

Impact in Renewables and Climate Change

Integrated Waste Management Facility

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Our Purpose

TWM exists to create a better reality for PNG, our environment, people and culture

Our Vision

To showcase PNG as a leader in developing world class essential services that create a positive impact on the environment and society

Our Values

- Lead The Way
- Live Your Legacy
- Be Honest
- We Care
- Be Safe
- Act Sustainably



Circular in our Approach – Delivering Change

ESG Principles and Guidelines

- **Triple ISO accredited** since 2015: Quality (9001), OH&S (45001) and Env. (14001).
- **TWM Information Management System.**
- **Level 3 Environment Permit EP-L3(486)** - the only waste services company to hold such a permit in PNG.
- Alignment to **IFC E&S Performance Standards**, and **HSE Guidelines**.
- Infrastructure investment designed and operated to **world class standards** (e.g. Vic EPA, US EPA, GIIP, AS) – **De-risking our clients and the country's profile**
- Interface and Collaboration with Key stakeholders – Government, Community, Clients and Partners
- **Investment in Human Capital:**
 - **ECITB** - Engineering Construction Industry Training Board accredited trainer. - Petrotekno (Indonesia RTO); Registered Training Organization (**RTO**), accredited by PNG Dep. Higher Ed., Research, Science & Tech.
 - **PALM** – Pacific Aust. Labor Mobility Program
 - **Graduate Development & Training Program**



PETRO TEKNO



A Safe Partner

- Challenging the Trend: Industry-leading Safety, Health & Environmental Performance

	TWM PNG Safety Performance	2019	2020	2021	2022	2023	2024
a	Total Manhour Worked	3115627	4128867	4248246	444627	469052	483887
b	Number of Loss Time Injuries (LTI)	0.00	0.00	0.00	0.00	0.00	0.00
c	Number of Total Lost Days	0.00	0.00	0.00	0.00	0.00	0.00
d	Number of Fatalities	0.00	0.00	0.00	0.00	0.00	0.00
e	In-plant / property damage	17.00	36.00	13.00	6.00	17.00	257.00
f	First Aid Treatment	0.00	0.00	1.00	0.00	1.00	0.00
g	Environment incident	1.00	2.00	10.00	3.00	6.00	13.00
h	Medical Treatment, Injuries (MTI) (Except First Aid)	0.00	0.00	0.00	3.00	6.00	0.00
i	Number of Restricted Work Cases	0.00	0.00	0.00	0.00	0.00	1.00
j	Number of Recordable Cases	0.00	0.00	0.00	3.00	5.00	0.00
k	Loss Time Injury Rate (LTIR)	0.00	0.00	0.00	0.00	0.00	0.00
l	Total Recordable Incident Rate (TRIR)	0.00	0.00	0.00	1.35	1.79	0.00
m	Severity Rate(SR)	0.00	0.00	0.00	0.00	0.00	0.00

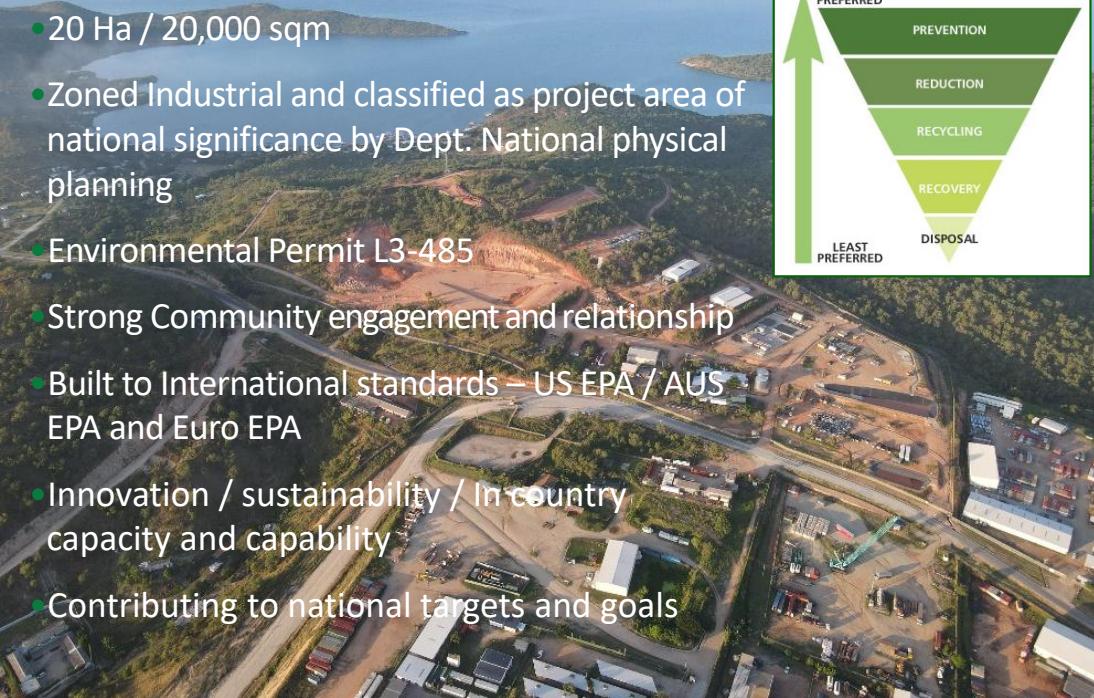
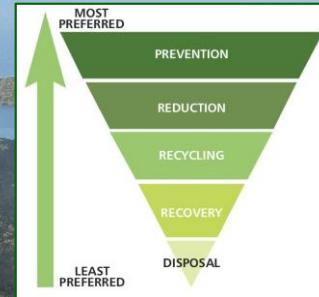
For our reference: Note that in PNG we typically report against 200,000 manhours in PNG.

