

Meeting Minutes

Purpose: Solid Waste Planning – Northern Islands Mayor’s Office (NIMO)

Location: Mayor of the Northern Islands Office (Saipan)

Date & Time: November 27, 2023. 1:00-2:00 p.m. ChST

Attendees: Mayor Valentino Taisacan, Special Assistant Mr. Mark Rabauliman, and Mr. Matthew Nieswender Solid Waste Analyst with the Office of Planning and Development

During the meeting Matt was informed that Pagan has people living on it now. (Meaning it had been cleared by CNMI Homeland Security – Pagan had been closed due to volcanic/smoke activity and was not “open” until the Spring/Summer of 2023).

NIMO explained that **three islands**, Pagan, Alamagan, and Agrihan need infrastructure before people return to live on the islands. Internet service, latrines/septic systems/flush toilets, a second source of consistent electric supply (wind power), and solid waste disposal were mentioned as examples of infrastructure needed.

Anatahan was mentioned as another island which NIMO will be developing infrastructure on, but this island would be developed after the other three.

Although the US Census listed 7 people living in the Northern Islands, NIMO is planning for **25-50 people living on Pagan, Alamagan, and Agrihan.**

The total waste generated by homesteaders is different from those living on more developed islands areas that have grocery stores, small businesses (such as restaurants and hotels), government offices, and schools.

Matt was given the task to look at other Island areas to see if data is available regarding solid waste generation rates. See Section entitled, “ADDENDUM A”.

Wastes are from materials brought by ship to the residents – these supply runs happen approximately every 3-4 months depending on the weather. Food packaging (plastic, paper, aluminum, and steel/tin) is one of the largest contributors to the waste stream. The residents of the Northern Islands are often quite ingenious in their re-use of containers. Domesticated animals (pigs and dogs) assist in the final consumption of food wastes.

Tourism is expected to increase as well. Although the tourists would be expected to take all waste back with them, it is likely tourism would generate some soled wastes. There were no projections for tourism.

Two more key elements were discussed to be added into the Solid Waste Plan

- 1.) A manual steel can crusher (making the return of this material via boat easier) – see <https://compactorsinc.com/can-crushers-power-krush-manual/> for a product managing #10 food

cans. It might be possible that a similar tool can be made locally for large and small cans for use on each island.

- 2.) Assessment, Design, Construction of a Small Community Exempt Landfill on the three islands. Such a landfill would require close coordination with BECQ. BECQ has some discretion for siting criteria as described in the Federal Register (*Federal Register / Vol. 68, No. 2/ Friday, January 3, 2003/Notices*). Alaska Dept. of Env. Conservation has dealt with remote camps and the solid waste disposal needs of these camps – these permits are called “**General Permit for Remote Camps and Lodges with Fewer than 50 Residents.**” NIMO may want to discuss with BECQ what a similar permit in the Northern Islands might look like. See <file:///C:/Users/USER/Downloads/gp-camp-2023.pdf>.

The existing elements in the Draft Solid Waste Plan were OK and will not be changed.

OPD will work to incorporate these additional thoughts in the Solid Waste Plan.

ADDENDUM A

After the meeting, on 11/30, Matt reviewed various solid waste reports on small island developing states in the Pacific (Pacific SIDS). From this review – the generation rates for places like Vanuatu, Cook Islands, Tonga, etc. is 0.2 – 1.0 kg/person/day (0.44 to 2.2 pounds/person/day). For the purposes of planning, 1.0 pounds/person/day will be used as metal and aluminum would not be discarded as waste, food will be fed to domesticated animals and some fiber (paper) wastes will be burned to assist in the lighting and maintenance of fires used for cooking, preserving meat, etc. The residents of the Northern islands, currently, do not always stay for one year, consequently, 35 people per island will be used for the purposes of solid waste planning.

1.0 pound/person/day * 35 people avg./year * 365 days/year generates 12,775 pounds or 6.4 tons per year. If MSW waste is 250 pounds loose per cubic yard, then 51 cubic yards of space per year would be consumed if the waste were not compacted in some fashion. Slight compaction reaching 400 pounds per cubic yard would consume 32 cubic yards. Cover soil could be assumed to consume 25% more space. 51 cy of waste effectively requires about 64 cy of space; and 32 cy of waste effectively requires about 40 cy of space.

A “right-sized” small community exempt landfill (a trench) 40 feet long by 20 feet wide by 5 feet deep (only level with ground level) would supply approximately 148 cubic yards of space or 3.5 - 4.5 years of space.

A larger footprint could be created by expanding the site horizontally; but it is projected that site conditions will determine the actual footprint. It is not expected this type of landfill would develop much past ground level due to the limitation of equipment. The right sized SCEL landfill will likely be dug by hand as needed with excavated soil used for cover.

