



June 7, 2019

Information Concerning Tailings Dam Management

Mitsui Mining & Smelting Co., Ltd. discloses information concerning tailings dam management, pursuant to the request by Church of England Pensions Board and Council on Ethics of the Swedish National Pension Funds.

• Attachment : Overview of Mitsui Mining & Smelting Co., Ltd.'s Tailings Management System and Mine Tailings Disclosure Table

Keiji Nishida
President, Representative Director

Overview of Mitsui Mining & Smelting Co., Ltd.'s Tailings Management System

As described below, Mitsui Mining & Smelting manages all of the tailings dams of the Group.

1. Deployment of in-house staff

Mitsui Mining & Smelting deploys its own staff to manage all of its tailings dams. It is the same with mines that have already been closed and are no longer extracting ore and producing tailings. We believe it is our responsibility to continue to manage these tailings dams and to take every measure to eliminate risks to people and the environment.

2. Technical support from expert staff

Mitsui Mining & Smelting is organized into technical coordination sections which are staffed by persons having a wealth of specialized knowledge and expertise. These expert staff members provide support for solving technical problems associated with tailings dams, and work diligently to reduce risks. Our experts are particularly involved with the management of tailings dams of special importance and they construct systems for preventing accidents.

3. Regular monitoring

At least one time every month, our staffs take measurements of water levels and water quality as part of inspections, as required by law. The measurement results are properly stored and used to evaluate safety.

In addition, hillside irrigation canals are cleaned, and the condition of drainage equipment is checked, both at regular intervals and as needed, to ensure that the risk of instability does not increase.

In addition, in cases where major rainfall events, etc., are anticipated, conditions are confirmed beforehand. In cases where an earthquake has occurred, its affect is confirmed after the event, and tailings dams are checked to make sure that they remain in normal condition.

4. Applicable management standards

In Japan, where the risk of natural disasters is high, world-class safety standards for the management of tailings dams have been put in place as legal and management guidelines. Mitsui Mining & Smelting manages the Group's tailings dams based on these legal and technical guidelines. Even when there is no legal obligation to evaluate the

safety of a tailings dam using these guidelines, we will still evaluate and formulate appropriate measures.

5. Dealing with the risks of natural disaster

In countries where Mitsui Mining & Smelting has tailings dams, that is, Japan and the Republic of Peru, there are risks of various types of natural disasters. We do not implement the same standardized measures at each of these sites; rather, we examine the risks for a variety of potentially hazardous events, such as earthquakes, typhoons, heavy snowfall, heavy rainfall, etc., and formulate measures that are designed to deal with the unique set of risks at each site.

In Japan, the risk of earthquakes is particularly high, and we conduct safety evaluations to formulate measures that can enable tailings dams to withstand even the maximum seismic intensity that may be expected to occur in the future. There is also a high risk of earthquakes in Peru, so at the Huanzala Mine which owns the Chuspic tailings dam, we have been conducting evaluations of the maximum seismic acceleration that can be expected to occur within a 500-year time frame.

6. Proper closure and idling of mines using money that has been earmarked for that purpose

In order to ensure the proper closure or idling of a mine, Mitsui Mining & Smelting sets aside money for that purpose while the mine is in operation. The preliminary work is completed properly based on the closure plan or idling plan, then the results of periodic monitoring are used to undertake the procedures for idling or closing the mine.

7. Engagement with local communities

We have a group-wide process for resolving complaints that is designed to help develop favorable relationships with local residents and respond to problems quickly. In addition, we hold meetings with local governments and local community organizations on an as-needed basis at our mining sites of special importance.

We also disclose information concerning our tailings dam management in our CSR report.

<https://www.mitsui-kinzoku.co.jp/en/csr/>

Accidents that have occurred at other companies' sites

During the Great East Japan Earthquake of 2011, some tailings dams managed by companies other than Mitsui Mining & Smelting ruptured, and mining debris flowed into rivers, fields, and even people's homes, causing much damage. As a result, the Ministry of Economy, Trade and Industry (METI) reexamined its technical guidelines, and in 2012 revised them as "Official Technical Guidelines for Establishing Technical Standards for Materials, Equipment, etc., Used in Mining". Mitsui Mining & Smelting conducted safety analyses on tailings dams that met the "special conditions" designated by these revised technical guidelines, as well as on tailings dams that it deemed to be necessary based on its own standards.

Based on the results of these safety analyses, Mitsui Mining & Smelting concluded that the possibility of rupturing was extremely low at all of the tailings dams that it was managing, even in cases of maximum scale seismic intensity that could be expected in the future, and that the potential for damage in downstream areas was also extremely low.

Regarding the Brumadinho tailings dam disaster in Brazil, little progress has been made in identifying the exact cause(s) of the accident, and it is not clear what could have led to such a catastrophic collapse. When the official report on the accident is released, we would like to study it and use it as a valuable reference for managing our tailings dams.

