

# PT-FI Water Monitoring Summary

September 2020







### **Cautionary Statement**



This presentation contains forward-looking statements in which we discuss our potential future performance. Forward-looking statements are all statements other than statements of historical facts, such as plans, projections, timing or expectations relating to environmental, social, [safety] and governance commitments and performance, including tailings management. The words "anticipates," "may," "can," "plans," "believes," "estimates," "expects," "projects," "targets," "intends," "likely," "will," "should," "could," "to be," "potential," "assumptions," "guidance," "future" and any similar expressions are intended to identify those assertions as forward-looking statements.

We caution readers that forward-looking statements are not guarantees of future performance and actual results may differ materially from those anticipated, expected, projected or assumed in the forward-looking statements. Important factors that can cause our actual results to differ materially from those anticipated in the forward-looking statements include, but are not limited to, the factors described in more detail under the heading "Risk Factors" in Freeport-McMoRan Inc.'s (FCX) Annual Report on Form 10-K for the year ended December 31, 2019, and subsequent Quarterly Report on Form 10-Q for the quarter ended June 30, 2020, each filed with the U.S. Securities and Exchange Commission (SEC) as updated by FCX's subsequent filings with the SEC.

Investors are cautioned that many of the assumptions upon which our forward-looking statements are based are likely to change after the forward-looking statements are made. Further, we may make changes to our business plans that could affect our results. We caution investors that we do not intend to update any forward-looking statements notwithstanding any changes in our assumptions, changes in business plans, actual experience or other changes.

We are committed to communicating on our environmental, social and governance (ESG) performance regularly and transparently and have been reporting on sustainability performance since 2001. As a result of methodology changes, corrections, or ongoing improvements to our data collection processes and quality, prior year data may be amended, supplemented and/or restated in future years. Our historical results are not necessarily indicative of future performance. All financial figures are reflected in U.S. dollars, unless otherwise noted. The data presented in this report covers our performance for years ended December 31, which corresponds to our fiscal year.

#### **Overview**



- PT-FI's long-term environmental monitoring program is designed to monitor potential environmental impacts through routine measurement of air quality, biological, hydrology, sediment, and meteorological characteristics in our entire operations area
- On average, PT-FI collects more than 16,000 samples annually for analysis which are used to develop the scientific information needed make informed management decisions with a focus on minimizing and mitigating environmental impacts
- PT-FI has an environmental lab (Timika Environmental Laboratory or 'TEL') located near our operations in the city of Timika
  - Certified to ISO 17025 quality standards from the Indonesian National Accreditation Committee.
  - Serves as the analytical lab for data used in the monitoring programs and is registered with the Ministry of Environment and Forestry as an Environmental Laboratory
  - In 2019, ~5,000 regulatory samples were received for analysis



#### **PT-FI Environmental Commitments**



- Government of Indonesia (GoI) Regulations
  - 69 national regulations concerning Environmental Management are applicable to PT-FI, covering Water Quality, Air Quality, Solid and Hazardous Waste, Energy Management, Water Sources and Wastewater, Reclamation, Protected Forest, Biodiversity and Conservation
- 50 different national, provincial and regency permits
- Commitments made as part of PT-FI's environmental and social impact assessment (better known as "300K AMDAL") approved in 1997 and the associated Environmental Management and Environmental Monitoring Plan (known as "RKL/RPL")
- ISO14001 Certified triennially (most recent recertification achieved March 2020) with annual surveillance
- FCX and PT-FI Environmental Policies and FCX Environmental Management Practices
- World Bank and IFC Guidelines

