

## IGO 2024 TAILINGS STORAGE FACILITY DISCLOSURE

### Introduction

Tailing Storage Facilities ('TSF') are surface impoundments used for the disposal and storage of fine-grained slurried mineral wastes that are discharged from mineral processing facilities following the extraction of the desired minerals from the feed ore. The improper management of TSFs can significantly increase the risk of a catastrophic event impacting human and environmental health.

IGO Limited wholly owns and operates three nickel assets in Western Australia, including the Nova Operation, the Forrestania Operation, and the Cosmos Project, with each asset containing a processing plant and TSF. A listing of TSF information for each asset is provided in Table 1.

The Cosmos Project transitioned into care and maintenance in early 2024. During 2024, the Forrestania Operation will reach the end of mine life and is due to enter into care and maintenance in September quarter 2024.

**Table 1: List of Tailings Storage Facilities**

| Operation      | Asset Status         | TSF Name               | TSF Status | TSF Design                              |
|----------------|----------------------|------------------------|------------|---|
| Nova           | Operational          | Nova TSF               | Active     | Paddock, HDPE lined                     |
| Forrestania    | Operational          | Cosmic Boy TSF (North) | Inactive   | Paddock, upstream construction, unlined |
| Forrestania    | Operational          | Cosmic Boy TSF (South) | Active     | Paddock, upstream construction, unlined |
| Cosmos Project | Care and maintenance | Cosmos TSF             | Active     | Paddock, upstream construction, unlined |

### Tailings Management Systems

Our management approach seeks to ensure the integrity and stability of our TSFs and covers the entire lifecycle of tailings storage, from initial design and construction to ongoing operation, rigorous monitoring, and eventual closure. The effective management of storage of tailings requires rigorous design practices, comprehensive monitoring and management programs, independent auditing and strict corporate governance.

The TSFs listed in Table 1 are operated subject to the Western Australian *Mines Safety and Inspection Act 1994* and the *Mining Act 1978* as administered by the Western Australian Department of Energy, Mines, Industry Regulation and Safety (DEMIRS). DEMIRS has produced a Code of Practice to assist industry to meet the legislative TSF management obligations. IGO conforms to these requirements as independently verified by external specialist tailings management consultants. We also manage our TSFs in accordance



with the Australian National Committee on Large Dams (ANCOLD) standards and codes.

The Company acknowledges the Global Industry Standard on Tailings Management (GISTM) with the objective of causing no harm to people or the environment through tailings facility design, operation and closure. This year we have undertaken a review of our tailings management practices, including the potential implementation of the GISTM. As an outcome of the review, and in the context of the majority of IGO's managed assets entering (or soon to be entering) into care and maintenance or mine closure, IGO will pursue partial alignment with GISTM across all our operations with a focus on improving governance of tailings management and regular internal progress reporting to our CEO.

Beyond the statutory obligations, all TSFs at IGO-operated sites are subject to IGO's Environmental Group Standard 3 – Mineral Waste Management which applies to management of waste rock and tailings. A copy of this standard is available on the IGO website at [www.igo.com.au](http://www.igo.com.au).

IGO's Environmental Group Standard 3 - Mineral Waste Management specifically addresses the minimum requirements for the development of a Mineral Waste Management Plan (MWMP) – also known as a Tailings Management Plan. The MWMP includes a risk assessment, completed in accordance with IGO's Risk Management Standards, and changes to the design or operation of tailings dams are managed in accordance with IGO's Management of Change Standard.

As outlined in IGO's Environmental Group Standard 3 - Mineral Waste Management, we strive to minimise adverse environmental impacts, protect communities, and reduce long-term post-closure liabilities. We continue to review our Emergency Management Plans and Crisis Management Plans to assess and mitigate the potential impacts on our people, the wider community and the environment in the unlikely event of a TSF failure.

A handwritten signature in black ink, appearing to read 'Chris Carr'.

**Chris Carr**  
Chief Operating Officer (Acting)

A handwritten signature in black ink, appearing to read 'Sam Retallack'.

