Ltd* (New Zealand) were awarded a 9-month contract by SPREP/AFD to develop used oil management plans for Samoa, Solomon Islands, Tonga and Vanuatu in December 2021.

1.2 Contract of Services (Inception Report)

Under the terms of the contract, the consultant is required to:

- **Host an initial meeting** with key government stakeholders to confirm desired outcomes and identify key national contacts.
- **Provide Minutes of the government meeting** with confirmation of activities, and scope of work to be developed and agreed by meeting participants prior to commencement of any activities.
- **Host an Inception Workshop with National Stakeholders** to confirm desired outcomes and to identify key national stakeholders. A full list of key stakeholders is to be included noting their sector, and interest, and the plan for further engagement as the project is implemented.
- **Undertake a detailed desktop review** of existing national legislation, policy, strategy and plans relevant to waste management that will determine existing systems, confirm the legislative environment and identify key opportunities for used oil management and market for product
- **Prepare an inception report¹** that presents the findings of desktop research and the outcome and findings from the consultation inception meeting. The report shall articulate the Government’s priorities and any additional priorities identified by other key stakeholders

¹Under the revised contract (February 2022), the Samoan inception report is only required to contain a desktop review of existing legislation, policy, strategy and plans that address waste management, institutional frameworks, and other enabling frameworks relevant to waste management.

and identify how these priorities will be addressed in the workplan and provide a detailed Workplan of activities (including a timeline) and clearly identify any tasks or responsibilities of the government necessary to ensure project success

1.3 National Background (Samoa)²

Samoa is an archipelago of nine volcanic islands located in the Polynesia region of the South Pacific. Samoa comprises of two main islands, seven smaller islands, and islets and rocks. Its total land area is about 2,820 km² with the two main islands of Upolu and Savaii containing 1,115 and 1,700 km² respectively. The topography of Samoa is rugged and mountainous, with about 40 per cent of Upolu and 50 per cent of Savaii characterised by steep slopes and descending from volcanic crests. The interior of both main islands is still covered with montane forests and, in the case of the highest altitudes on Savaii, cloud forest. Samoa's population (~188,000) has remained relatively stable for decades, and internal migration from rural areas to urban areas is common as people are access employment and educational services. Samoa's population lives in 362 villages including the Apia Urban Area. Over 98% of these are traditional villages or villages that are governed by the *Fono* or Council of Chiefs. Villages are largely autonomous of the National Government. Samoa's political system is a parliamentary representative democracy with a unicameral legislative assembly consisting of 49 members. The Prime Minister of Samoa is the head of government who appoints 12 other parliamentarians to form a Cabinet. With some exceptions, national development initiatives especially the development of physical infrastructure, public utilities of water, electricity and social services for education, health, etc are the responsibility of the national Government. The country has an Exclusive Economic Zone of 120,000 km², the smallest EEZ amongst those of the Pacific Island Countries.

2. Desktop review of national waste management legislation in Samoa^{3,4}

Samoa has a well-developed system of waste management legislation. It has a dedicated Waste Management Act (2010), which is administered by the Ministry for Natural Resources and the Environment (MNRE). This principal legislation on waste management is complemented by other environmental and planning laws. Other agencies, such as the Planning and Urban Management Agency (PUMA), also play important roles in administering laws relevant to waste management facilities. PUMA sits within the Ministry of Works, Transport, and Infrastructure. The Ministry of Women, Community and Social Development is responsible for the managing and coordination of community development through 300 villages) also plays a key role in the community management of solid waste.

2.1 Existing Legislation

2.1.1 Waste Management Act (2010) is administered by MNRE. The Act covers the collection, management, disposal, and recycling of solid waste. It also provides for the registration and licensing of waste operators; issuance of dumping and incineration permits; establishment of environmental standards; and ensures community involvement in waste management. This Act also provides for the issuance of permits to vessels in relation to the dumping or incineration of waste at sea and the application of penalties due to noncompliance with the London Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (1972) and its London Protocol (1996), as well as the 1995 Waigani Convention. The Waste Management Act (WMA) provides a framework to develop specific regulations in relation to categories of recyclables. For example, under section 10 of

²Government of Samoa (2015). *Samoa's National Biodiversity Strategy and Action Plan, 2015-2020*. 92pp.