### **Compliance Audits & Inspections**



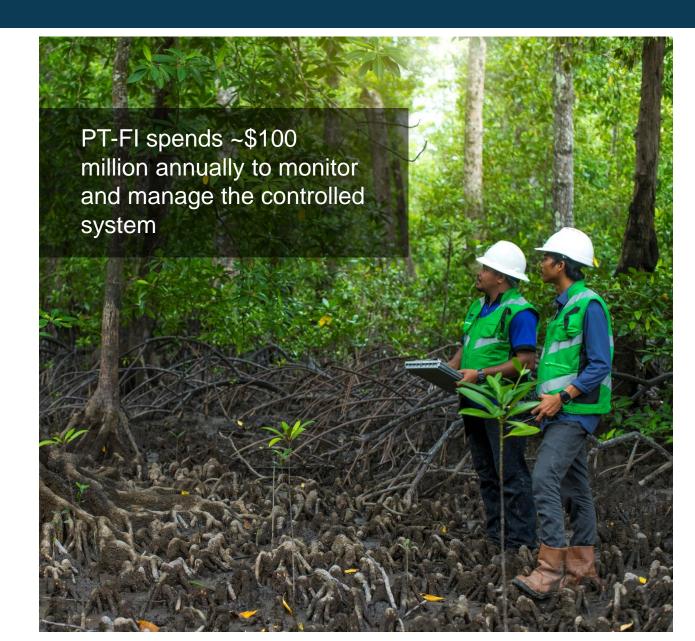
- Triennial External Third-party Audit
  - Results publicly available on FCX website: <a href="https://www.fcx.com/sustainability/environment/PT-FI-external-audits">https://www.fcx.com/sustainability/environment/PT-FI-external-audits</a>
  - Last audit completed in 2017; Upcoming audit was planned for Q4 2020, but will be deferred to 2021 due to COVID-19
- Annual Internal FCX Corporate Audit Environment and Environment Management System
- Annual ISO14001 (EMS) and ISO17025 (Lab) Surveillance and Recertification (every 3 years) Audit
- Government of Indonesia National and Provincial Audits MEMR, MoEF, Papua
- Internal compliance inspections are conducted annually on 149 individual facilities and semi-annually on permitted facilities

#### **PT-FI Controlled Riverine Tailings**

Alternative with lowest risk to human health and the environment



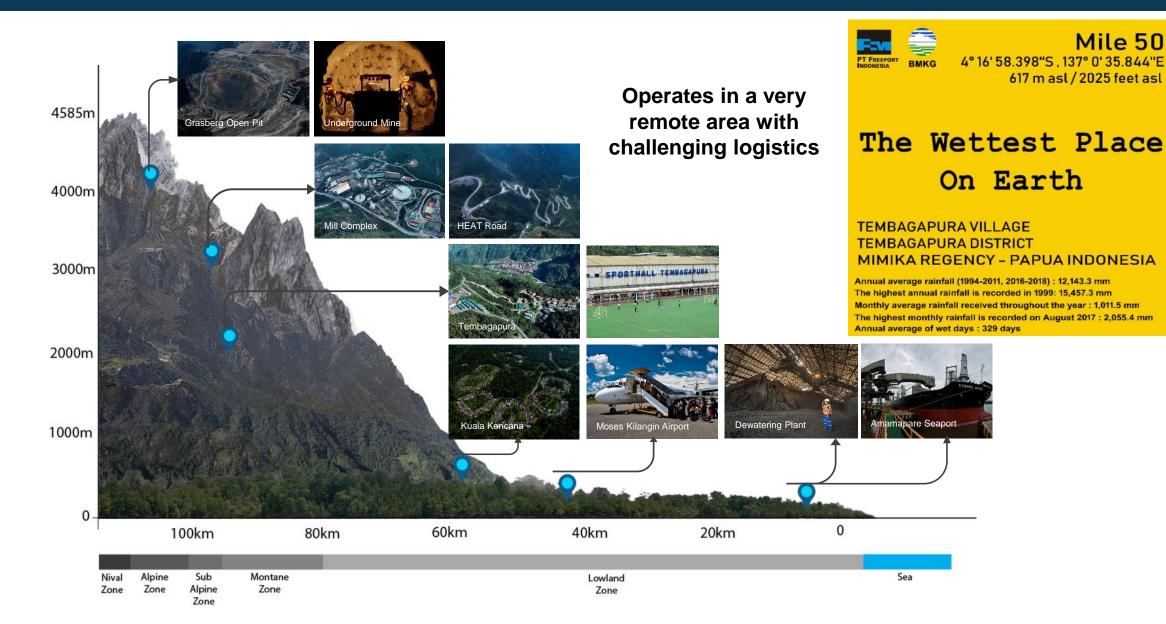
- PT-FI's controlled system selected after extensive evaluations by international experts given extreme terrain and site-specific conditions
- A conventional tailings management system would have created an unacceptably high risk to human health and the environment
- 20+ year history of performing as designed
- Extensive monitoring and testing over 60 active monitoring programs
- Monitoring programs have established natural revegetation occurs and that the impacts are reversible at the end of the mine life