Mine Tailings Disclosure Table

1 of 15

As of March 2019

Disclosure Item	Answer	Relevant information
1. "Tailings Dam" Name/identifier	Wasabo	
2. Location	Lat 36.326730/long 137.319257	
3. Ownership	Kamioka Mining and Smelting Co., Ltd. ,a subsidiary of Mitsui Mining & Smelting Co., Ltd.	
4. Status	Active	
5. Date of initial operation	July, 1955	
6. Is the Dam currently operated or closed as per currently approved design?	Yes	
7. Raising method	Downstream	
8. Current Maximum Height	137m	
9. Current Tailings Storage Impoundment Volume	26,557,000m3	
10. Planned Tailings Storage Impoundment Volume in 5 years time.	140,000m3	
11. Most recent Independent Expert Review	March, 2000	
12. Do you have full and complete relevant engineering records including design, construction, operation, maintenance and/or closure.	Yes	
13. What is your hazard categorisation of this facility, based on consequence of failure?	failiure risk: low	
14. What guideline do you follow for the classification system?	Ministry of Economy, Trade, and Industry(2012) "Technical Policies of the ministerial decree defining technical standards of mining facilities"	The national laws in Japan do not require hazard categorisation based on consequence of failure.
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).	No	
16. Do you have internal/in house engineering specialist oversight of this facility? Or do you have external engineering support for this purpose?	In house engineering specialist oversight : Yes External engineering support : Yes	
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?	No	Because they are not required under national law, evaluations of "downstream impacts" have not been conducted. However, we will be examining laws and regulations governing tailings dam management in the host country, as well as international frameworks, standards and guidelines, in order to consider appropriate countermeasures.
18. Is there a) a closure plan in place for this dam, and b) does it include long term monitoring?	a) Yes b) Yes	Plans are being made to undertake closure work following national guidelines, and money is being set aside for that purpose. However, the current tailings dam will continue to be used, and so there are no plans to close it at the present time.
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?	Yes	Last year, we conducted in-house simulations in order to prepare for abnormal weather, and confirmed that the current equipment and facilities would be able to withstand a major rainfall event of 100mm/h.It should also be noted that drainage facilities have been built that can withstand a 100-year rainfall event, and based on Japanese domestic results, we feel that satisfactory measures are being taken. Furthermore, with the construction of an emergency drainage canal that can withstand a 200-year rainfall event, we can conclude that sufficient preparations are also being made to deal with the risk of abnormal weather that may occur in the future. We will continue to examine Japanese laws and regulations, as well as international frameworks, standards and guidelines, in order to consider appropriate countermeasures.
20. Any other relevant information and supporting documentation. Please state if you have omitted any other exposure to tailings facilities through any joint ventures you may have.		

Mine Tailings Disclosure Table

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As of March 2019

Disclosure Item	Answer	Relevant information
1. "Tailings Dam" Name/identifier	Masutani	
2. Location	Lat 36.441608/long 137.286521	
3. Ownership	Kamioka Mining and Smelting Co., Ltd. , a subsidiary of Mitsui Mining & Smelting Co., Ltd.	
4. Status	Active	
5. Date of initial operation	1955	
6. Is the Dam currently operated or closed as per currently approved design?	Yes	
7. Raising method	Downstream	
8. Current Maximum Height	140m	
9. Current Tailings Storage Impoundment Volume	6,200,000m3	
10. Planned Tailings Storage Impoundment Volume in 5 years time.	150m3	
11. Most recent Independent Expert Review	September, 1998	
12. Do you have full and complete relevant engineering records including design, construction, operation, maintenance and/or closure.	Yes	
13. What is your hazard categorisation of this facility, based on consequence of failure?	failiure risk: low	
14. What guideline do you follow for the classification system?	Ministry of Economy, Trade, and Industry(2012) "Technical Policies of the ministerial decree defining technical standards of mining facilities"	The national laws in Japan do not require hazard categorisation based on consequence of failure.
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).	No	
16. Do you have internal/in house engineering specialist oversight of this facility? Or do you have external engineering support for this purpose?	In house engineering specialist oversight : Yes External engineering support : Yes	
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?	No	Because they are not required under national law, evaluations of "downstream impacts" have not been conducted. However, we will be examining laws and regulations governing tailings dam management in the host country, as well as international frameworks, standards and guidelines, in order to consider appropriate countermeasures.
18. Is there a) a closure plan in place for this dam, and b) does it include long term monitoring?	a) Yes b) Yes	Plans are being made to undertake closure work following national guidelines, and money is being set aside for that purpose. However, the current tailings dam will continue to be used, and so there are no plans to close it at the present time.
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?	Yes	Last year, we conducted in-house simulations in order to prepare for abnormal weather, and confirmed that the current equipment and facilities would be able to withstand a major rainfall event of 100mm/h. It should also be noted that drainage facilities have been built that can withstand a 100-year rainfall event, and based on Japanese domestic results, we feel that satisfactory measures are being taken. Furthermore, with the construction of an emergency drainage canal that can withstand a 200-year rainfall event, we can conclude that sufficient preparations are also being made to deal with the risk of abnormal weather that may occur in the future. We will continue to examine Japanese laws and regulations, as well as international frameworks, standards and guidelines, in order to consider appropriate countermeasures.
20. Any other relevant information and supporting documentation. Please state if you have omitted any other exposure to tailings facilities through any joint ventures you may have.		