³SPREP (2021). *Assessment of Legislative Frameworks Governing Waste Management in Samoa*. 66pp.

⁴<https://www.theprif.org/document/samoa/solid-waste-management-and-recycling/samoa-profile-solid-waste-and-recycling-sector>

the Act, regulations can be made imposing special levies on goods that have adverse effects on the environment. Further, under section 12, regulations may be made to impose requirements in relation to certain wastes by 'requiring the lodging of a deposit in relation to certain objects, substances or things which may become wastes to ensure their appropriate disposal by recycling or otherwise'. Moreover, the general power to enact regulations under section 43 of the WMA enables the making of regulations to, amongst other things, prescribe litter and waste control measures. The WMA provides the necessary legislative scope to develop further regulations to support recycling initiatives and control illegal dumping of products and materials that could otherwise be recycled.

2.1.2 The Land, Surveys and Environment Act (1989) deals with the natural environment and its conservation in Part 8. Under the Act, MNRE is responsible for provision of advice on EIA procedures, pollution control and control and management of hazardous substances. Division 4 of Part 8 establishes the CEO's responsibility to draft management plans for the conservation, management, and control of (g) pollution and (h) waste and litter disposal. Section 146 allows regulations for the purposes of (t) regulating or prohibiting the pollution of air, water, or land, and the depositing or dumping of litter, rubbish, or any substance of a dangerous, noxious, or offensive nature; and (x) providing for the regulating or prohibiting the import of environmental pollutants.

2.1.3 The Water Resources Management Act (2008) is led by the MNRE. It relates to the management, conservation, and use of water resources, including coastal waters where freshwater accumulates or discharges and is mixed with seawater, and the control of pollutant discharges to minimize water pollution, including creation of local bylaws to restrict practices that may pollute water sources.

2.1.4 The Planning and Urban Management Act 2004 relates to urban planning and development. It guides the sustainable management of urban areas and environmental impact assessments including setting minimum standards relating to the emission of pollution and means for its prevention, control and mitigation.

2.1.5 The Marine Pollution Prevention Act 2008 falls under the MNRE and relates to the prevention of pollution to the marine environment, as well as to response to incidents of marine pollution discharged from vessels. It ensures adherence to marine pollution conventions, including those related to oil spill management.

2.2 Existing Policy

2.2.1 The National Waste Management Policy (2001) includes objectives of involvement of the private sector in waste recycling, cost recovery and promotion of recycling of waste materials.

2.2.2 The National Chemicals and Hazardous Waste Management Policy (2012) looks at options for the sustainable management of chemicals and hazardous waste throughout all their lifecycle and identifies key priority actions already outlined under the first Strategic Approach to International Chemicals Management Project (SAICM).

2.2.3 Draft Samoan National Used Oil Management Policy (2013)⁵ was designed to establish and operate an appropriate management framework that improves national management of used oil and promotes shared used oil management responsibility by all stakeholders. The Policy covered all used oil consistent with the classification of hazardous waste under the Waigani and Basel Conventions. This includes any semi-solid or liquid product consisting totally or partially of mineral oil or synthesised

⁵SPREP (2013). *National Used Oil Management Policy (2013-2016)*. MNRE. 7pp.

hydrocarbons (synthetic oils), oily residues from tanks, oil-water mixtures and emulsions. These may be produced from industrial and non-industrial sources where they have been used for lubrication, hydraulic movement, heat transfer, electrical insulation or other purposes and whose original characteristics have changed during use, thereby rendering them unsuitable for further use for the purpose for which they were originally intended. The Samoan Government was identified as the lead agency in the development of national OHS and environmental guidelines for the management of used oil and the National Petroleum Industry the lead agency for used oil collection and removal and the lead in provision of used oil management training.

