Consultation response

Part 1: Your details

Original language of response: English

Name: Armando Antonio Mesquita Costa

Country of residence: South Africa

Are you willing to let us publish your response publicly on the Global Tailings Review website? Yes

Please select which stakeholder group you are representing: Consultant (geotechnical)

If 'Other', please specify below:

Are you responding on behalf of an organization? Yes

Please give the name of the organization: NPCT Solutions

Your level within the organisation: Other

Part 2: Your views on each of the Principles and Requirements in the Standard
Topic I: Knowledge Base

Principle 1

In your view, will compliance with this Principle and its Requirements contribute to the prevention of catastrophic failure of tailings facilities?
Yes

Which aspects of Principle 1 do your comments relate to?
Comments on the Principle itself

Your comments on Principle 1
TSF is a man-made waste site facility & requires a legal waste site license or permit requiring the Development & Regular Updated Health, Safety & Environmental independent data through a Seven Tier Artificial Intelligent (AI)/IoT Platform Program System that can operate without Human Error & Corrupted Erroneous Actions or Influence provides the current TSF challenges & disasters with short, medium & long term solutions. NPCT has designed not only Seven Tier Artificial Intelligent/IoT Platform Program System but its several case studies are able to reflect converting Toxic Tailing Waste to commodity.

Principle 2

In your view, will compliance with this Principle and its Requirements contribute to the prevention of catastrophic failure of tailings facilities?

Yes

Which aspects of Principle 2 do your comments relate to?
Comments on the Principle itself

Your comments on Principle 2
The Development & Regular Updated Independent Health, Safety & Environmental Data on a Seven Tier Artificial Intelligent/IoT Platform Program System that can operate Big Data in Real Time without Human Error & Corrupted Erroneous Actions or Influence an Integrated Social, Economic, Environmental, Health, Safety Technical Data/Information operates on all Seven Tiers of the AI/IoT System.

Topic II: Affected Communities

Principle 3

In your view, will compliance with this Principle and its Requirements contribute to the prevention of catastrophic failure of tailings facilities?
Yes

Which aspects of Principle 3 do your comments relate to?
Comments on the Principle itself

Your comments on Principle 3
The Development & Regular Updated Independent Health, Safety & Environmental Big Data on a Seven Tier Artificial Intelligent/IoT Platform Program System that can operate without Human Error & Corrupted Erroneous Actions or Influence. Big Data on a Seven Tier Artificial Intelligent/IoT Platform Program System is designed around PAP to understand how a site specific TSF failure may cause or contribute to adverse human rights impacts, including impacts on the individual and collective rights of indigenous peoples and tribal peoples through all phases of the TSF lifecycle

Topic III: Design, Construction, Operation and Monitoring of the Tailings Facility

Principle 4

In your view, will compliance with this Principle and its Requirements contribute to the prevention of catastrophic failure of tailings facilities?
Yes

Which aspects of Principle 4 do your comments relate to?
Comments on the Principle itself

Your comments on Principle 4
Due to the unique large deposition of an Evolutionary Human Designed Waste Stream System created from Evolutionary Complex Mining & Processing operations creates the challenges one faces in TSF Disasters therefore can only be prevented by looking always at the most Extreme Failure Classification & can only be Rebutted when all evolving parameters of risk Hazardous Waste & Assessment can be proven through Seven Tier Artificial Intelligent/IoT Platform Program System which provides Big DataAI /IoT Pilot Projects/Models on all seven Tiers by an AI/IoT Risk Assessment

Program System overlooked by an Independent Professional Panel who carry out the Accountable & Liable Final Decision. What makes this system better & different is that this system operate & records on all 7 Tiers therefore whether the accountable Executives on Board (Tier 2) or company managers (Tier 3) or ICMM Auditor (Tier 5) the decision is transparent & legal to enforce accountability & liability on the perpetrators from Primary Investor. The Seven Tier Artificial Intelligent/IoT Platform Program System (5d Model) runs concurrently alongside the Mining & Processing Operations on a Real Time Big Data System providing a IoT/AI Management Platform Program Systems-Models. Designed to detect, audit, regulate & eliminate human error from Global Mining & Processing operations on a district/regional/national or international level providing a real time Global Remote Monitoring & Management Platform System utilizing tremor, breaching, leaching, heat etc real time monitoring modules.