**Sam Retallack**  
Chief People Officer



**Table 2: IGO 2024 TSF Data**

|   | Notes   | Nova TSF  | Cosmic Boy TSF (North)                          | Cosmic Boy TSF (South)  | Cosmos TSF  |
|---|---------|---|---|---|---|
| <b>1. "Tailings Dam" Name/identifier</b>  | Note 1  | Nova TSF  | Cosmic Boy Tailings Storage Facility North Cell | Cosmic Boy Tailings Storage Facility South Cell   | Cosmos TSF  |
| <b>2. Location</b>  | Note 2  | Latitude: -31.826496°<br>Longitude: 123.176961°   | Latitude: -32.583420°<br>Longitude: 119.750069° | Latitude: -32.588326°<br>Longitude: 119.750069°   | Latitude: -27.590747<br>Longitude: 120.583462                     |
| <b>3. Ownership</b>   | Note 3  | Owned and Operated (IGO - 100%)   | Owned and Operated (IGO - 100%)                 | Owned and Operated (IGO - 100%)   | Owned and Operated (IGO - 100%)                                   |
| <b>4. Status</b>  | Note 4  | Active  | Inactive reclaiming dry tails for pastefill     | Active  | Active  |
| <b>5. Date of initial operation</b>   | Note 5  | 2016  | 2009  | 2021  | 2000  |
| <b>6. Is the Dam currently operated or closed as per currently approved design?</b> | Note 6  | Yes   | Yes   | Yes*<br>*Current surface water coverage >30% design criteria, cleared with independent expert review. | Yes   |
| <b>7. Raising method</b>  | Note 7  | Other – constructed to maximum design height and fully lined prior to tailings deposition | Upstream  | Upstream  | Upstream  |
| <b>8. Current Maximum Height</b>  | Note 8  | 13m   | 17m   | 2.5m  | 12.3m   |
| <b>9. Current Tailings Storage Impoundment Volume</b>                               | Note 9  | Approx. 3,210,000 m <sup>3</sup>  | 3,420,000 m <sup>3</sup>                        | 394,500 m <sup>3</sup>  | 1,370,000 m <sup>3</sup>  |
| <b>10. Planned Tailings Storage Impoundment Volume in 5 years' time.</b>            | Note 10 | Approx. 4,100,000 m <sup>3</sup><br>[+890,000 m <sup>3</sup> ]                            | 3,420,000 m <sup>3</sup>                        | 461,500 m <sup>3</sup>  | 1,940,000 m <sup>3</sup> (Note site is now in care & maintenance) |

|  | Notes   | Nova TSF   | Cosmic Boy TSF (North)   | Cosmic Boy TSF (South)   | Cosmos TSF   |
|--|---------|--|--|--|--|
| <b>11. Most recent Independent Expert Review</b>   | Note 11 | Annual Audit 2023 by SRK Consulting, Comprehensive Dam Safety Review by Klohn Crippen Berger (Oct 2023), Design Basis Review by SRK Consulting (May 2023). | June 2023.   | June 2024.   | May 2024 Annual Dam Report, Tetrattech.  |
| <b>12. Do you have full and complete relevant engineering records including design, construction, operation, maintenance and/or closure.</b>   | Note 12 | Yes.   | Yes.   | Yes.   | Comprehensive but not full and complete.   |
| <b>13. What is your hazard categorisation of this facility, based on consequence of failure?</b>   | Note 13 | Category 2 Medium (DEMIRS) Significant (ANCOLD)  | Category 1 High (DEMIRS) Significant (ANCOLD)  | Category 1 High (DEMIRS) Medium (ANCOLD)   | Category 1 High (DEMIRS) Significant (ANCOLD)  |
| <b>14. What guideline do you follow for the classification system?</b>   | Note 14 | Facility is classified under both the DMP, 2013 and ANCOLD, 2012 guidelines and standards.   | Facility is classified under both the DMP, 2013 and ANCOLD, 2012 guidelines and standards. | Facility is classified under both the DMP, 2013 and ANCOLD, 2012 guidelines and standards.         | Facility is classified under both the DMP, 2013 and ANCOLD, 2012 guidelines and standards. |
| <b>15. Has this facility, at any point in its history, failed to be confirmed or certified as stable, or experienced notable stability concerns, as identified by an independent engineer (even if later certified as stable by the same or a different firm).</b> | Note 15 | No.  | No.  | No.  | No.  |
| <b>16. Do you have internal/in house engineering specialist oversight of this facility? Or do you have</b>   | Note 16 | Yes. Internal oversight provided by Processing Manager. External support for design and  | Yes. Internal oversight provided by Processing Manager. External support                   | Yes. Internal oversight provided by Processing Manager. External support for design and operations | Yes. Internal oversight provided by Site Senior Executive. External support                |