Mine Tailings Disclosure Table

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As of March 2019

Disclosure Item	Answer	Relevant information
1. "Tailings Dam" Name/identifier	Shikamadani	
2. Location	Lat 36.358467/long 137.303616	
3. Ownership	Kamioka Mining and Smelting Co., Ltd. , a subsidiary of Mitsui Mining & Smelting Co., Ltd.	
4. Status	Active	
5. Date of initial operation	August, 1931	
6. Is the Dam currently operated or closed as per currently approved design?	Yes	
7. Raising method	Downstream	
8. Current Maximum Height	No.1 : 77m No.2 : 64m No.3 : 130m	
9. Current Tailings Storage Impoundment Volume	5,441,700m ³	
10. Planned Tailings Storage Impoundment Volume in 5 years time.	100m ³	
11. Most recent Independent Expert Review	March, 2001	
12. Do you have full and complete relevant engineering records including design, construction, operation, maintenance and/or closure.	Yes	
13. What is your hazard categorisation of this facility, based on consequence of failure?	failure risk: low	
14. What guideline do you follow for the classification system?	Ministry of Economy, Trade, and Industry(2012) "Technical Policies of the ministerial decree defining technical standards of mining facilities"	The national laws in Japan do not require hazard categorisation based on consequence of failure.
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).	No	
16. Do you have internal/in house engineering specialist oversight of this facility? Or do you have external engineering support for this purpose?	In house engineering specialist oversight : Yes External engineering support : Yes	
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?	No	Because they are not required under national law, evaluations of "downstream impacts" have not been conducted. However, we will be examining laws and regulations governing tailings dam management in the host country, as well as international frameworks, standards and guidelines, in order to consider appropriate countermeasures.
18. Is there a) a closure plan in place for this dam, and b) does it include long term monitoring?	a) Yes b) Yes	Plans are being made to undertake closure work following national guidelines, and money is being set aside for that purpose. However, the current tailings dam will continue to be used, and so there are no plans to close it at the present time.
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?	Yes	Last year, we conducted in-house simulations in order to prepare for abnormal weather, and confirmed that the current equipment and facilities would be able to withstand a major rainfall event of 100mm/h. It should also be noted that drainage facilities have been built that can withstand a 100-year rainfall event, and based on Japanese domestic results, we feel that satisfactory measures are being taken. Furthermore, with the construction of an emergency drainage canal that can withstand a 200-year rainfall event, we can conclude that sufficient preparations are also being made to deal with the risk of abnormal weather that may occur in the future. We will continue to examine Japanese laws and regulations, as well as international frameworks, standards and guidelines, in order to consider appropriate countermeasures.
20. Any other relevant information and supporting documentation. Please state if you have omitted any other exposure to tailings facilities through any joint ventures you may have.		

Mine Tailings Disclosure Table

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As of March 2019

Disclosure Item	Answer	Relevant information
1. "Tailings Dam" Name/identifier	Omokusa	
2. Location	Lat 35.8800/long 136.5757	
3. Ownership	Nakatatsu Kougyou Co., Ltd. , a subsidiary of Mitsui Mining & Smelting Co., Ltd.	
4. Status	Inactive	
5. Date of initial operation	December, 1962	
6. Is the Dam currently operated or closed as per currently approved design?	Yes	
7. Raising method	Upstream	
8. Current Maximum Height	130.7m	
9. Current Tailings Storage Impoundment Volume	3,650,000m ³	
10. Planned Tailings Storage Impoundment Volume in 5 years time.	0m ³	
11. Most recent Independent Expert Review	March, 2019	
12. Do you have full and complete relevant engineering records including design, construction, operation, maintenance and/or closure.	Yes	
13. What is your hazard categorisation of this facility, based on consequence of failure?	failure risk: low	
14. What guideline do you follow for the classification system?	Ministry of Economy, Trade, and Industry(2012) "Technical Policies of the ministerial decree defining technical standards of mining facilities"	The national laws in Japan do not require hazard categorisation based on consequence of failure.
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).	No	
16. Do you have internal/in house engineering specialist oversight of this facility? Or do you have external engineering support for this purpose?	In house engineering specialist oversight : Yes External engineering support : Yes	
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?	No	Because they are not required under national law, evaluations of "downstream impacts" have not been conducted. However, we will be examining laws and regulations governing tailings dam management in the host country, as well as international frameworks, standards and guidelines, in order to consider appropriate countermeasures.
18. Is there a) a closure plan in place for this dam, and b) does it include long term monitoring?	a) Yes b) Yes	Plans are being made to undertake closure work following national guidelines, and money is being set aside for that purpose. In addition, the ground cover is being revegetated in some places, and efforts are being made to stabilize the soil. However, the site is currently being monitored in an idled state, and there are no plans to close the tailings dam at the present time.
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?	No	This tailings dam has been equipped with drainage facilities that can withstand a 100-year rainfall event, and based on Japanese domestic results, we feel that satisfactory measures are being taken. However, it is necessary to pay sufficient attention to future climate change, so we will be examining laws and regulations governing tailings dam management in the host country, as well as international frameworks, standards and guidelines, in order to consider appropriate countermeasures.
20. Any other relevant information and supporting documentation. Please state if you have omitted any other exposure to tailings facilities through any joint ventures you may have.		