2.3 Existing Strategies and Plans

2.3.1 The National Chemical Management Strategy (2007-2017) provides a framework for sustainable management of all chemicals. It includes the activities of procurement, transportation, storage, distribution, use, and disposal.

2.3.2 National Waste Management Strategy (2019-2023) developed under the Waste Management Act, distinguishes between solid waste, and chemical and hazardous waste. The Strategy defines solid waste as general waste from households and businesses (e.g., paper, cardboard, kitchen waste, green waste, aluminium and steel cans, plastic paper/bags, PET bottles, nappies/diapers, textiles, rubber, glass, bulky waste etc.) and defines chemical and hazardous waste as substances or matter that are toxic and poisonous, which may harm human health or the environment (e.g., e-waste, waste oil, batteries, healthcare waste, asbestos, persistent organic pollutants (POPs) etc). The Strategy includes analysis of current solid waste and chemical/hazardous waste management systems, identifies issues, and challenges and adopts priorities and action plans.

2.3.3 GEF-PAS Waste Oil Strategy Enhancement (2011)⁶ summarised used oil management status at that time for the GEF-PAS programme (2014-2020). Petroleum Product Supplies Ltd (PPS) is the sole importer and distributor of petroleum fuels for Samoa, with a current supply contract with Exxon-Mobil. PPS imports 160-200,000 litres of lubricants per year (2011), which includes engine lubricants, hydraulic and transmission fluids, and gearbox oil. The other major suppliers are Gold Star and Samoa Spare Parts, but there are also numerous other smaller importers, because the market is unregulated. Samoa's total oil imports are about 0.8-1.0 million litres per year. As of 2011, the only oil recycling facility in the region was in Guam⁷. The Guam Refinery and Environmental Services Company accepts used oil from individuals, businesses and other local producers and has recycled a little more than three million gallons of oil 1993-2009. The process involved pre-treatment to remove water, followed by distillation, which produces a naphtha product and gas oil. These are further processed and blended with other feedstock to produce a diesel-type product. An oil recycling plant was also established in Samoa in 1993⁸. The plant took in oil from local producers and also imported it from nearby islands such as American Samoa. The treatment process involved drying, acid neutralisation and filtration, followed by blending with additives to produce a recycled oil product. The plant was shut down after several years due to problems with import/export duties and a lack of consumer demand for the finished product.

⁶Graham (2011). *GEF-PAS Project on Pacific POPs Release Reduction through Improved Management of Solid and Hazardous Wastes: Consultancy Report: Organic Waste and Waste Oil Strategy Enhancement*. SPREP. 59pp.

⁷Delfin, J. (2009). Environmental Story. Guam Business Magazine, http://www.guambusinessmagazine.com/?pg=vol26_01_feature03

⁸Hill and Ward (1993). *Recycling Oil for Profit in Western Samoa*. SPREP, Apia.

2.3.4 Used Oil Audit Report (2012)^{9,10} was an audit of used oil management in Samoa undertaken in 2012 for the AFD/GEFPAS programme. The audit concluded that:

- The Electrical Power Corporation (EPC) uses 6% of lubricating oil imported into Samoa.
- Most lubricating oils are used in the local transport and construction industries.
- Petroleum Product Supplies Ltd (PPS), as the Samoan Fuels Distributor and Terminal Operator, has storage tank capacity of 185,000 litres for its own used oil and for fuel slops generated from terminal activities.
- EPC has tankage of 185,000 litres at its *Tanugamanono* plant site that could be made available for national storage of used oil.
- Nearly all used oil collection sites are poorly managed.
- Used oil is used for a wide range of alternative purposes in Samoa that are not sustainable or environmentally acceptable.
- The cost of shipping a 20ft container from Apia to Fiji in 2018 was \$US3,500. This does not include the collection, loading and unloading of the drums, port handling fees or insurances.
- The cost of shipping a 20ft container from Apia to India in 2018 was \$US1,870. This does not include the collection, loading and unloading of the drums, port handling fees or insurances.