Principle 5

In your view, will compliance with this Principle and its Requirements contribute to the prevention of catastrophic failure of tailings facilities?
Yes

Which aspects of Principle 5 do your comments relate to?
Comments on the Principle itself

Your comments on Principle 5
Management & Governance on any level is a challenge which we as intelligent humans have created due to imperfection & flaws within our human make-up. So the key or solution to Management & Governance has not changed in the last 4000 years of human history. Key is humans are assisted by using tools in every sector & industry Globally. An Independent Mining & TSF Artificial Intelligent/IoT Platform Program System to a Global Mining Group is no different to a Plough to a farmer or a multi meter to an electrician it's a tool that assists humans manage its risks. A Regulator or a Global Mining or Metal Company who utilises a Big Data Artificial Intelligent programming system removes the human error from the business equation. The principle of attaining highest standards within a regulatory system provides for best attainable regulatory decision making within both the Regulator or Regulated. Therefore it is imperative to address on an Extreme Consequence Classification approach due to the complex make up of both Mining & its Processing variables & methods.

Principle 6

In your view, will compliance with this Principle and its Requirements contribute to the prevention of catastrophic failure of tailings facilities?

Which aspects of Principle 6 do your comments relate to?

Your comments on Principle 6:

Principle 7

In your view, will compliance with this Principle and its Requirements contribute to the prevention of catastrophic failure of tailings facilities?

Which aspects of Principle 7 do your comments relate to?

Your comments on Principle 7

Principle 8

In your view, will compliance with this Principle and its Requirements contribute to the prevention of catastrophic failure of tailings facilities?
Yes

Which aspects of Principle 8 do your comments relate to?
Comments on the Principle itself

Your comments on Principle 8
Due to the unique large deposition of an Evolutionary Human Designed Waste Stream System created from Evolutionary Complex Mining & Processing operations creates the challenges one faces in TSF Disasters therefore can only be prevented by looking always at the most Extreme Failure Classification & can only be Rebutted when all evolving parameters of risk Hazardous Waste & Assessment can be proven through Seven Tier Artificial Intelligent/IoT Platform Program System which provides Big DataAI /IoT Pilot Projects/Models on all seven Tiers by an AI/IoT Risk Assessment Program System overlooked by an Independent Professional Panel who carry out the Accountable & Liable Final Decision. What makes this system better & different is that this system operate & records on all 7 Tiers therefore whether the accountable Executives on Board (Tier 2) or company managers (Tier 3) or ICMM Auditor (Tier 5) the decision is transparent & legal to enforce accountability & liability on the perpetrators from Primary Investor. The Seven Tier Artificial Intelligent/IoT Platform Program System (5d Model) runs concurrently alongside the Mining & Processing Operations on a Real Time Big Data System providing a IoT/AI Management Platform Program Systems-Models. Designed to detect, audit, regulate & eliminate human error from Global Mining & Processing operations on a district/regional/national or international level providing a real time Global Remote Monitoring & Management Platform System utilizing tremor, breaching, leaching, heat etc real time monitoring modules.

Topic IV: Management and Governance

Principle 9

In your view, will compliance with this Principle and its Requirements contribute to the prevention of catastrophic failure of tailings facilities?
Yes

Which aspects of Principle 9 do your comments relate to?
Comments on the Principle itself

Your comments on Principle 9
Management & Governance on any level is a challenge which we as intelligent humans have created due to imperfection & flaws within our human make-up. So the key or solution to Management & Governance has not changed in the last 4000

years of human history. Key is humans are assisted by using tools in every sector & industry Globally. An Independent Mining & TSF Artificial Intelligent/IoT Platform Program System to a Global Mining Group is no different to a Plough to a farmer or a multi meter to an electrician it's a tool that assists humans manage its risks. A Regulator or a Global Mining or Metal Company who utilises a Big Data Artificial Intelligent programming system removes the human error from the business equation. The principle of attaining highest standards within a regulatory system provides for best attainable regulatory decision making within both the Regulator or Regulated. Therefore it is imperative to address on an Extreme Consequence Classification approach due to the complex make up of both Mining & its Processing variables & methods.

Principle 10

In your view, will compliance with this Principle and its Requirements contribute to the prevention of catastrophic failure of tailings facilities?
Yes

Which aspects of Principle 10 do your comments relate to?

Your comments on Principle 10:

Principle 11

In your view, will compliance with this Principle and its Requirements contribute to the prevention of catastrophic failure of tailings facilities?
Yes

Which aspects of Principle 11 do your comments relate to?