Mine Tailings Disclosure Table

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As of March 2019

Disclosure Item	Answer	Relevant information
1. "Tailings Dam" Name/identifier	Todorokidani	
2. Location	Lat 35.8844/long 136.6063	
3. Ownership	Nakatatsu Kougyou Co., Ltd. , a subsidiary of Mitsui Mining & Smelting Co., Ltd.	
4. Status	Inactive	
5. Date of initial operation	September, 1954	
6. Is the Dam currently operated or closed as per currently approved design?	Yes	
7. Raising method	Upstream	
8. Current Maximum Height	76m	
9. Current Tailings Storage Impoundment Volume	533,000m ³	
10. Planned Tailings Storage Impoundment Volume in 5 years time.	0m ³	
11. Most recent Independent Expert Review	September, 2015	
12. Do you have full and complete relevant engineering records including design, construction, operation, maintenance and/or closure.	Yes	
13. What is your hazard categorisation of this facility, based on consequence of failure?	failure risk: low	
14. What guideline do you follow for the classification system?	Ministry of Economy, Trade, and Industry(2012) "Technical Policies of the ministerial decree defining technical standards of mining facilities"	The national laws in Japan do not require hazard categorisation based on consequence of failure.
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).	No	
16. Do you have internal/in house engineering specialist oversight of this facility? Or do you have external engineering support for this purpose?	In house engineering specialist oversight : Yes External engineering support : Yes	
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?	No	Because they are not required under national law, evaluations of "downstream impacts" have not been conducted. However, we will be examining laws and regulations governing tailings dam management in the host country, as well as international frameworks, standards and guidelines, in order to consider appropriate countermeasures.
18. Is there a) a closure plan in place for this dam, and b) does it include long term monitoring?	a) Yes b) Yes	Plans are being made to undertake closure work following national guidelines, and money is being set aside for that purpose. In addition, the ground cover is being revegetated in some places, and efforts are being made to stabilize the soil. However, the site is currently being monitored in an idled state, and there are no plans to close the tailings dam at the present time.
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?	No	This tailings dam has been equipped with drainage facilities that can withstand a 100-year rainfall event, and based on Japanese domestic results, we feel that satisfactory measures are being taken. However, it is necessary to pay sufficient attention to future climate change, so we will be examining laws and regulations governing tailings dam management in the host country, as well as international frameworks, standards and guidelines, in order to consider appropriate countermeasures.
20. Any other relevant information and supporting documentation. Please state if you have omitted any other exposure to tailings facilities through any joint ventures you may have.		

Mine Tailings Disclosure Table

Disclosure Item	Answer	Relevant information
1. "Tailings Dam" Name/identifier	Kushikino No.3	
2. Location	Lat 31.7335/long 130.2539	
3. Ownership	Mitsui Kushikino Mining Co., Ltd. ,a subsidiary of Mitsui Mining & Smelting Co., Ltd.	
4. Status	Inactive	
5. Date of initial operation	October, 1974	
6. Is the Dam currently operated or closed as per currently approved design?	Yes	
7. Raising method	Upstream	
8. Current Maximum Height	86m	
9. Current Tailings Storage Impoundment Volume	478,965m ³	
10. Planned Tailings Storage Impoundment Volume in 5 years time.	0m ³	
11. Most recent Independent Expert Review	March, 2019	
12. Do you have full and complete relevant engineering records including design, construction, operation, maintenance and/or closure.	Yes	
13. What is your hazard categorisation of this facility, based on consequence of failure?	failure risk: low	
14. What guideline do you follow for the classification system?	Ministry of Economy, Trade, and Industry(2012) "Technical Policies of the ministerial decree defining technical standards of mining facilities"	The national laws in Japan do not require hazard categorisation based on consequence of failure.
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).	No	
16. Do you have internal/in house engineering specialist oversight of this facility? Or do you have external engineering support for this purpose?	In house engineering specialist oversight : Yes External engineering support : Yes	
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?	No	Because they are not required under national law, evaluations of "downstream impacts" have not been conducted. However, we will be examining laws and regulations governing tailings dam management in the host country, as well as international frameworks, standards and guidelines, in order to consider appropriate countermeasures.
18. Is there a) a closure plan in place for this dam, and b) does it include long term monitoring?	a) Yes b) Yes	Plans are being made to undertake closure work following national guidelines, and money is being set aside for that purpose. However, it is being monitored in an idled state, and there are no plans to close the tailings dam at the present time.
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?	No	This tailings dam has been equipped with drainage facilities that can withstand a 100-year rainfall event, and based on Japanese domestic results, we feel that satisfactory measures are being taken. However, it is necessary to pay sufficient attention to future climate change, so we will be examining laws and regulations governing tailings dam management in the host country, as well as international frameworks, standards and guidelines, in order to consider appropriate countermeasures.
20. Any other relevant information and supporting documentation. Please state if you have omitted any other exposure to tailings facilities through any joint ventures you may have.		

Mine Tailings Disclosure Table

Disclosure Item	Answer	Relevant information
1. "Tailings Dam" Name/identifier	Kurotani	
2. Location	Lat 35.8790/long 136.6019	
3. Ownership	Nakatatsu Kougyou Co., Ltd. , a subsidiary of Mitsui Mining & Smelting Co., Ltd.	
4. Status	Inactive	
5. Date of initial operation	November, 1942	
6. Is the Dam currently operated or closed as per currently approved design?	Yes	
7. Raising method	Upstream	
8. Current Maximum Height	8m	
9. Current Tailings Storage Impoundment Volume	250,000m ³	
10. Planned Tailings Storage Impoundment Volume in 5 years time.	0m ³	
11. Most recent Independent Expert Review	September, 2015	
12. Do you have full and complete relevant engineering records including design, construction, operation, maintenance and/or closure.	Yes	
13. What is your hazard categorisation of this facility, based on consequence of failure?	failiure risk: low	
14. What guideline do you follow for the classification system?	Ministry of Economy, Trade, and Industry(2012) "Technical Policies of the ministerial decree defining technical standards of mining facilities"	The national laws in Japan do not require hazard categorisation based on consequence of failure.
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).	No	
16. Do you have internal/in house engineering specialist oversight of this facility? Or do you have external engineering support for this purpose?	In house engineering specialist oversight : Yes External engineering support : Yes	
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?	No	Because they are not required under national law, evaluations of "downstream impacts" have not been conducted. However, we will be examining laws and regulations governing tailings dam management in the host country, as well as international frameworks, standards and guidelines, in order to consider appropriate countermeasures.
18. Is there a) a closure plan in place for this dam, and b) does it include long term monitoring?	a) Yes b) Yes	Plans are being made to undertake closure work following national guidelines, and money is being set aside for that purpose. In addition, the ground cover is being revegetated in some places, and efforts are being made to stabilize the soil. However, the site is currently being monitored in an idled state, and there are no plans to close the tailings dam at the present time.
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?	No	This tailings dam has been equipped with drainage facilities that can withstand a 100-year rainfall event, and based on Japanese domestic results, we feel that satisfactory measures are being taken. However, it is necessary to pay sufficient attention to future climate change, so we will be examining laws and regulations governing tailings dam management in the host country, as well as international frameworks, standards and guidelines, in order to consider appropriate countermeasures.
20. Any other relevant information and supporting documentation. Please state if you have omitted any other exposure to tailings facilities through any joint ventures you may have.		