|   | Notes   | Nova TSF   | Cosmic Boy TSF (North)   | Cosmic Boy TSF (South)   | Cosmos TSF   |
|---|---------|--|--|--|--|
| external engineering support for this purpose?  |         | operations provided by SRK as the Engineer of Record.  | for design and operations provided by Coffey.  | provided by Coffey.  | for design and operations provided by Golder WSP and Coffey. |
| 17. Has a formal analysis of the downstream impact on communities, ecosystems and critical infrastructure in the event of catastrophic failure been undertaken and to reflect final conditions? If so, when did this assessment take place? | Note 17 | Yes. Most recent assessment in 2019 by SRK.  | Yes, 2013.   | Yes, 2013.   | Yes, 2018.   |
| 18. Is there a) a closure plan in place for this dam, and b) does it include long term monitoring?  | Note 18 | Yes.<br>Yes.   | Yes.<br>Yes.   | Yes.<br>Yes.   | Yes.<br>Yes.   |
| 19. Have you, or do you plan to assess your tailings facilities against the impact of more regular extreme weather events as a result of climate change, e.g. over the next two years?  | Note 19 | Yes. Maximum Operating Level reduced from 298.3m to 295.5m as contingency to provide additional flood freeboard. Emergency spillway being considered for closure. No current external catchment. Current operational freeboard for storage of a rainfall event up to 220% of the design storm (500mm above operating pond plus 1:100-year 72-hour. | Yes - as part of closure and rehabilitation planning. 300-year service life as the basis of design; the conceptual model will be a 'store and release' system and will cater for climate change impacts. | Yes - as part of closure and rehabilitation planning. 300-year service life as the basis of design; the conceptual model will be a 'store and release' system and will cater for climate change impacts. | Yes.   |

|   | Notes   | Nova TSF                                       | Cosmic Boy TSF (North) | Cosmic Boy TSF (South) | Cosmos TSF |
|---|---------|--|------------------------|------------------------|------------|
| <p><b>20. Any other relevant information and supporting documentation.</b></p> <p>Please state if you have omitted any other exposure to tailings facilities through any joint ventures you may have.</p> | Note 20 | See attached response for further information. |                        |                        |            |

## List of abbreviations used

|        |  |
|--------|--|
| ANCOLD | Australian National Committee on Large Dams                              |
| JV     | Joint Venture  |
| MCP    | Mine Closure Plan  |
| MWMP   | Mineral Waste Management Plan (also known as a Tailings Management Plan) |
| TSF    | Tailing storage facility   |

## Instructions to support completion and associated notes

### Note 1 TSF Name

Requested Information: Please identify every tailings storage facility and identify if there are multiple dams (saddle or secondary dams) within that facility.

*IGO notes:* The register includes all above ground TSFs that are, or have been, used to store slurry tailings. In-pit TSFs and stockpiles of dry tailings, e.g., for use as paste backfill production, have not been included due to negligible risk of failure runoff.

### Note 2 Location

Requested Information: Coordinates in decimal degrees taken from Google Earth.

### Note 3 Ownership

Requested Information: Please specify: Owned and Operated, Subsidiary, JV, NOJV.

### Note 4 Status

Requested Information: Status of each TSF has been assigned as one of the following:

- Active: Tailings has been deposited within the last 12-months
- Inactive: Tailings has not been deposited within the last 12 months and infrastructure remains in place for tailings deposition to recommence.
- Decommissioned / Care and Maintenance: No more tailings will be deposited in the facility. Some rehabilitation works may have been undertaken but are incomplete.
- Closed: Facility has been rehabilitated in accordance with the closure plan and no further works of significance are likely to be required.

*IGO notes:* We define closed as: a closure plan was developed and approved by the relevant local government agency, and key stakeholders were involved in its development; a closed facility means the noted approved closure plan was fully implemented, or the closure plan is in the process of being implemented. A facility that is inactive or under care and maintenance is not considered closed until such a time a closure plan has been implemented.

### Note 5 Date of Initial Operation

Requested Information: The Month/Year when tailings were first deposited into the completed facility reported. For legacy facilities (>25 years since operation ceased), the approximate period for first deposition is reported.

### Note 6 Is the Dam currently operated or closed as per the currently approved design?

Requested Information: Yes/No. If 'No', more information can be provided in the answer to Q20

*IGO notes:* Where an operational or closure design exists, and the facility is generally in agreement with the design, the question has been answered in the affirmative.

**Note 7 Raising Method**

Requested Information: Requested Information: Raising method(s) are reported as one of the following categories:

- Downstream – includes filtered tailings dry-stack facilities.
- Centerline;
- Upstream; or,
- Hybrid – includes combinations of different methods.

**Note 8 Current Maximum Height**

Requested Information: The current height of the largest dam is reported in meters as of June 2024.

**Note 9 Current tailings storage impoundment volume**

Requested Information: Volume (m<sup>3</sup>).

*IGO notes:* For facilities with records of deposition, stored volume is based on measured data to end of June 2024 or on most recent assessment of the facility (e.g., annual audit) with a pro-rata estimate to end of June 2024. For facilities without records of deposition, stored volume is based on an estimate of depth of tailings over surface area of facility. These estimates are reported in brackets, e.g., (#####).

**Note 10 Planned tailings storage impoundment volume in 5 years**

Requested Information: Volume (m<sup>3</sup>) as planned for June 2029.

*IGO notes:* For active facilities, an estimate of stored volume is based on tailings management plans. All other facilities are assumed to have no change in stored volume.

**Note 11 Most recent Independent Expert Review**

Requested Information: Date of most recent Independent Expert Review.

