## US Environmental Protection Agency – Work in the Freely Associated States

Angela Hendrichsen Sandoval, P.E. – FAS Circuit Rider Engineer
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### **EPA Overarching Regional Goals**

- Safeguard the environmental health of the U.S. Affiliated Pacific Islands, by addressing environmental deficiencies such as inadequate water infrastructure, open dumps, and unaddressed hazardous waste sites.
- Build local environmental protection capacity by providing resources, technical assistance and training.



## **Mechanisms for Engagement**

- Quarterly Pacific Islands
   Environmental Directors Meetings
- Biannual Pacific Islands
   Environmental Conference (PIEC)
- Water Quality Labs EPA
   Certification Program
- Technical Assistance
- Department of State and Department of Interior Interagency Agreements





# Interagency Agreements – DOI, Dept of State and EPA

#### **Two Key Activities**

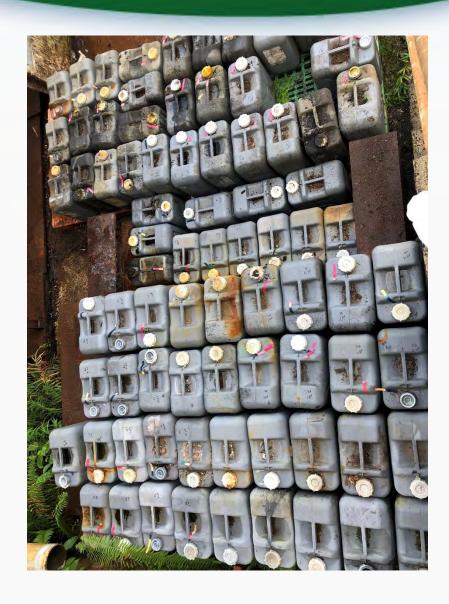
- Hazardous Chemical Removal and Training Chris Reiner/Bret Moxley
- FAS Engineer Circuit Rider Angela Sandoval

#### **Purpose**

- Increase resiliency in the FAS by focusing on:
  - Removing chemical threats to resilience
  - Improve resiliency of water, wastewater and solid waste infrastructure and regulatory programs
  - Building FAS capacity
  - Sanitary Surveys at WTPs

## **HW Assessment July 2022**







#### **HW Removal Nov 2022**





Removed

13 Hazmat Staff Trained



### **Circuit Rider Engineer**

- "Local" point of contact for the FAS based in Guam
- Better communication, opportunities and ability to visit the FAS more easily and frequently
- Voice for the FAS inside the EPA/US Government to focus specifically on env issues
- Provide "on the ground" technical assistance
- Compile priorities
- Seek funding and technical assistance opportunities



#### **Circuit Rider Engineer**

- Relocated to Guam end of July 2022
- Initial Visits to all FAS Islands
- Initial findings show that there is still great need in both safe
   Drinking Water and Solid/Hazardous
   Waste management.



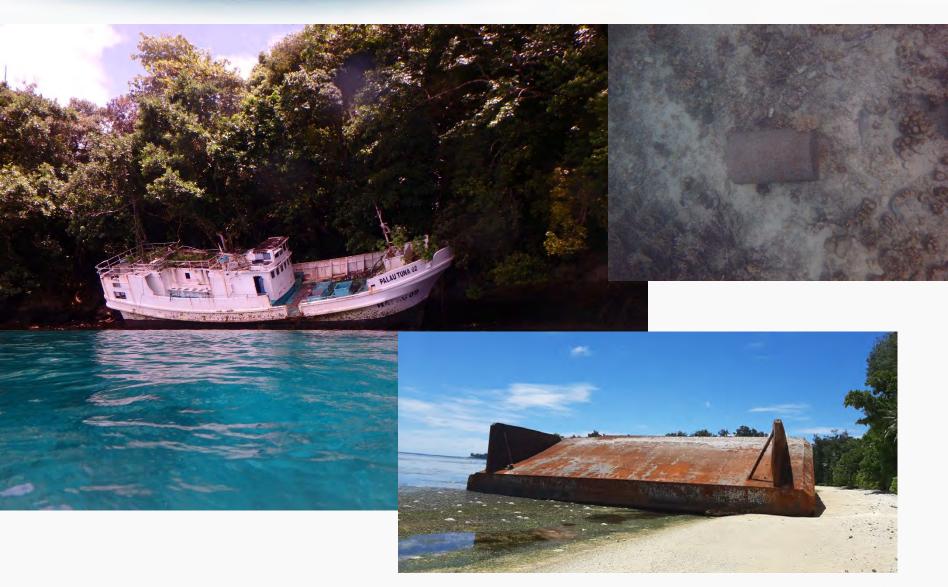


## Circuit Rider Palau Visit Sept 2022/Jan 2023/July 2023

- Meet Environmental Staff/Board
- Needs Assessment
- Site Visits to Drinking Water Plants, Landfills,
   Open Dump, Recycling Center and ADV sites
- Sanitary Surveys at 3 Rural Water Systems
- PIEC July 31-Aug 4, 2023

## Brokered a Partnership for NOAA Marine Debris Grant Award for \$4M





## Sanitary Survey at Palau's Ollei WTP







## Peleliu Unmanaged Open Dump



#### Pacific Island Env Conference





- Bi-Annual Conference Over 200 people from all US Territories and FAS in attendance (others too!)
- 38 People trained on HAZMAT Awareness and Response



#### **Circuit Rider FSM Visit**

- Nov 22/Apr 23- Pohnpei, Dec 22/Mar 23/ Aug 23-Chuuk, Feb 23-Kosrae, Sept 23 - Yap
- Meet National and State Govt
- Needs Assessment
- Site Visits to Drinking Water Plants, Wastewater Plants, Solid Waste Management, and Recycling Centers
- SS at Chuuk and Pohnpei WTPs
- Attended Joint Environmental and Emergency Management Platform

