

## Welcome to your CDP Water Security Questionnaire 2022

### W0. Introduction

#### W0.1

**(W0.1) Give a general description of and introduction to your organization.**

AngloGold Ashanti is a multinational global gold mining company with a geographically diverse, world-class portfolio of operations and projects. Headquartered in Johannesburg, South Africa, AngloGold Ashanti is the fourth largest gold mining company in the world, measured by production. AngloGold Ashanti produced 2.472 million ounces of gold in 2021 - an estimated 2.1% of global production - making it the fourth largest gold producer in the world. AngloGold Ashanti operates 11 gold-producing operations located in 6 countries on three continents, and a group of greenfield projects in Colombia as well as AngloGold Ashanti's newest Silicon project in the United States of America which is supported by a focused exploration programme. These comprise mid to long-life, relatively low-cost assets with differing ore body types located in key gold-producing regions. AngloGold Ashanti currently operates in Argentina, Australia, Brazil, Ghana, the Republic of Guinea, and Tanzania. Several of these assets are strongly leveraged to energy costs and currencies. In addition, AngloGold Ashanti holds a material interest in 2 non-managed mines which are operated by RandGold Resources. We work across the full spectrum of the mining value chain and are concerned with the impact of our activities on the varied and many communities and environments in which we operate. Our goal is to create sustainable value for our shareholders, employees, and social partners through safe and responsible mining practices and capital discipline. Headquartered in Johannesburg, South Africa, AngloGold Ashanti's primary listing is on the Johannesburg Stock Exchange (ANG). It is also listed on the following securities exchanges: New York (AU), Australia (AGG) and Ghana (AGA).



## W-MM0.1a

**(W-MM0.1a) Which activities in the metals and mining sector does your organization engage in?**

Activity	Details of activity
Mining	Gold
Processing	Gold

## W0.2

**(W0.2) State the start and end date of the year for which you are reporting data.**

	Start date	End date
Reporting year	January 1, 2021	December 31, 2021

## W0.3

**(W0.3) Select the countries/areas in which you operate.**

- Argentina
- Australia
- Brazil
- Ghana
- Guinea
- United Republic of Tanzania

## W0.4

**(W0.4) Select the currency used for all financial information disclosed throughout your response.**

- USD



## W0.5

**(W0.5) Select the option that best describes the reporting boundary for companies, entities, or groups for which water impacts on your business are being reported.**

Companies, entities or groups over which operational control is exercised

## W0.6

**(W0.6) Within this boundary, are there any geographies, facilities, water aspects, or other exclusions from your disclosure?**

No

## W0.7

**(W0.7) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?**

Indicate whether you are able to provide a unique identifier for your organization.	Provide your unique identifier
Yes, a Ticker symbol	JSE - ANGJ.J

## W1. Current state

### W1.1

**(W1.1) Rate the importance (current and future) of water quality and water quantity to the success of your business.**

	Direct use importance rating	Indirect use importance rating	Please explain

Sufficient amounts of good quality freshwater available for use	Neutral	Not very important	DIRECT USE: There are only a few production processes in operating mines that require good quality freshwater. These include air cooling and ventilation systems in underground mines, the gold elution circuits in gold extraction plants and WASH services for employees. The bulk of the water requirements can be met with poorer quality water. Often however, where there are limited poorer quality sources available, freshwater must be imported into the organisation to sustain operations, either in untreated form directly from rivers, lakes or potable quality freshwater is imported from utility water suppliers. INDIRECT USE: There are immaterial volumes of water contained in purchased products, being limited to liquid reagents that are purchased and where water is used as a carrier (e.g. acids, peroxide, liquid cyanide, etc.).
Sufficient amounts of recycled, brackish and/or produced water available for use	Vital	Not important at all	DIRECT USE: The bulk of operational water needs at our operations are met by recycled water (up to 67%) within closed systems. Most operational processes can use very poor quality water and as a result, water losses incurred due to evaporation, phreatic water entrainment in tailings and seepage are preferentially made up by brackish and/or saline groundwater water sources. Where insufficient poor quality water is available to counter losses, fresh water must be imported. INDIRECT USE: There are immaterial volumes of water contained in purchased products, being limited to liquid reagents that are purchased and where water is used as a carrier (e.g. acids, peroxide, liquid cyanide, etc.).