- Setting the standard: Workforce and infrastructure dev. Building in-country capability and capacity



Key Infrastructure Investment – TWM Roku IWMF

- 20 Ha / 20,000 sqm
- Zoned Industrial and classified as project area of national significance by Dept. National physical planning
- Environmental Permit L3-485
- Strong Community engagement and relationship
- Built to International standards – US EPA / AUS EPA and Euro EPA
- Innovation / sustainability / In country capacity and capability
- Contributing to national targets and goals



Strategically located:

- 10KM LNGP, Adjacent to AES Industrial Park and Wharf, 8KM Motu Kea Terminal and 20KM from Port Moresby CBD
- Pacific solution – Western hub (PNG, pacific island and Timor Leste)

Class 1 Engineered Landfill



LOCALLY LED
PACIFIC FIRST
WORLD-CLASS

The only Hazardous Class landfill in PNG

Constructed with a Best Practice lining system
(meeting US, Aus, Euro and UK EPA standards)

Stage 1 – 11,000m³ (complete)

Stage 2 – 35,000m³

Stage 3 - >130,000m³

Self-performed by TWM Construction

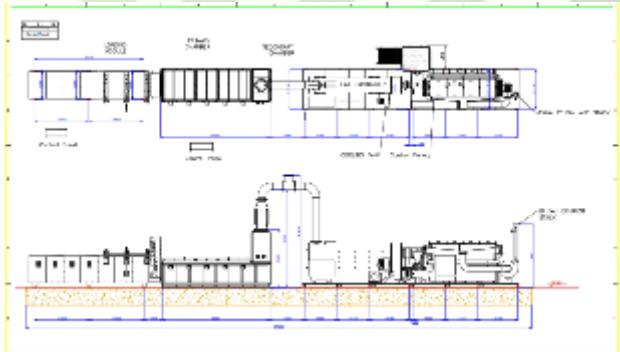


High Temperature Incineration



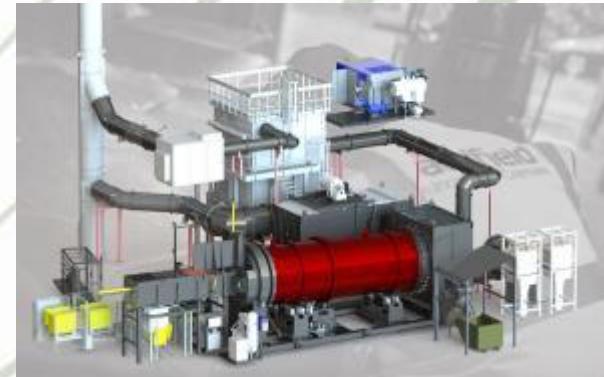
Safe and secure treatment of hazardous waste streams (incl. biohazards, chemicals, pharmaceuticals, solvents).

- Temp. $>1000^{\circ}\text{C}$ to achieve waste destruction and volume reduction
- Suitable for all wastes - incl. medical, hazardous
- Up to 500kg/hr capacity
- Diesel and or PFO (recycled oil) fired unit
- Pollution Control System



Designed to PNG,
*US EPA and *EU
standards

Replacement due
2027 designed to
IFC performance
standards



Hazardous Waste Management



Designed to fully comply with Australian standards AS 1940



Management in strict observation of specific hazards (SDS)



Treatment to render inert / non-hazardous to people and environment

Holder of 12 Waigani Australian hazardous waste export permits since 2016

Material Type
Waste Acids
Waste Alkalis
Waste Biocides
Non Halogenated Solvents
Waste Oil
Oily Water
Oxidizers
Activated Carbon



IMDG Certified

Full Waste Tracking

Resource Recovery Centre (RRF)



A Step Change for PNG!
Shifting PNG to the forefront for
Sustainable Waste Management



- Waste sorting and segregation
- Solids processing
- E-waste processing line
- Recovery of resources (RRRR)
- Plastics recycling

Conclusion

"In a circular economy, waste is not the end—it's the beginning of something new."

- *Policy & Regulation*
- *Good Leadership – Transparency*
- *Responsible decision making – With the end in mind*
- *Let us be passionate, committed and disciplined*

Our first 50 years – Protecting environment, our people and culture is embedded in the constitution of PNG. Our founding fathers and mothers had this vision.

The next 50 years is now up to each and everyone of us to play our role in creating a more sustainable, cleaner and greener future for PNG, the pacific Islands region and the planet.



Tenkyu tru