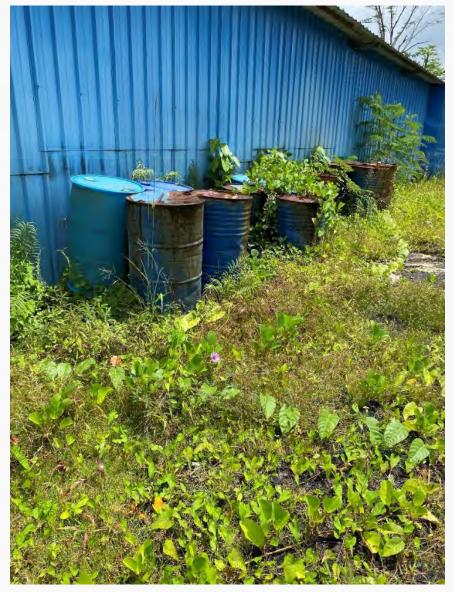
Site Visit- Pohnpei Water and Sewer



## Pohnpei Sanitary Survey







## Site Visit Pohnpei Waste Management





#### Chuuk Site Visit - Waste Issues







#### Chuuk Site Visit – Water Issues









## Chuuk Sanitary Survey







#### Kosrae Site Visit - Waste Issues

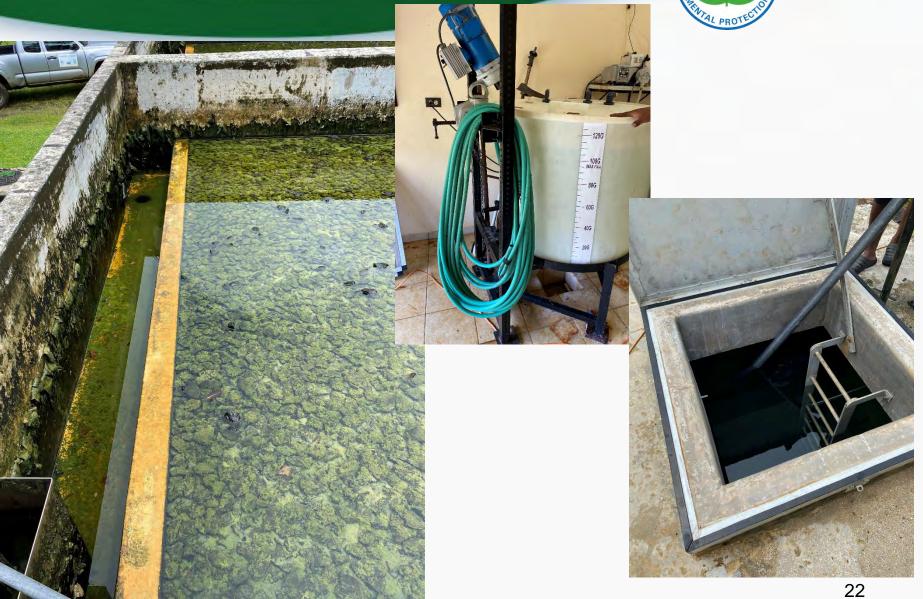








#### Kosrae Site Visit - Water Issues



## Yap Site Visit - Waste Issues

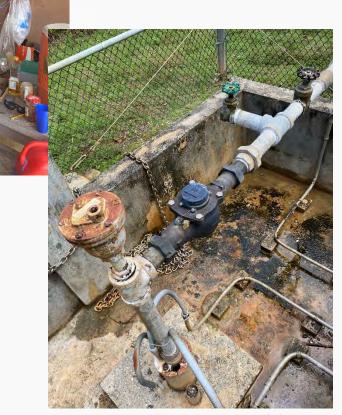






## Yap Site Visit - Water and Sewer







## Circuit Rider Republic of Marshall Islands Visit- Feb 2023

- Majuro and Kwajalein only
- Meet Environmental Staff
- Needs Assessment
- Site Visits to Drinking Water Plants, Landfills, Recycling Center, Waste Oil Storage, Medical Incinerator and Wastewater Outfall
- Sanitary Survey tentatively scheduled for Dec

#### RMI Site Visit - Waste Issues







#### RMI Site Visit - Water Issues











## **Initial Challenges**

- So much need! Where to begin?
- Zero US EPA funding for FAS for any projects or Infrastructure
- Lots of players with lots of projects
- Lack of capacity or expertise to manage additional funding or projects
- Not enough capacity to apply for most grants
- New challenge will be to effectively spend upcoming Compact funds and keep in Environmental Sector



#### **Initial Wins**

- Chemical Removal Success in Palau Should ship by end of July.
- \$4M for ADV Removal in Palau, Yap/RMI
- Pohnpei Ipat Water Storage Tank (Others too!)
- Chlorine Injector malfunction at Chuuk hospital supply well
- Chlorine short circuiting at Chuuk drinking water well/over chlorination at 4 residences
- Collaboration with ADB to address critical issues at Utwe water plant and to assist with future projects, as well as getting USDA funding back on the radar.
- Addressing bottled water providers oversight in FSM
- Environmentally focused oversight and coordination



#### **Initial Goals**

- Matching needs with funding
  - USDA Rural Development- can do both DW and SW projects- SS deficiencies?
  - DOI grants for Insular Areas
- Obtain continuation of IA's with DOI/DOS
  - More funding for waste removal
  - Keep and/or expand the Circuit Rider position
- Set up a reoccurring Operator Certification Program
  - model after EPA Lab Certification Program
- Look for opportunities for additional collaboration
- Assist in prioritizing Env Sector Compact spending



Thank you!

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