## W1.2

**(W1.2) Across all your operations, what proportion of the following water aspects are regularly measured and monitored?**

	% of sites/facilities/operations	Please explain
Water withdrawals – total volumes	100%	All company facilities report water withdrawal monthly, in accordance with GRI G4-EN8 as well as the ICMM Water Reporting, Good practice guide, 2nd Edition. The data is reported externally (in our Sustainability report) on an annual basis. Measuring withdrawal volumes is critical in identifying sudden and unexpected changes in the site

		water balance. In many jurisdictions, water withdrawals into the organisation are also closely tracked and require reporting to regulators.
Water withdrawals – volumes by source	100%	All company facilities report withdrawal by source monthly, in accordance with GRI G4-EN8 as well as the ICMW Water Reporting, Good practice guide, 2nd Edition. Rainwater is excluded from internal definitions of withdrawal and accounted for elsewhere. The data is reported externally on an annual basis. Measuring withdrawal volumes by source, or by water type is critical in identifying sudden and unexpected changes in the site water balance. Targets are often set to reduce importation from fresher, constrained or more expensive water sources. In many jurisdictions, water withdrawals into the organisation are also closely tracked and require reporting to regulators.
Entrained water associated with your metals & mining sector activities - total volumes [only metals and mining sector]	100%	Estimated by calculation at company aggregation level and included as part of total the Water consumption for the organisation in our published annual Sustainability report.
Water withdrawals quality	100%	A core set of water quality parameters are monitored by all operations and records kept at site.
Water discharges – total volumes	100%	All company facilities that discharge water account for discharged water volumes in accordance with GRI G4-EN22, on a monthly basis. The data is collated and reported externally on an annual basis (in our published Sustainability report). Volumes of water discharged, e.g. through a water treatment plant are required to maintain the operational site water balance and closely manage costs of water treatment. In addition, discharges are regulated and require reporting to regulators.
Water discharges – volumes by destination	100%	Water discharge permits or licenses issued by regulators typically indicate the permissible location of discharge, which has been determined through a process of scientific study and stakeholder consultation. For example, our Sunrise Dam operation discharges hyper-saline water onto a salt lake. Typically, these destinations remain fixed and confirmation of water discharge at the permitted points is provided in reports to regulators along with other pertinent discharge information. In addition to the

		discharge volume, the discharge destination for each discharge is reported externally on an annual basis (in our published Sustainability report).
Water discharges – volumes by treatment method	100%	Water discharge permits or licenses issued by regulators typically indicate the type of treatment to be applied and/or water quality objectives that have to be met. This data is reported externally on an annual basis (in our published Sustainability report).
Water discharge quality – by standard effluent parameters	100%	Water discharge permits or licenses issued by regulators indicate the permissible thresholds of various standard effluent parameters e.g. pH, conductivity and parameters of potential concern such as dissolved metals. Monitoring of these parameters is typically obligatory, as is provision of this information to regulators. Again, this data is reported externally on an annual basis (in our published Sustainability report).
Water discharge quality – temperature	51-75	Water discharge permits or licenses issued by regulators indicate the permissible thresholds of various standard effluent parameters e.g. pH, conductivity and parameters of potential concern such as dissolved metals. Monitoring of these parameters is typically obligatory, as is provision of this information to regulators. It is not however common to require temperature readings, hence this is not globally applied. The percentage reported here is an estimate.
Water consumption – total volume	100%	2022 Consumption data includes entrainment and evaporation aggregated at the company level. It also includes high and low quality water imports, harvested rainfall as well as high and low quality water discharge as per the ICMM Water Reporting, Good practice guide, 2nd Edition.
Water recycled/reused	100%	All active operational facilities account for recycled water volumes in accordance with the ICMM methodology (based on MCA water accounting framework). The data is collated and reported externally on an annual basis.
The provision of fully-functioning, safely managed WASH services to all workers	100%	We believe that these are fundamental human rights and are committed to complying with the Universal Declaration on Human Rights, International Bill of Human Rights and the International Labour Organisation (ILO) standards.