Mine Tailings Disclosure Table

Disclosure Item	Answer	Relevant information
1. "Tailings Dam" Name/identifier	Noda	
2. Location	Lat 35.1906/long 132.4377	
3. Ownership	Mitsui Mining & Smelting Co., Ltd.	
4. Status	Inactive	
5. Date of initial operation	April, 1975	
6. Is the Dam currently operated or closed as per currently approved design?	Yes	
7. Raising method	Upstream	
8. Current Maximum Height	25m	
9. Current Tailings Storage Impoundment Volume	199,500m ³	
10. Planned Tailings Storage Impoundment Volume in 5 years time.	0m ³	
11. Most recent Independent Expert Review	March, 2014	
12. Do you have full and complete relevant engineering records including design, construction, operation, maintenance and/or closure.	Yes	
13. What is your hazard categorisation of this facility, based on consequence of failure?	failiure risk: low	
14. What guideline do you follow for the classification system?	Ministry of Economy, Trade, and Industry(2012) "Technical Policies of the ministerial decree defining technical standards of mining facilities"	The national laws in Japan do not require hazard categorisation based on consequence of failure.
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).	No	
16. Do you have internal/in house engineering specialist oversight of this facility? Or do you have external engineering support for this purpose?	In house engineering specialist oversight : Yes External engineering support : Yes	
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?	No	Because they are not required under national law, evaluations of "downstream impacts" have not been conducted. However, we will be examining laws and regulations governing tailings dam management in the host country, as well as international frameworks, standards and guidelines, in order to consider appropriate countermeasures.
18. Is there a) a closure plan in place for this dam, and b) does it include long term monitoring?	a) Yes b) Yes	Plans are being made to undertake closure work following national guidelines, and money is being set aside for that purpose. In addition, the ground cover is being revegetated in some places, and efforts are being made to stabilize the soil. However, the site is currently being monitored in an idled state, and there are no plans to close the tailings dam at the present time.
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?	No	This tailings dam has been equipped with drainage facilities that can withstand a 100-year rainfall event, and based on Japanese domestic results, we feel that satisfactory measures are being taken. However, it is necessary to pay sufficient attention to future climate change, so we will be examining laws and regulations governing tailings dam management in the host country, as well as international frameworks, standards and guidelines, in order to consider appropriate countermeasures.
20. Any other relevant information and supporting documentation. Please state if you have omitted any other exposure to tailings facilities through any joint ventures you may have.		

Mine Tailings Disclosure Table

Disclosure Item	Answer	Relevant information
1. "Tailings Dam" Name/identifier	Kushikino No.1	
2. Location	Lat 31.4349/long 130.1627	
3. Ownership	Mitsui Kushikino Mining Co., Ltd. ,a subsidiary of Mitsui Mining & Smelting Co., Ltd.	
4. Status	Inactive	
5. Date of initial operation	June, 1972	
6. Is the Dam currently operated or closed as per currently approved design?	Yes	
7. Raising method	Upstream	
8. Current Maximum Height	23m	
9. Current Tailings Storage Impoundment Volume	172,605m ³	
10. Planned Tailings Storage Impoundment Volume in 5 years time.	0m ³	
11. Most recent Independent Expert Review	December, 2013	
12. Do you have full and complete relevant engineering records including design, construction, operation, maintenance and/or closure.	Yes	
13. What is your hazard categorisation of this facility, based on consequence of failure?	failure risk: low	
14. What guideline do you follow for the classification system?	Ministry of Economy, Trade, and Industry(2012) "Technical Policies of the ministerial decree defining technical standards of mining facilities"	The national laws in Japan do not require hazard categorisation based on consequence of failure.
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).	No	
16. Do you have internal/in house engineering specialist oversight of this facility? Or do you have external engineering support for this purpose?	In house engineering specialist oversight : Yes External engineering support : Yes	
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?	No	Because they are not required under national law, evaluations of "downstream impacts" have not been conducted. However, we will be examining laws and regulations governing tailings dam management in the host country, as well as international frameworks, standards and guidelines, in order to consider appropriate countermeasures.
18. Is there a) a closure plan in place for this dam, and b) does it include long term monitoring?	a) Yes b) Yes	Plans are being made to undertake closure work following national guidelines, and money is being set aside for that purpose. However, it is being monitored in an idled state, and there are no plans to close the tailings dam at the present time.
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?	No	This tailings dam has been equipped with drainage facilities that can withstand a 100-year rainfall event, and based on Japanese domestic results, we feel that satisfactory measures are being taken. However, it is necessary to pay sufficient attention to future climate change, so we will be examining laws and regulations governing tailings dam management in the host country, as well as international frameworks, standards and guidelines, in order to consider appropriate countermeasures.
20. Any other relevant information and supporting documentation. Please state if you have omitted any other exposure to tailings facilities through any joint ventures you may have.		

