



J-PRISM SAMOA



Promotion of Regional Initiatives on Solid Waste Management Samoa

PAGE 1

HIGHLIGHTS FROM2012 TO2013

ISSUE 1

JAN 2011– DEC 2011

- Project Pilot Plan being developed
- Report of Waste Characterization being produced
- Conducting Awareness Programs
- Training on Landfill Operation for Tafaigata Office

JAN 2012-AUGUST 2013

- Conducting Minimization & Segregation Workshop
- Review Shopping Bags Regulation
- Improvement of the Tafaigata Landfill Disposal Site
- Conducting Time & Motion Study on Zone A & Zone B1

OUTPUT 1: Improvement of Waste Collection Services & Waste Minimization are implemented in Urban Areas

Time & Motion Study

The Time & Motion Study was conducted in April and May 2013 in two rubbish collection zones at the urban area, Zone A & Zone B1. One officer and two casual workers with the driver were the study team. Its their first time conducting a Time & Motion Study. During the study they found out different issues need to improved for a better collection services especially for the urban area with a huge population. Not only for the services by the contractors but also the input from the public by packing their waste properly and in a safe platform for an easy and fast collection. Noted from the Study that not all the family in the urban area both collection zones have platforms. Attached are pictures of the Time & Motion Study at Zone B1, how the waste were collected and some difficulties that cause the delay on collection time



Waste Minimization & Segregation Workshop in the Community

The workshop was conducted in 3 days with 100 participants from the urban area. 1st and 2nd day with 30 participants each, and the last day was 40 participants with the same agenda. ACEO-DEC of MNRE Faleafaga Toni Tipama'a with his and The JICA Representative Mr Katshushiro Sasakai were speech on behalf of their organization on their Opening Remarks. The focus of this workshop is to clarify and give explanation to the public on WHY we need to minimized and segregated our waste. MNRE invite the Manager of the Pacific Recycled Company Mr Silafau John Sio and Ms Tilomai from the Women in Business to share their knowledge on how the Recycled Company handled recyclable materials and also Women in Business in using organic waste to produced compost. After the Workshop the participants visit the Women in Business Organic Farm in Nu'u and Pacific Recycled Company in Tafaigata for observation. They also practice the using of green waste and organic waste to start a compost.



Waste Characterization Survey

Waste Characterization was conducted in the November - December 2011. 40 households were randomly selected from rubbish collection Zone B2 and 7 commercial activities from town area for analysis. After the survey waste generation rate in the domestic sector is 0.38kg/person/day while the commercial sector is 0.01kg/m²/day. For composition of generated, green waste dominates waste generated rate daily for both domestic and commercial sector.



3R's Promotion



3R's is one of a method adopted from Japan to introduced in Samoa in a way to minimized waste in each residents also waste coming in to the landfill. Promoting 3R's on buses is one of a good way of public advertisement that people can see, read and think by looking at it. Not only it was advertised by decorating the bus body but the management of this bus company started responsible for their passengers litter by installing small rubbish bins inside the bus.

Composting Promotion



The Waste Management Section started working on building compost box for organic and green waste from local market and restaurant to promote this useful way of minimizing waste to be disposed at the landfill called COMPOST. Mr Seumanu deal with the managers of the local market and selected restaurant to make sure the waste will separate before transporting to dispose. This promotion of composting is not only for minimizing waste to disposed at the landfill by using the organic waste but also introduces segregation method to the local markets and selected restaurants.

Waste Awareness Programmes

Samoa is the first Pacific Island Country to adopt and install the Fukuoka Method Landfill in 2003. This Sanitary landfill is commonly known to experts as the Semi-aerobic landfill system. In Samoa, little is known to the public of this system beside its just a disposal system to dispose wastes. However, it is very important to introduce school students to the system and the Waste Management in Samoa. The Waste Management Section implemented a landfill visit program as an eye opening to students introducing them to the waste management in the country as part of the awareness program. Six primary schools and five secondary schools were involved in the program. Objectives of the Program: is to let students aware of the waste issues in Samoa and for students to prepare a presentation report on their fieldtrip to the whole school. The program included presentations, field visit to the landfill, health care incinerator, sludge facility and recycling facilities at Tafaigata. The students were interested in subjects discussed and they even coined in some simple ideas to minimize waste. They were surprised that they are also contributing to the waste generation and they should also be responsible for their wastes.