#### **Geographical Conditions**



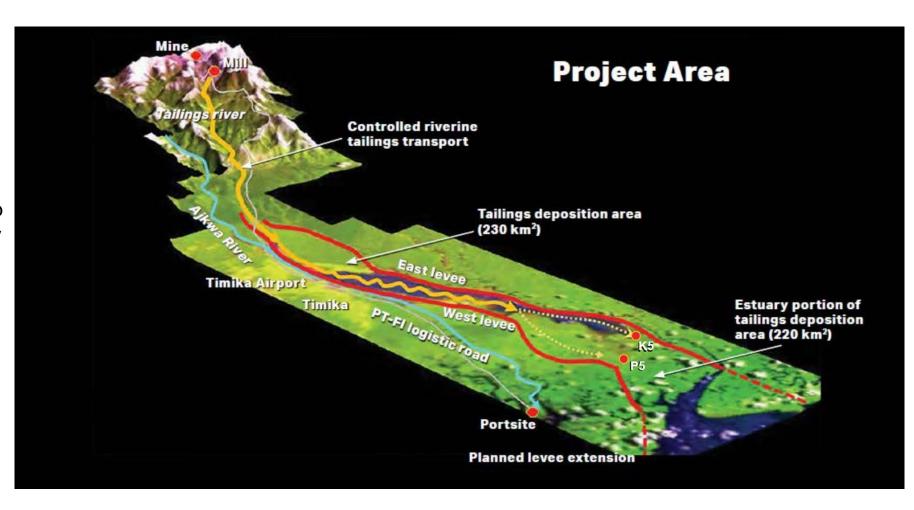
Mile 50



### **Controlled Tailings Transport Schematic**



- Tailings from the Mill in the Highlands are transported by river to the Modified Ajkwa Deposition Area (called the "ModADA")
- Levees border ModADA to keep tailings within the approximately 230 km2 terrestrial area;
- PT-FI committed to retain 50% of tailings in this area over life of mine
- Smaller particles are deposited in the estuary and Arafura Sea, causing delta expansion and land creation



