

# The Ash Problem — What the EIA Actually Shows

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*Analysis based on OCR of TNG-EIA-APP-M Bottom Ash and Fly Ash Reuse Report (14 pages total, GHD Pty Ltd, 3 March 2026, prepared for The Next Generation Fiji).*

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**The incinerator will produce up to 196,000 tonnes of hazardous and non-hazardous ash residue every year. There is no committed disposal plan. The proposed solution is a UK company with no Fiji presence, whose marketing brochure is literally pasted into the appendix. The document's own final conclusion recommends that TNG investigate whether exporting the ash is even legal under international law. And the document says it must not be relied upon.**

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### The Eight Critical Failures

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#### 1. The Document Explicitly Says It Must Not Be Relied Upon — And Was Never Intended to Be

The purpose clause in Section 1.1 is unusually direct:

*“This report is provided as an interim communication under our agreement with The Next Generation Fiji. It is provided to foster discussion in relation to technical matters associated with the project and should not be relied upon in any way or for any purpose.”*

This is not a risk assessment. It is a discussion paper. The difference matters enormously: this document was submitted as part of an EIA meant to guide a government decision affecting millions of people and an irreplaceable coastline. It says, in its own words, that it should not be relied upon for any purpose.

The standard GHD disclaimer appears on the footer of every page:

*“This document is in draft form. The contents, including any opinions, conclusions or recommendations contained in, or which may be implied from, this draft document must not be relied upon. GHD reserves the right, at any time, without notice, to modify or retract any part or all of the draft document.”*

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## **2. The Facility Produces Up to 196,000 Tonnes of Ash Residue Every Year — With No Plan for Any of It**

The document acknowledges the APCr (Air Pollution Control residue — fly ash from the flue gas cleaning system) output clearly:

*“The amount of APCr generated by an EfW facility is depended on feedstock characteristics but is typically in the range of 2-6% of the tonnage processed. The proposed Fiji EfW facility will have a design capacity of 900,000 tonnes per annum (tpa), so at full capacity the facility would be expected to generate approximately 18,000 to 54,000 tpa of APCr.”*

18,000 to 54,000 tonnes of APCr per year. Every year. For 25–30 years.

What the document does not mention is bottom ash — the coarser residue that constitutes approximately 20–30% of the waste stream by weight. At 900,000 tpa throughput, bottom ash production would be approximately 130,000 to 180,000 tpa. It does not appear in this document despite being half of its title.

Combined ash residue from this facility:

**up to approximately 196,000 to 234,000 tonnes per year**

— in a country that produces only 200,000 tonnes of waste in total annually.

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## **3. APCr Is Classified as Hazardous Waste — Explicitly, by TNG’s Own Consultants**

There is no ambiguity on this point:

*“Unless subjected to further treatment, APCr is generally classified as hazardous waste.”*

This is GHD’s own characterisation. The fly ash from this incinerator — produced every day, year after year — is hazardous waste by default. Treatment is described as a possibility, not a commitment.

The material concentrates heavy metals (chromium, lead, zinc, mercury, cadmium), dioxins, and furans drawn from the entire waste stream. It must be stored, handled, transported, and ultimately disposed of or processed under hazardous waste protocols. Where that happens — and how — is the subject of this report.

The report provides no answer.

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#### 4. Three Disposal Options Are Described — None Is Committed To

Section 2.1 presents three theoretical approaches to APCr management:

1. **Landfill** — burial in a suitably engineered hazardous waste facility
2. **Immobilisation** — blending with cement to reduce leachability, then landfill or use as structural elements
3. **Carbonation** — using CO<sub>2</sub> to react with the APCr to form a lightweight aggregate

The document discusses each option. It does not select one. It does not commit to one. It does not identify a licensed facility in Fiji capable of receiving hazardous waste. It does not state what happens to the ash from day one of operation.

There is no landfill in Fiji certified to receive hazardous waste at this scale. There is no mention of building one. There is no environmental assessment for one. This is not addressed.

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#### 5. The Proposed “Solution” Is a UK Company Whose Marketing Brochure Is Literally Appendix A

The carbonation approach is presented via a specific vendor: UK-based O.C.O. Technology:

*“UK-based O.C.O. Technology utilises accelerated carbonation to stabilise APCr from EfW facilities... The carbonated APCr is then reused as a carbon-negative manufactured limestone aggregate for the construction industry.”*

*“OCO is a recognised leader in the field, having achieved End of Waste status in the UK for its APCr treatment technology.”*

“End of Waste status in the UK” is a UK regulatory designation. It has no legal standing in Fiji. There is no equivalent Fijian regulatory framework. There is no assessment of whether Fiji’s construction industry could absorb tens of thousands of tonnes of processed ash

aggregate annually. There is no signed agreement with OCO Technology. There is no evidence OCO Technology has any presence, licence, or operational capacity in Fiji or the Pacific.

Appendix A of this report is OCO Technology’s marketing brochure — downloaded from their website, printed, and appended. It is not a contract, a technical assessment, a feasibility study, or a regulatory approval. It is advertising material.