Annual Lubricant Importation (L)	Estimated Annual Used Oil Production (L)	National Used Oil Stockpile in 2012 (L)	National Used Oil Storage Capacity (L)	Past Used Oil Management Practice(s)	Previous Used Oil Management Recommendations
660,000	330,000	8,400	2,700,000 L (PPS and EPC tanks)	Refining and re-use Used as a free lubricant	Diesel blending for use in national power generation Export to India

2.3.5 Used Oil Management Plan for Samoa (2014)¹¹ detailed a potential used oil stewardship system for Samoa. The plan outlined the roles and responsibilities of a proposed Managing Agency to be established for the enforcement and monitoring of the collection and storage of used oil for its reuse, recycle or export. The Plan identified a National Regulatory Framework on which a Stewardship System was to be based, the structure and functioning of the Proposed Managing Agency and the necessary implementation stages for collection, storage, disposal and re-use of used oil and related monitoring and evaluation Measures. A Cost Benefit Analysis study was completed that assessed options available to Samoa to manage used oil. The analysis concluded that in the short to medium term, using the used oil as a supplementary fuel source for electrical generation was the most cost-effective and environmentally sustainable solution. The costs of collection, storage, and possible shipment of used oil for recycling was proposed to be recovered from the oil purchaser through a levy placed on the oil when it was imported into the country. The development of collection system for used oil on Upolu and Savaii was examined in detail in consultation with stakeholders. It proposed establishing temporary storage sites with plastic drums (150 litre) and/or IBC's (intermediate storage containers 1,000 litre). Ideally the containers would be stored undercover and placed in a bunded area to contain any spillages. Collection locations were identified at service stations, hauliers/bus companies, construction companies, Samoa Shipping Corporation, and Electric Power Corporation (EPC). Bulk storage for collected oil was to be established at either the EPC or Petroleum Products

⁹Envirocare Engineering Consult Ltd (2013). *Cost Benefit Analysis of Used Oil Management Options for Samoa*. Unpublished Report to the Secretariat of the Pacific Environment Programme. 31 pp.

¹⁰Haynes, Leney and O'Grady (2018). *Desktop Review of Used Oil Management Data*. Consultancy to Assist SPREP and Pacific Island Countries in an Assessment of Options for Future Used Oil Management. 21pp.

¹¹MNRE (2014). *Used Oil Management Plan for Samoa*. SPREP. 38pp.

Supplies (PPS).

2.3.6 Draft Cost Benefit Analysis (2014)¹² of used oil management was completed for Samoa in 2014. It was estimated that approximately 660,000 litres of lubricating oils were imported into Samoa on an annual basis in 2012 which generates approximately 250,800 litres of used oil per annum (38% of the imported volume). The relative costs of environmentally sustainable and practical options for used oil disposal for Samoa are summarised below:

Practical Option	Levy to fund disposal (WST per litre)	Advantages of this disposal option	Disadvantages of this disposal option
Used oil added as a diesel fuel augments for local electricity generation	Levy cost of 2% of oil purchase price (i.e. 0.18 WST per lt).	<i>Generates local income from used oil.</i>	<i>Must include the use of a diesel particulate filter and catalytic converter to avoid breaching the Stockholm Convention and the Samoan Waste Management Act. Will only be a disposal option until 2020 when Samoa becomes energy self sufficient</i>
Point of sale addition of used oil (at a concentration of <1%) to all diesel fuel sold in Samoa	Levy cost of 2% of oil purchase price (i.e. 0.18 WST per lt).	<i>Generates income from used oil.</i>	<i>May breach the Samoan Waste Management Act and will breach the Stockholm Convention if vehicles are not fitted with filters and catalytic converters. May void engine warranties. Requires ongoing co-operation and good will of PPS</i>
Used oil shipped offshore for disposal to India	Levy cost of 9% of purchase price (i.e. 0.71 WST per lt).	<i>Environmentally sustainable option. Will have to be used when Samoa uses 100% renewable energy by 2020</i>	<i>More expensive disposal option</i>
Used oil shipped offshore for disposal to Fiji	Levy cost of 10% of purchase price (i.e. 0.78 WST per lt).	<i>Environmentally sustainable option. Will have to be used when Samoa uses 100% renewable energy by 2020</i>	<i>More expensive disposal option</i>