### **PT-FI Monitoring Programs Summary**



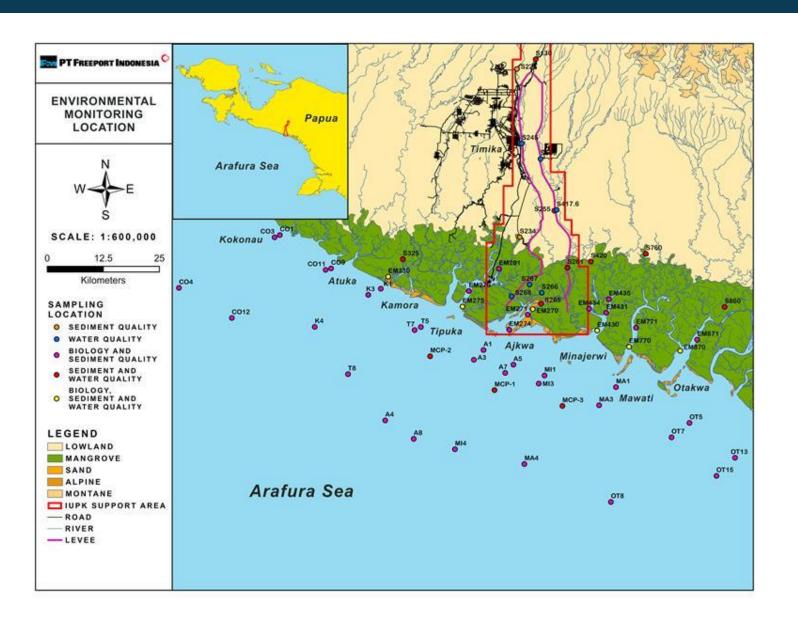
- PT-FI has more than 60 active monitoring programs, including:
  - Water Quality 33 (Surface water, Groundwater, Drinking water, Effluents, Estuarine and Marine)
  - Air Quality 8
  - Coastal Biodiversity 12
  - Sediment 10
- Other programs include (but not limited to) Hydrology, Meteorology, Noise Monitoring, and Oceanography





### **Monitoring Locations (Voluntary & Compliance)**





#### **Regulatory Compliance Monitoring Locations**

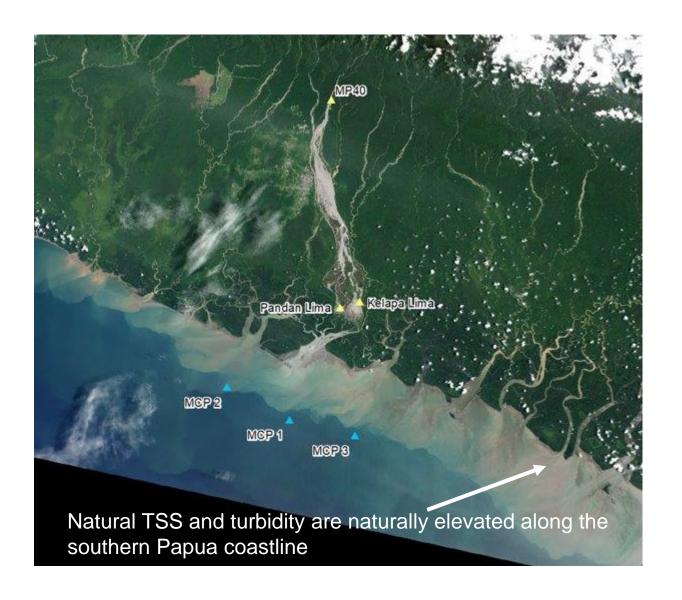


# ModADA Effluent quality (i.e. discharged water quality)

- Monitored daily for TSS and flow, weekly for suspended sediment geochemistry, and monthly for dissolved metals at:
  - 1) Kelapa Lima (KL); and
  - 2) Pandan Lima (PL);
- Results are compared to GOI regulation PP202/2004 "Effluents Quality Standards for Gold and/or Copper Ore Mining Businesses and/or Activities"