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## **6. The Final Technical Conclusion of the Report Is That Exporting the Ash May Be Illegal — And Recommends “Investigation”**

Section 2.3 is the most damaging passage in the document. It states:

*“There are restrictions on overseas transport (transshipment) of wastes from Australia and other countries, including household waste, mixed plastics and other hazardous materials. These include the Basel, Rotterdam and Stockholm Conventions.”*

*“Investigation of constraints on export from country of origin and import of residues from the proposed EfW facility, and measures that would need to be implemented to demonstrate compliance, is recommended.”*

Read that carefully. TNG’s own consultants are telling their own client, in the EIA submission document, that they should investigate whether the ash export plan complies with international law — because they have not done so.

The carbonation solution depends on shipping processed ash out of Fiji. The Basel Convention restricts transboundary movement of hazardous waste. The Rotterdam Convention covers chemicals. The Stockholm Convention covers persistent organic pollutants. Fly ash from mixed municipal waste incineration contains persistent organic pollutants.

GHD does not assess whether the ash export plan is legal. They recommend investigation. That investigation has not been completed. It is not documented in the EIA. The disposal pathway for the most toxic output of this facility is legally unresolved — by the applicant’s own admission.

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## **7. There Is No Environmental Risk Assessment for Ash Storage, Leachate, or Marine Contamination**

Section 2.2 — “APCr handling and storage considerations” — is three sentences:

*“APCr is captured and pneumatically conveyed to silos at the EfW facility (similar to cement silos), and usually transported by road via conventional cement transport tankers. The material is hazardous and requires appropriate management and treatment.”*

That is the entirety of the storage assessment. Two sentences. No assessment of: - Leachate from ash storage under rainfall - Contamination pathways to the Dreketi Inlet and adjacent mangroves - Runoff to the adjacent Pacific Ocean - Ash spill scenarios during transport by road or sea - Long-term groundwater contamination from on-site storage - Atmospheric dispersion from silo venting

The facility sits on a coastal peninsula surrounded by mangroves and ocean. The ash is hazardous. The environmental risk from storing it there is not assessed.

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## **8. Bottom Ash Is Not Assessed at All — Despite Being Half of the Document’s Title**

The document is titled “Bottom Ash and Fly Ash Reuse Report.” Bottom ash — the coarser residue from the furnace floor, constituting approximately 20–30% of the waste stream — does not appear in the body of the report.

At 900,000 tpa throughput, the facility would produce approximately 130,000 to 180,000 tonnes of bottom ash annually. Bottom ash from mixed municipal waste carries significant heavy metal contamination including lead, copper, zinc, and barium, and may contain unburned organic material including PAHs (polycyclic aromatic hydrocarbons).

There is no plan for it. There is no mention of it. The document title is false to its own content.

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## **What This Document Actually Is**

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Nine pages of substantive content. Three pages describing the problem (APCr is hazardous, there are three options). Two pages describing a UK technology with no Fiji presence. One paragraph on storage. One paragraph acknowledging the ash export plan may violate international law.

Then a marketing brochure.

This is not an ash management plan. It is a placeholder submitted to the regulator to suggest that an ash management plan might eventually exist. It does not identify a receiving facility. It does not assess environmental risk. It does not establish legal compliance. It does not commit to any approach.

The EIA presents the incinerator as an energy solution. Appendix M reveals that the most dangerous physical output of that incinerator — tens of thousands of tonnes of hazardous residue every year — has no destination, no treatment plan, no legal export pathway, and no environmental safeguards. It all stays in Fiji.

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## Summary of Failures

Issue	Status
Committed ash disposal plan	None — three options described, none selected
Licensed hazardous waste facility identified	None in Fiji
Bottom ash assessed	Not mentioned
APCr classified as hazardous	Yes — explicitly by GHD
OCO Technology agreement	No — marketing brochure only
Basel/Stockholm/Rotterdam compliance confirmed	Not assessed — “investigation recommended”
Leachate/marine contamination assessment	Not assessed
Cyclone/flood risk to ash storage	Not assessed
Site visits for storage assessment	Not mentioned
Document status	“Interim communication — must not be relied upon”
GHD liability	Disclaimed in full

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## What Remains to Be Analysed

- **Appendix K — Hydrodynamic Modelling** (*does it model ash leachate transport to the ocean and mangroves?*)

- **Appendix H – Flood Study** (*does it assess ash stockpile inundation risk?*)
  - **Appendix Q – Marine Ecology Assessment** (*does it identify ash contamination as a marine threat?*)
  - **Appendix S – Mangrove Management Plan** (*does it address ash leachate as a mangrove contamination pathway?*)
  - **Appendix G – Climate Risk Scan** (*does it assess long-term ash storage under climate projections?*)
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*Analysis prepared: May 2026 Source document: GHD Pty Ltd for The Next Generation Fiji – Bottom Ash and Fly Ash Reuse Report, Fiji Energy from Waste Project, 3 March 2026, Project No. 12675112. Submitted as Appendix M to the TNG Fiji Environmental Impact Assessment, received by Fiji Ministry of Environment and Climate Change, March 2026.*