The analysis recommended that:

- Appropriate regulations and associated levy fee structures be developed for used oil management in Samoa.
- Appropriate collection and storage mechanisms for used oil established as soon as possible.
- A refined detailed analysis of the total cost to collect and ship used oil offshore to American Samoa, Asia, Australia, Fiji, India, and New Zealand for reuse be completed.

2.3.7 National Environment Sector Plan (2017-2021) noted ongoing improvement to solid waste management as a key national achievement and identified current waste management priorities including sound management of chemicals and hazardous waste and wastewater and operationalization of deposit levy schemes.

¹²Haynes and Vanderburg (2013). *Cost-benefit analysis of used oil management options for Samoa*. SPREP. 31 pp.

2.4 Institutional Frameworks for used oil management

2.4.1 SWOMP^{13,14}

The Samoa Waste Oil Management Programme (S.W.O.M.P) was launched in August 2019. The programme is a partnership between the Samoa Recycling and Waste Management Association (SRWMA) and MNRE, SPREP, Swire Shipping and spearheaded by Nissan Samoa with support from UNEP, and the Japan International Cooperation Agency (JICA). The program collects waste oil from Samoa. Approximately 41,000 lts of used oil have been collected to date in stage one of the programme. A major issue is verification of used oil quality prior to export being approved. The programme is currently assessing options to export the collected oil for recycling or reuse in a neighboring country. One option being investigated is potential used oil export to Fiji where it could potentially be used as an alternate energy source by the Blue Scope Steel Factory in Fiji to smelt waste scrap steel¹⁵. A second option is India as an export location. The oil could be potentially shipped for free under the Moana Taka Agreement between the Secretariat of the Regional Environment Program (S.P.R.E.P.) and SWIRE Shipping, who will transfer low value waste like oil to a collector on their trade route. To support the success of the program a \$0.20 sene fee will apply to every litre of waste oil collected which will aid in the sustainability of the programme and the continued export of waste from the region. Eventually, the project hopes to acquire a 11,000-25,000 litre Iso tank which can store the oil before shipment. But until then, producers will deliver their stock to a storage site in Tafaigata Landfill, or have it collected for a fee. One hundred, 1000 litre Intermediate Bulk Containers (IBCs) have been provided by UNEP to support the used oil collection programme.

2.5 National Used Oil Management Opportunities

Little data is available on past (inappropriate) methods used to dispose of used oil in Samoa, however disposal practices in 2012 were reported to include¹⁶:

- Ground marking of sports fields by schools and villages;
- Preservative use in timber such as fencing posts, farm buildings;
- Dust suppression on gravel roads and during road construction;
- Rust preventative for machinery and equipment exposed to the weather and to roofing and steel in building frames;
- Inclusion with other general rubbish or in open rubbish burning;
- Direct disposal into storm water drains or waterways or into ground; and
- Use as a weed killer.

In the past, Samoan used oil has been refined for reuse on a small scale, and more recently, it was recommended that the best management option was export to India, Australia or New Zealand for recycling.¹⁷ Blending used oil as a diesel extender in old electrical generators for national power generation was also proposed as a re-use option in 2013, but this was not implemented due to generator upgrades being carried out at that time.