PRESENTATION

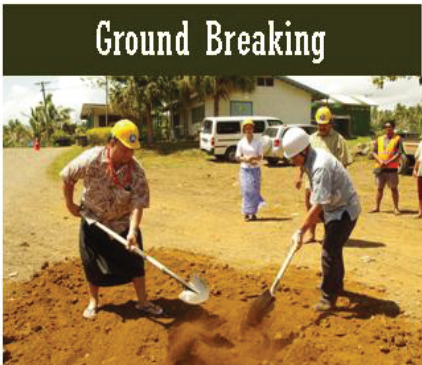


FIELD VISIT TO THE LANDFILL



FIELD VISIT TO THE RECYCLE COMPANY

OUTPUT 2 : Landfill Management Capacity at Tafaigata and Vaiaata is increased



Leachate Monitoring

Leachate testing result January – March 2013

Date	Sample Point	BOD	Color	Odor	Transparency	pH	DO
31/01/13	Pond	25mg/l	Light light yellow	n/a	26cm	8	5
	Wetland	-	Clear	n/a	22cm	7	4
	Borehole #3	-	Clear	n/a	Over 30cm	6	5
	Borehole #4	n	o		s	a	p
28/02/13	Pond	27mg/l	Light light green	n/a	18cm	6	4
	Wetland	n	o		s	a	p
	Borehole #3	-	clear	n/a	Over 30cm	6	5
	Borehole #4	n	o		S	a	p
26/03/13	Pond	27mg/l	Light light yellow	n/a	Over 30cm	8	3
	Wetland	-	Light light yellow	n/a	Over 30cm	8	5
	Borehole #3	-	Clear cloudy	n/a	Over 30cm	7	4.5
	Borehole #4	n	o		s	a	p
28/6/13	Pond	26mg/l	Light light yellow	n/a	Over 30cm	8	4
	Wetland	no	s	a	m	p	l
	Borehole #3	-	clear	n/a	26cm	6	6
	Borehole #4	no	s	a	m	p	l



Water Quality – Interpretation of Results
 4 samples were collected per month from 4 sample point, by looking at the results its shows that each sample was on safe from contamination. BOD should in between 15 – 40mg/l, Color should be in clear and light green or yellow, Odor should have no smell, Transparency must in between 20cm or over that shows the water is very clear, pH is between 6-

Landfill Maintenance



OUTPUT 3 : EXPERIENCES AND LESSONS LEARNT ARE SHARED ACROSS THE REGION

Overseas Missions from Okinawa Youth



18 visitors from the Okinawa Youth Development Programme visited Tafaigata Landfill on the 31st of July 2013. Principal officer of the Waste Management Section Mr Setoa Apo conducted a presentation on the overall responsibilities carried out by the Waste Management Section. He also explained to them the method that Tafaigata currently used was adopted from Japan their home county which is called Fukuoka Method. After the presentation the youth visited the Tafaigata Semi-Aerobic Landfill to observed how waste management section maintain the landfill.



Setoa Apo
Principal Waste Management Officer
Email: setoa.apo@man.gov.ws



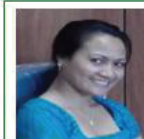
Semeana Mikaela To'ofa
Senior Landfill Officer
Email: mikaela.to'ofa@man.gov.ws



Fetuwaluano Alene'ala'alelano
Senior Waste Planning & Policy Officer
Email: fetuwaluano.alene'ala'alelano@man.gov.ws



Fala'aho Talo
Landfill Officer



Pele Tutu'aveva
Quality Officer
Email: pele.tutu'aveva@man.gov.ws

For more information do not hesitate to contact the above officers phone # 22267 & 67200