Mine Tailings Disclosure Table

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As of March 2019

Disclosure Item	Answer	Relevant information
1. "Tailings Dam" Name/identifier	Hatai	
2. Location	Lat 35.1805/long 132.4367	
3. Ownership	Mitsui Mining & Smelting Co., Ltd.	
4. Status	Inactive	
5. Date of initial operation	October, 1975	
6. Is the Dam currently operated or closed as per currently approved design?	Yes	
7. Raising method	Upstream	
8. Current Maximum Height	15m	
9. Current Tailings Storage Impoundment Volume	138,043m ³	
10. Planned Tailings Storage Impoundment Volume in 5 years time.	0m ³	
11. Most recent Independent Expert Review	March, 2014	
12. Do you have full and complete relevant engineering records including design, construction, operation, maintenance and/or closure.	Yes	
13. What is your hazard categorisation of this facility, based on consequence of failure?	failure risk: low	
14. What guideline do you follow for the classification system?	Ministry of Economy, Trade, and Industry(2012) "Technical Policies of the ministerial decree defining technical standards of mining facilities"	The national laws in Japan do not require hazard categorisation based on consequence of failure.
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).	No	
16. Do you have internal/in house engineering specialist oversight of this facility? Or do you have external engineering support for this purpose?	In house engineering specialist oversight : Yes External engineering support : Yes	
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?	No	Because they are not required under national law, evaluations of "downstream impacts" have not been conducted. However, we will be examining laws and regulations governing tailings dam management in the host country, as well as international frameworks, standards and guidelines, in order to consider appropriate countermeasures.
18. Is there a) a closure plan in place for this dam, and b) does it include long term monitoring?	a) Yes b) Yes	Plans are being made to undertake closure work following national guidelines, and money is being set aside for that purpose. In addition, the ground cover is being revegetated in some places, and efforts are being made to stabilize the soil. However, the site is currently being monitored in an idled state, and there are no plans to close the tailings dam at the present time.
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?	No	This tailings dam has been equipped with drainage facilities that can withstand a 100-year rainfall event, and based on Japanese domestic results, we feel that satisfactory measures are being taken. However, it is necessary to pay sufficient attention to future climate change, so we will be examining laws and regulations governing tailings dam management in the host country, as well as international frameworks, standards and guidelines, in order to consider appropriate countermeasures.
20. Any other relevant information and supporting documentation. Please state if you have omitted any other exposure to tailings facilities through any joint ventures you may have.		

Mine Tailings Disclosure Table

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As of March 2019

Disclosure Item	Answer	Relevant information
1. "Tailings Dam" Name/identifier	Kushikino No.2	
2. Location	Lat 31.7309/long 130.2746	
3. Ownership	Mitsui Kushikino Mining Co., Ltd. , a subsidiary of Mitsui Mining & Smelting Co., Ltd.	
4. Status	Inactive	
5. Date of initial operation	June, 1973	
6. Is the Dam currently operated or closed as per currently approved design?	Yes	
7. Raising method	Upstream	
8. Current Maximum Height	39,5m	
9. Current Tailings Storage Impoundment Volume	99,500m3	
10. Planned Tailings Storage Impoundment Volume in 5 years time.	0m3	
11. Most recent Independent Expert Review	March, 2019	
12. Do you have full and complete relevant engineering records including design, construction, operation, maintenance and/or closure.	Yes	
13. What is your hazard categorisation of this facility, based on consequence of failure?	failure risk: low	
14. What guideline do you follow for the classification system?	Ministry of Economy, Trade, and Industry(2012) "Technical Policies of the ministerial decree defining technical standards of mining facilities"	The national laws in Japan do not require hazard categorisation based on consequence of failure.
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).	No	
16. Do you have internal/in house engineering specialist oversight of this facility? Or do you have external engineering support for this purpose?	In house engineering specialist oversight : Yes External engineering support : Yes	
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?	No	Because they are not required under national law, evaluations of "downstream impacts" have not been conducted. However, we will be examining laws and regulations governing tailings dam management in the host country, as well as international frameworks, standards and guidelines, in order to consider appropriate countermeasures.
18. Is there a) a closure plan in place for this dam, and b) does it include long term monitoring?	a) Yes b) Yes	Plans are being made to undertake closure work following national guidelines, and money is being set aside for that purpose. However, it is being monitored in an idled state, and there are no plans to close the tailings dam at the present time.
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?	No	This tailings dam has been equipped with drainage facilities that can withstand a 100-year rainfall event, and based on Japanese domestic results, we feel that satisfactory measures are being taken. However, it is necessary to pay sufficient attention to future climate change, so we will be examining laws and regulations governing tailings dam management in the host country, as well as international frameworks, standards and guidelines, in order to consider appropriate countermeasures.
20. Any other relevant information and supporting documentation. Please state if you have omitted any other exposure to tailings facilities through any joint ventures you may have.		