¹³<https://www.sprep.org/news/samoa-waste-oil-management-programme-swomp-launched>

¹⁴<https://www.samoobserver.ws/category/samoa/48220>

¹⁵Past investigations have indicated that used oil imports to Fiji are already maximised and it is unlikely that Samoa will be able to dispose of used oil in Fiji in the immediate future

¹⁶EECL (2012). Use oils audit survey: An audit of used oils in Samoa. Unpublished Consultant Report to SPREP. 17pp.

¹⁷Haynes, Loney and O'Grady (2018). *Desktop Review of Used Oil Management Data*. Consultancy to Assist SPREP and Pacific Island Countries in an Assessment of Options for Future Used Oil Management. 21pp.

3. Inception and Stakeholder Meetings

- 3.1 A national inception meeting was held on the 8th February 2022 between MNRE, SPREP and the National Project Consultant, Ms Katenia Rasch. Draft meeting minutes are attached as Annex 1.
- 3.2 A national stakeholder workshop was held on the 8th March 2022. Participants were generally opposed to implementation of an advanced recycling fee and plans to export 60,000lts of collected used oil have stalled. Draft meeting minutes are attached as Annex 2.
- 3.3 The reluctance to support an advanced recycling fee was a major obstacle to improving used oil management in Samoa in the past, and a nationally agreed solution to this impasse will be critical to achieving any real long-term management of national used oil management. Stakeholder opinion on the feasibility of introduction of an advanced recycling fee will be a discussed further during future stakeholder consultations. This will include presentation of realistic scenarios and canvassing of alternative mechanisms and cost structures with each major stakeholder including national government representatives. Stakeholder views will be summarised and presented in the form of a cost benefit analysis in the next reporting phase.
- 3.4 Identified national stakeholders with an interest in improved used oil management in Samoa are listed below.

Stakeholder	Sector	Interest	Mechanism for engagement*
AA workshop	Mechanical workshop	Used oil producer	Face to face meeting when possible
Ah Liki Construction	Construction/Haulage	Used oil producer	Face to face meeting when possible
Apia Lua Company	Construction/Haulage		Face to face meeting when possible
Auto Saver	Mechanical workshop	Used oil producer	Face to face meeting when possible
ASCO Motors	Motor distributor/Mechanical workshop	Used oil producer	Face to face meeting when possible
Bluebird Transport and Construction	Construction/Haulage	Used oil producer	Face to face meeting when possible
Chamber of Commerce	Private Sector Secretariat		Face to face meeting when possible
Customs and Revenue, Ministry of	Government regulator	Management	Face to face meeting when possible
EPC	Electricity Utility	Used oil producer	Face to face meeting when possible
Ministry of Finance	Government regulator	Management	Face to face meeting when possible
Ford Samoa	Mechanical workshop	Used oil producer	Face to face meeting when possible
Goldstar	Petroleum retailer	Oil retailer	Face to face meeting when possible
Ministry of Health	Government regulator	Management	Face to face meeting when possible
Hyundai Service Centre	Motor distributor/Mechanical workshop		Face to face meeting when possible
JICA/JPRISM	Environmental	Management	Face to face meeting when possible
Kings Construction	Construction/Haulage		Face to face meeting when possible
Lee Transport	Construction/Haulage	Used oil producer	Face to face meeting when possible
Lucky Construction	Construction/Haulage	Used oil producer	Face to face meeting when possible
MCIL	Government regulator	Management	Face to face meeting when possible
MNRE	Government regulator	Management	Face to face meeting when possible
MOF	Petroleum Taskforce	Management	Face to face meeting when possible
Nissan Samoa	Mechanical workshop	Used oil producer	Face to face meeting when possible
Ott Construction	Construction/Haulage	Used oil producer	Face to face meeting when possible
PPS	Petroleum importer	Oil retailer	Face to face meeting when possible