#### Marine Water Quality

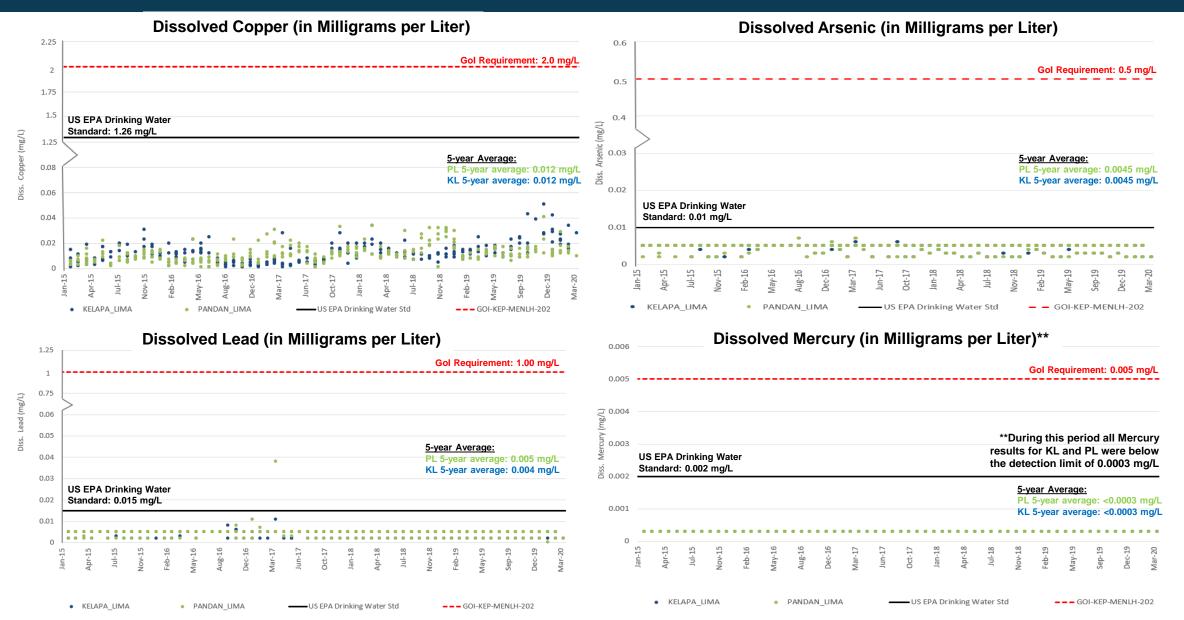
- Monitored quarterly at three points:
  - 1) MCP1,
  - 2) MCP2, and
  - 3) MCP3
- Results are compared to GOI regulation PP51/2004 "Quality Standards for Sea Water"



### ModADA GOI Compliance Points (KL and PL)



US EPA levels are for illustrative purposes only – they are not like-for-like standards with GOI requirements

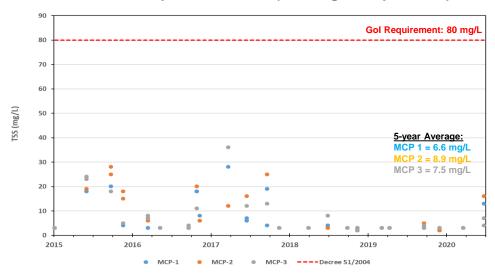


## Marine GOI Compliance Points (MCP 1, 2, and 3)

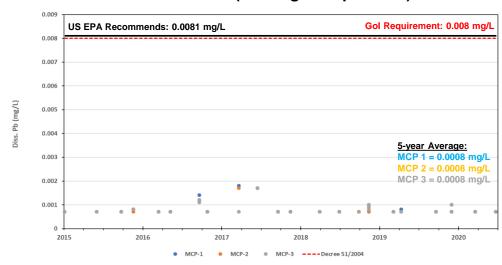


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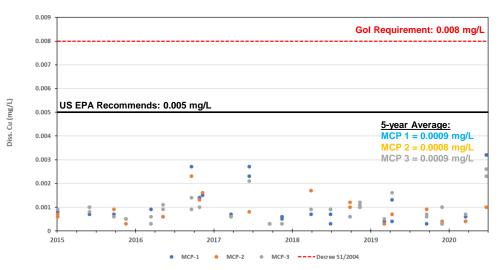
#### **Total Suspended Solids (in Milligrams per Liter)**



#### **Dissolved Lead (in Milligrams per Liter)**



#### **Dissolved Copper (in Milligrams per Liter)**



#### Dissolved Mercury (in Milligrams per Liter)\*\*