*IGO notes:* For this question we take 'Independent' to mean a suitably qualified individual or team, external to the operation, that does not direct the design or construction work for that facility. Where completed, the date of the review and name of the reviewer is listed. The type of review is also listed based on the following types:

- Comprehensive type: Detailed review of all functional aspects of the facility design, construction, and operation. May also include additional data collection and analyses as required.
- Audit-type: Review of available records and performance data against design and operational criteria. May also include physical inspection of the facility.

**Note 12 Do you have full and complete relevant engineering records including design, construction, operation, maintenance, and/or closure?**

Requested Information: Yes or No answer.

*IGO Notes:* We take the word "relevant" here to mean that you have all necessary documents to make an informed and substantiated decision on the safety of the dam, be it an old facility, or an acquisition, or legacy site. Where complete records are available, the question has been answered in the affirmative.

For legacy facilities (>25 years since operation ceased), records are expected to be limited and judgement on the risk profile of the facility has been used to answer the question. Further discussion on the risk profile of legacy facilities is included in Section 4 of this disclosure.

**Note 13 What is your hazard categorisation of this facility, based on the consequence of failure?**

*IGO notes:* Hazard categorisation is applied based on the applicable guidelines and standards for each dam. The applicable guidelines and standards are discussed under (Q14) and the relevant hazard categorisation for each dam is



listed in the register.

**Note 14 What guideline do you follow for the classification system?**

*IGO notes:* All the IGO-operated assets with tailings dams are located in Western Australia, Australia. Applicable guidelines and standards within this jurisdiction include the following:

- Department of Mines and Petroleum<sup>1</sup>, 2013, Tailings storage facilities in Western Australia – code of practice: Resources Safety and Environment Divisions, Department of Mines and Petroleum, Western Australia. 2013
- Australian National Committee on Large Dams (ANCOLD), 2012. Guidelines on Tailings Dams: Planning, Design, Construction, Operation and Closure. May 2012.

The guidelines and standards knowingly applied to each dam are listed.

**Note 15 Has this facility, at any point in its history, failed to be confirmed or certified as stable, or experienced notable stability concerns, as identified by an independent engineer (even if later certified as stable by the same or a different firm).**

Requested information: Yes or No answer. If yes, have appropriately designed and reviewed mitigation actions been implemented?

*IGO Notes:* Where there has been a known incidence of stability concerns, the question is answered in the affirmative and the date and cause of the concern is noted. Where an affirmative response has been given, the status for rectification of the concern is included.

**Note 16 Do you have internal/in house engineering specialist oversight of this facility? Or do you have external engineering support for this purpose?**

Requested Information: Yes, No or "Both".

*IGO notes:* Each of IGO's active tailings facilities has an internal designated responsible person. This person is typically not dedicated solely to management of the tailings facility but completes this as part of a wider set of duties and responsibilities. Where a facility has a designated person responsible for oversight of this facility within IGO, the question is answered in the affirmative and the qualifications and experience of the designated person are listed.

Where a facility has recently engaged an external consultant to provide specialist advice, the question is answered in the affirmative and the name of the company providing these services is noted.

**Note 17 Has a formal analysis of the downstream impact on communities, ecosystems and critical infrastructure in the event of catastrophic failure been undertaken and to reflect final conditions? If so, when did this assessment take place?**

Requested Information: Please answer 'yes' or 'no', and if 'yes', provide a date.

*IGO notes:* Where a dam breach assessment has been completed, the question is answered in the affirmative and date of the most recent assessment noted.

**Note 18 Is there a) a closure plan in place for this dam, and b) does it include long term monitoring?**

Requested Information: Please answer both parts of this question (e.g. Yes and Yes).

*IGO notes:* IGO is required to submit and update a Mine Closure Plan (MCP) for each asset that includes domain specific closure plans including for each TSF facility. The MCP is required to include increasing levels of design detail as an asset moves closer to closure. All MCPs include provision for long-term monitoring during the post-closure phase. Where an MCP exists, the question is answered in the affirmative.

---

<sup>1</sup> Department of Mines and Petroleum now known as the Department of Energy, Mines, Industry Regulation and Safety (DEMIRS)



**Note 19 Have you, or do you plan to assess your tailings facilities against the impact of more regular extreme weather events as a result of climate change, e.g. over the next two years?**

Requested Information: Yes or no answer.

*IGO notes:* Where explicit consideration of climate change impacts has been made in design, operation, or closure of a facility, the question is answered in the affirmative. Where there has been no explicit consideration, but the facility includes adequate contingency in terms of flood storage, the question is also answered in the affirmative with appropriate commentary.

**Note 20 Any other relevant information and supporting documentation.**

Requested Information: Supplementary information as appropriate.

*IGO notes:* Provided in the cover letter and in the table.