Sakalafai Contractors	Construction/Haulage		Face to face meeting when possible
Samoa Shipping	Export	Export	Face to face meeting when possible
Silva Transport	Construction/Haulage	Used oil producer	Face to face meeting when possible
Smart Auto	Mechanical workshop	Used oil producer	Face to face meeting when possible
SPREP	Environmental	Management	Face to face meeting when possible
Samoa Shipping Corp	Export	Export	Face to face meeting when possible
SFESA	Emergency Services		Face to face meeting when possible
SRWMA	Recycling collective	Management	Face to face meeting when possible
STAR	Association?		Face to face meeting when possible
SWIRE	Export	Export	Face to face meeting when possible
Tokelau Office		Used oil producer	Face to face meeting when possible
Uncle Johnny's	Beverage and Foods Manufacturer	Used oil producer	Face to face meeting when possible
Vailima Breweries	Beverage and Foods Manufacturer	Used oil producer	Face to face meeting when possible

*A subset of major representatives of stakeholder groups will most likely be interviewed

4 Detailed Workplan

4.1.1 A logical step-by-step methodology that focuses on assessing used oil from the point it is generated until it is finally disposed of will be used to develop a national used oil management plan.

4.1.2 Used oil can originate from many sources and, as far as possible, all national sources will be explored. These sources typically include:

- Engine oil – typically includes crankcase oils from gasoline, diesel and LPG/CNG engines
- Brake fluids
- Gear oils
- Transmission fluids
- Hydraulic oils and fluids
- Compressor oils
- Refrigeration oils
- Industrial process oils
- Electrical insulating oil
- Metalworking fluids and oils
- Heat transfer oils
- Machining oils
- Ship's slops, bilge water, tank cleanings produced by vessels during normal shipboard operations
- Bottom clean-out waste from virgin fuel storage tanks, virgin fuel oil spill clean-ups, or other oil

4.1.3 The step-by-step methodology will include the following used oil life cycle stages:

- Potential advanced recycling fee options and approaches
- Generation
- Short-term storage for collection
- Collection and transportation
- Bulk storage
- Regulation and transport to end use
- Final disposal

4.1.4 Satisfactory disposal of used oil is expected to be mainly to off-shore destinations although

some local end uses may be deemed acceptable. Off-shore disposal is generally the preferred option throughout the Pacific although there are other local end use options in some countries such as the BlueScope Pacific Steel in Fiji.

4.1.5 A detailed series of questions will be developed that will gather detailed information about the above life cycle stages to inform project reporting and examine ways to:

- Increase collection
- Improve transport methods
- Seek satisfactory disposal methods
- Assess means for improvements
- Assess costs for improvements
- Assess training and capacity-building needed
- Target needs to each country's requirements.
- Determine potential pathways to develop Advance Disposal Fees for lubricating oils
- Review existing waste legislation and relevance to waste oils

4.1.6 The questions will be prepared electronically, and information can be recorded electronically or transferred as soon as possible from notes. Photos will be used extensively to supplement the data gathering and will be numbered and identified with care so they can be traced to sources.

4.1.7 Project timelines will be as described in the amended Contract

5. National Government Responsibilities

The Samoan Government is, as yet, to formally advise on its accepted responsibilities under the programme.

Annex 1. Inception Meeting with MNRE Minutes



Draft Meeting Minutes

Inception Meeting with Ministry of Natural Resources and Environment (MNRE)

8th February 2022, 1pm

Attendees.

No.	Name	Organization
1.	Seumalo Afele Failagi	MNRE
2.	Fiasoso Siasosi	MNRE
3.	Setoa Apo	MNRE
4.	Darren Bartley	MNRE
5.	Jullie Pillet	SPREP
6.	Katenia Rasch	Consultant

1. Opening of Meeting

Seumalo welcomed all in attendance, and introduced his team. Fiasoso; the Principal for Chemicals and Hazardous Waste Officer will be the lead and contact person for this project. Setoa Apo as the Solid Waste Management Officer is heavily involved with the JPRISM Project will provide support assistance to the Consultant for the Project. He mentioned the management of used oil in Samoa as a high priority but due to lack of human and financial resources had delayed much of the work. In addition, he thanked the assistance by the SWAP project for making it possible for the Consultant to carry out this work.