Mine Tailings Disclosure Table

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As of March 2019

Disclosure Item	Answer	Relevant information
1. "Tailings Dam" Name/identifier	Arakawa	
2. Location	Lat 31.7561/long 130.2757	
3. Ownership	Mitsui Kushikino Mining Co., Ltd. ,a subsidiary of Mitsui Mining & Smelting Co., Ltd.	
4. Status	Inactive	
5. Date of initial operation	August, 1950	
6. Is the Dam currently operated or closed as per currently approved design?	Yes	
7. Raising method	Upstream	
8. Current Maximum Height	26m	
9. Current Tailings Storage Impoundment Volume	48,000m ³	
10. Planned Tailings Storage Impoundment Volume in 5 years time.	0m ³	
11. Most recent Independent Expert Review	March, 2019	
12. Do you have full and complete relevant engineering records including design, construction, operation, maintenance and/or closure.	Yes	
13. What is your hazard categorisation of this facility, based on consequence of failure?	failure risk: low	
14. What guideline do you follow for the classification system?	Ministry of Economy, Trade, and Industry(2012) "Technical Policies of the ministerial decree defining technical standards of mining facilities"	The national laws in Japan do not require hazard categorisation based on consequence of failure.
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).	No	
16. Do you have internal/in house engineering specialist oversight of this facility? Or do you have external engineering support for this purpose?	In house engineering specialist oversight : Yes External engineering support : Yes	
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?	No	Because they are not required under national law, evaluations of "downstream impacts" have not been conducted. However, we will be examining laws and regulations governing tailings dam management in the host country, as well as international frameworks, standards and guidelines, in order to consider appropriate countermeasures.
18. Is there a) a closure plan in place for this dam, and b) does it include long term monitoring?	a) Yes b) Yes	Plans are being made to undertake closure work following national guidelines, and money is being set aside for that purpose. In addition, the ground cover is being revegetated in some places, and efforts are being made to stabilize the soil. However, the site is currently being monitored in an idled state, and there are no plans to close the tailings dam at the present time.
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?	No	This tailings dam has been equipped with drainage facilities that can withstand a 100-year rainfall event, and based on Japanese domestic results, we feel that satisfactory measures are being taken. However, it is necessary to pay sufficient attention to future climate change, so we will be examining laws and regulations governing tailings dam management in the host country, as well as international frameworks, standards and guidelines, in order to consider appropriate countermeasures.
20. Any other relevant information and supporting documentation. Please state if you have omitted any other exposure to tailings facilities through any joint ventures you may have.		

Mine Tailings Disclosure Table

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As of March 2019

Disclosure Item	Answer	Relevant information
1. "Tailings Dam" Name/identifier	Ounoyama	
2. Location	Lat 31.9297/long 130.6943	
3. Ownership	Mitsui Kushikino Mining Co., Ltd. ,a subsidiary of Mitsui Mining & Smelting Co., Ltd.	
4. Status	Inactive	
5. Date of initial operation	November, 1940	
6. Is the Dam currently operated or closed as per currently approved design?	No	
7. Raising method	Upstream	
8. Current Maximum Height	14m	
9. Current Tailings Storage Impoundment Volume	39,000m3	
10. Planned Tailings Storage Impoundment Volume in 5 years time.	0m3	
11. Most recent Independent Expert Review	Currently being implemented	
12. Do you have full and complete relevant engineering records including design, construction, operation, maintenance and/or closure.	Yes	
13. What is your hazard categorisation of this facility, based on consequence of failure?	failure risk: low	
14. What guideline do you follow for the classification system?	Ministry of Economy, Trade, and Industry(2012) "Technical Policies of the ministerial decree defining technical standards of mining facilities"	The national laws in Japan do not require hazard categorisation based on consequence of failure.
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).	No	
16. Do you have internal/in house engineering specialist oversight of this facility? Or do you have external engineering support for this purpose?	In house engineering specialist oversight : Yes External engineering support : Yes	
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?	No	Because they are not required under national law, evaluations of "downstream impacts" have not been conducted. However, we will be examining laws and regulations governing tailings dam management in the host country, as well as international frameworks, standards and guidelines, in order to consider appropriate countermeasures.
18. Is there a) a closure plan in place for this dam, and b) does it include long term monitoring?	a) Yes b) Yes	Plans are being made to undertake closure work following national guidelines, and money is being set aside for that purpose. In addition, the ground cover is being revegetated in some places, and efforts are being made to stabilize the soil. However, the site is currently being monitored in an idled state, and there are no plans to close the tailings dam at the present time.
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?	No	This tailings dam has been equipped with drainage facilities that can withstand a 100-year rainfall event, and based on Japanese domestic results, we feel that satisfactory measures are being taken. However, it is necessary to pay sufficient attention to future climate change, so we will be examining laws and regulations governing tailings dam management in the host country, as well as international frameworks, standards and guidelines, in order to consider appropriate countermeasures.
20. Any other relevant information and supporting documentation. Please state if you have omitted any other exposure to tailings facilities through any joint ventures you may have.		