Your comments on Principle 11:

Principle 12

In your view, will compliance with this Principle and its Requirements contribute to the prevention of catastrophic failure of tailings facilities?
Yes

Which aspects of Principle 12 do your comments relate to?

Your comments on Principle 12:

Principle 13

In your view, will compliance with this Principle and its Requirements contribute to the prevention of catastrophic failure of tailings facilities?
Yes

Which aspects of Principle 13 do your comments relate to?
No

Your comments on Principle 13:

In your view, will compliance with this Principle and its Requirements contribute to the prevention of catastrophic failure of tailings facilities?
Yes

Which aspects of Principle 14 do your comments relate to?

Your comments on Principle 14:

Topic V: Emergency Response and Long-Term Recovery

Principle 15

In your view, will compliance with this Principle and its Requirements contribute to the prevention of catastrophic failure of tailings facilities?
Yes

Which aspects of Principle 15 do your comments relate to?
Comments on the Principle itself

Your comments on Principle 15:
A Site specific EPRP will operate to the standard of the individuals managing these portfolios, data & history reflects poorly in this regard. How many innocent lives need to be loss, land & river systems destroyed & primary investor value depreciated overnight. Now Governments are going to follow the action that the Brazilian Government took against Vale. The key is to make sure that those site-specific Emergency Preparedness and Response Plan (EPRP) include The Seven Tier Artificial Intelligent/IoT Platform Program System (5d Model) runs concurrently alongside the Mining & Processing Operations on a Real Time Big Data System providing a IoT/AI Management Platform Program Systems-Models. Designed to detect, audit, regulate & eliminate human error from Global Mining & Processing operations on a district/regional/national or international level providing a real time Global Remote Monitoring & Management Platform System utilizing tremor, breaching, leaching, heat etc real time monitoring modules. Will be key in managing the EPRP portfolio understanding all the parameters prior to the disaster & the best counter solutions based on the same parameters eliminating human error. AI /IoT Pilot Projects/Models on all seven Tiers by an AI/IoT Risk Assessment program system (runs concurrent to the Global Mining & Processing Operations) are overseered by an Independent Professional Panel who carry Accountable & Liable Final Decision.

Principle 16

In your view, will compliance with this Principle and its Requirements contribute to the prevention of catastrophic failure of tailings facilities?
Yes

Which aspects of Principle 16 do your comments relate to?

Your comments on Principle 16:

Topic VI: Public Disclosure and Access to Information

Principle 17

In your view, will compliance with this Principle and its Requirements contribute to the prevention of catastrophic failure of tailings facilities?
Yes

Which aspects of Principle 17 do your comments relate to?

Your comments on Principle 17:

Part 3: Your views on the Standard

Your view as to whether the content of the Standard meets your expectations

Your view as to whether the content of the Standard meets your expectations (closed question):
2: Falls somewhat below my expectations

Please summarize why you chose this option:
As a Global Regulator based in UK how are you going to regulate on a Global sense? To regulate properly you need to know what each and every mining & TSF portfolio is doing in Real Time to stop the disasters that occur Globally. It is imperative that ICMM have a Big Data AI/IoT Global Platform with all its members.

Your view on whether the Standard will create a step change for the industry in the safety and security of tailings facilities

Your view on whether the Standard will create a step change for the industry in the safety and security of tailings facilities (closed question):
2: Will deliver minor improvements to the safety and security of tailings facilities

Please summarize why you chose this option:
www.npctsolutions.co.uk

Does the content of the Standard address all aspects of tailings facility management adequately?

Does the content of the Standard address all aspects of tailings facility management adequately (closed question)?
No

Please explain why and/or what is missing:
www.npctsolutions.co.uk

Part 4: Suggestions for topics to be included in the accompanying Recommendations Report

On which topics would you expect to have further clarification or guidance in this document?
PRINCIPLE 15: Prepare for emergency response to tailings facility failures and support local level emergency preparedness and response using best practice methodologies. PRINCIPLE 16: Prepare for long term recovery in the event of catastrophic failure. PRINCIPLE 17: Provide public access to information on tailings facility decisions, risks and impacts, management and mitigation plans, and performance monitoring

Other information

Non-fitting response text (text submitted which did was not in response to one of the questions above)

Attachment 1 reference (if applicable)

ref:0000001179:Q83

Attachment 2 reference (if applicable)