The Consultant provided the overview of the Project and outlined the five stages from Inception stage to development of a draft and final National Used Oil Management Plan. Emphasis was made on the next steps of the project where it was discussed the need of a National Stakeholder Consultation to meet Project Deliverables. It was discussed that due to the recent lockdown and currently restrictions to the Government State of Emergency that a

Consultation may not be possible however MNRE suggested that the major stakeholders could be contacted via video call to obtain required information and data. This was regarded a favorable option by all.

Julie stated an existing Used Oil Project supported by JICA and collaborated with the Samoa Recycling Waste Management Association (SRWMA) is underway and have a report to be finalized end of February and will share with the Consultant in the hope to inform this project.

Afele assured that MNRE will reach out to SRWMA for information to share with consultant in addition instructed his team to finalize the list of Stakeholders as mentioned as a required for the Stakeholder meeting. He added that a Memorandum of Understanding (MoU) exists stipulating the data sharing of project information and details from SRWMA to MNRE. He further outlined the importance of data being obtained from Projects by the government. Julie added a list of stakeholders was discussed amongst herself and JICA colleagues for the Project and will have it sent via email to all.

It was concluded that a Stakeholder Workshop as the next step will be assessed after the two (2) weeks level 2 lockdown as MNRE also had other workshops being held due to Covid lockdown. Other avenues of communication such as email and virtual meetings were discussed and agreed upon as alternatives.

Afele closed the meeting with assurance to Julie and the Consultant that MNRE will be readily available to support and assist where necessary.

Annex 2. National Stakeholder Meeting Notes



Meeting Notes

National Stakeholders Workshop

8 March 2022, 11am

ISSUES RAISED

SRWMA - currently have many challenges. There is no technical capacity within the association to deal with oil management.

Currently have in possession 50-60,000litres of Oil with no exportation or immediate plans to export any.

Near-deals to export required laboratory testing for oil as a prerequisite to export. Samoa cannot carry out any testing and is time consuming and expensive to send samples overseas for testing. SRWMA collect oil- but no capacity to asses any spillage/leakage or contamination when containers fail to contain oil contents.

Current

Chamber of Commerce strongly opposed the idea of a Deposit levy- penalizing and adding further pressure on the private sector/importer should not be the solution. Claims Samoa has too many policies and laws but there is poor enforcements and worries about illegal disposal if such mechanism is adopted.

CHAIR- Tony Talouli reminded all about the existing Oil problem with no exportation and no treatment and that we must all be part of the solution. He further added that perhaps a Deposit levy can be a pilot project to assess feasibility and practicality in the county.

SRWMA supports the introduction of a Deposit Levy mechanism.

Lessons from existing system is 0.20sene is unfeasible and some customers are reluctant to pay that fee.

ASCO- uses 1000L/month new oil. Any used oil is sent to SRWMA and mentioned that ASCO are big on supporting “Green” environmental projects such as these.

Solid Waste perspective- dealing with other waste stream – trial other countries.
ASCO- lack of awareness on legislation. Asked to share.

SILVA- emphasized on the need for government incentives on Oil and doesn't support levy mechanism,- if it trickles down to consumers as oil has already rises in recent years as well as cost of living and are reluctant to impose further burden on their customers.

Samoa Breweries Ltd- followed up on a proposal to put in deposit levy as proposed under PACWASTE PLUS.

This is being handled and piloted under different waste streams according to MNRE.

TONY- only 2 countries in pacific with used oil levy- NEW Cal and Tahiti.

JPRISM rep- added to discussion that AFD can apply success story from New Cal and Tahiti to apply to Samoa.

MoF- Samoa Petroleum Task Force- happy to see future consultations- will invite Task Force for their involvement.

Chamber- offer their existing system to disseminate questions on email to stakeholders who mostly are already their members.

Meeting closed 12:15pm.