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As of March 2019

Disclosure Item	Answer	Relevant information
1. "Tailings Dam" Name/identifier	Chuspic	
2. Location	Lat -9.876181/Long -77.020846	
3. Ownership	Compañia Minera Santa Luisa S.A. ,a subsidiary of Mitsui Mining & Smelting Co., Ltd.	
4. Status	Active	
5. Date of initial operation	June, 1974	
6. Is the Dam currently operated or closed as per currently approved design?	Yes	
7. Raising method	Downstream	
8. Current Maximum Height	39.5m	
9. Current Tailings Storage Impoundment Volume	Approx. 8,230,000m ³	
10. Planned Tailings Storage Impoundment Volume in 5 years time.	316,000m ³	
11. Most recent Independent Expert Review	December, 2017	
12. Do you have full and complete relevant engineering records including design, construction, operation, maintenance and/or closure.	Yes	
13. What is your hazard categorisation of this facility, based on consequence of failure?	failure risk: low	This work is conducted following the national standards of the Republic of Peru. <ul style="list-style-type: none"> • Static (normal) stability analysis (extended plan) Safety rate (safety level): Results, 2.16; Standard, 1.5 or higher. • Safety analysis during an earthquake (extended plan) Safety rate: Results, 1.35; Standard, 1.0 or higher. Evaluation of the maximum seismic acceleration of a 500-year earthquake event in the Huanzala region.
14. What guideline do you follow for the classification system?	"Guía Ambiental para la Estabilidad de Taludes de Depósitos de Residuos Sólidos Provenientes de Actividades Mineras" by Ministry of Energy and Mines in Peru(DGAA, Vol. XVI –1998)	
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).	No	
16. Do you have internal/in house engineering specialist oversight of this facility? Or do you have external engineering support for this purpose?	In house engineering specialist oversight : Yes External engineering support : Yes	Once a month, in house staff monitor the level and quality of water at the dam. Once every three months, an outside consultant takes measurements of the water level and slope of the dam, and conducts safety evaluations.
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?	No	Because they are not required under national law, evaluations of "downstream impacts" have not been conducted. However, we will be examining laws and regulations governing tailings dam management in the host country, as well as international frameworks, standards and guidelines, in order to consider appropriate countermeasures.
18. Is there a) a closure plan in place for this dam, and b) does it include long term monitoring?	a) Yes b) Yes	Plans are being made to close the entire mine based on the "Programa de Adecuación de Manejo Ambiental" , and they also include plans for closing the tailings dam. Money is being set aside to obtain approval for the mine closure plan from the relevant government offices, and to implement the plan.
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?	No	Following the dam design standards of the International Commission on Large Dams (ICOLD), drainage facilities and emergency drainage canals were constructed at this tailings dam, and it was concluded that sufficient preparations have been made to deal with risks of future abnormal weather. However, it is necessary to pay sufficient attention to future climate change, so we will be examining laws and regulations in the host country, as well as international frameworks, standards and guidelines, in order to consider appropriate countermeasures.
20. Any other relevant information and supporting documentation. Please state if you have omitted any other exposure to tailings facilities through any joint ventures you may have.	http://cmslsa.com/	

Mine Tailings Disclosure Table

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As of March 2019

Disclosure Item	Answer	Relevant information
1. "Tailings Dam" Name/identifier	Caserones currently has two tailings deposit/dams: 1.- "La Brea", a slimes deposit, with a borrow material dam (rockfill). 2.- "Caserones Bajo" ("El Tambo"), a sands deposit on a basin where sands are dumped (no water pond).	
2. Location	1.- La Brea extends From: Lat -28.123056/Long -69.617278 To: Lat -28.141886/Long -69.631161 2.- El Tambo extends From: Lat -28.189933/Long -69.541228 To: Lat -28.196147/Long -69.566758	
3. Ownership	Both, La Brea and El Tambo are owned by Sociedad Contractual Minera Lumina Copper Chile., a JV between Mitsui Mining & Smelting Co., Ltd., JX Nippon Mining & Metals Corporation and MITSUI & CO., LTD.	
4. Status	Both, La Brea and El Tambo deposits, are currently active.	
5. Date of initial operation	1.- La Brea started in May, 2014. 2.- El Tambo started in October, 2014.	
6. Is the Dam currently operated or closed as per currently approved design?	1.- La Brea: Yes. 2.- El Tambo: Yes.	
7. Raising method	1.- La Brea: Downstream method. 2.- El Tambo: Paddock cells and Spigot method.	
8. Current Maximum Height	1.- La Brea: 140 m approximately. 2.- El Tambo: 10 m approximately.	
9. Current Tailings Storage Impoundment Volume	1.- La Brea: 50,290,375 m3. 2.- El Tambo: 13,293,000 m3	
10. Planned Tailings Storage Impoundment Volume in 5 years time.	The planned Tailing storage impoundment volume for 2024 is: 1.- La Brea: 130,032,000m3, 2.- El Tambo: 62,228,000m3.	
11. Most recent Independent Expert Review	November, 2017 Reviewed By Golder Associates.	
12. Do you have full and complete relevant engineering records including design, construction, operation, maintenance and/or closure.	Yes.	
13. What is your hazard categorisation of this facility, based on consequence of failure?	Impact: High Probability: Low	
14. What guideline do you follow for the classification system?	"Decreto Supremo N° 248" by Ministry of Mining in Chile.	
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).	No.	
16. Do you have internal/in house engineering specialist oversight of this facility? Or do you have external engineering support for this purpose?	We have external engineering support.	
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?	Yes. 1.- La Brea: several analysis have been performed, being the latest done on June, 2018. 2.- El Tambo: an assessment is currently under process.	
18. Is there a) a closure plan in place for this dam, and b) does it include long term monitoring?	a) Yes. b) 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?	Yes.	
20. Any other relevant information and supporting documentation. Please state if you have omitted any other exposure to tailings facilities through any joint ventures you may have.		