## W1.2b

**(W1.2b) What are the total volumes of water withdrawn, discharged, and consumed across all your operations, and how do these volumes compare to the previous reporting year?**

	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Total withdrawals	55,478	Much higher	We have aligned our water withdrawal data with the CDP Water guidance, adapting from the ICMM Consistent Water Reporting Guide. This includes harvested rainwater and “Other Managed Water Withdrawals.” This makes the 2021 data not comparable with the reported 2020 data. In addition, our 2020 water withdrawal figures had included 9 months of water withdrawals from the South African operations and a full year of data from the Sadiola mine in Mali.
Total discharges	18,279	Much higher	We have aligned our water discharge data with the CDP Water guidance, adapting from the ICMM Consistent Water Reporting Guide. This includes “Other Managed Water Discharges” for the 2021 period. This number includes diffuse discharges to groundwater (other task losses).
Total consumption	37,199	Lower	We have aligned our reporting with the ICMM Water Reporting, Good practice guide, 2nd Edition. Our 2020 water withdrawal consumption data had included 9 months of water consumption at the South African operations and a full year of water consumption at the Sadiola mine in Mali. These operations are excluded from the 2021 data reducing the year-on-year water consumption value.

## W1.2d

**(W1.2d) Indicate whether water is withdrawn from areas with water stress and provide the proportion.**

Withdrawals are from areas with water stress	Please explain

Row 1	Yes	Two of our operations are located in areas identified as being under water stress; in reality, these operations have a significant proportion of extraneous fissure water draining into the operations, reducing the need to import water from surface sources and water supply utilities.
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## W1.2h

**(W1.2h) Provide total water withdrawal data by source.**

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Fresh surface water, including rainwater, water from wetlands, rivers, and lakes	Relevant	31,294	Lower	Includes directly and indirectly harvested rainwater.
Brackish surface water/Seawater	Not relevant			The water quality of our water withdrawals at our operating sites is not in exceedance of 10,000 mg/l TDS.
Groundwater – renewable	Relevant	16,537	Lower	Includes high and low quality groundwater.
Groundwater – non-renewable	Not relevant			We do not tap into water at these depths and we currently do not have a need to.
Produced/Entrained water	Relevant but volume unknown			Water entrained with the ore arriving at a processing plant includes a percentage of moisture and a proportion of the recirculating process water balance. The extent between mines can vary significantly, depending on the geology and the mine type. For example, hard rock mining tends to have very limited naturally occurring water, with most being added through mining activities. The percentage of entrained moisture is estimated in the site level water balance and, included in



				the Groundwater Withdrawal numbers. At the corporate aggregation level, we are unable to quantify the volume of entrained water.
Third party sources	Relevant	40	Much lower	One of our operating sites makes use of third party water when the groundwater supply is inadequate. In the prior reporting year, our SA mines contributed largely to this total volume for AGA. With 2021 being a full reporting year, without the SA mines, the reported volume has significantly decreased.

## W1.2i

### (W1.2i) Provide total water discharge data by destination.

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Fresh surface water	Relevant	17,749	This is our first year of measurement	Our primary Water accounting methodology is the ICMM Water Reporting, Good practice guide, 2nd Edition. We have adapted this to the CDP Water guidance to include “Other Managed Water Discharges”, which includes excess rainfall. We have aggregated the discharge volumes by the quality thresholds of the CDP Water guidance for this section. This makes our 2021 data incomparable with the methodology used in 2020 and earlier.
Brackish surface water/seawater	Relevant	530	This is our first year of measurement	Our primary Water accounting methodology is the ICMM Water Reporting, Good practice guide, 2nd Edition. We have adapted this to the CDP Water guidance to include “Other Managed Water Discharges” and have aggregated the discharge volumes by the quality thresholds of the CDP Water guidance for this section. This makes our 2021 data incomparable with the methodology used in 2020 and earlier.

Groundwater	Relevant but volume unknown			We do not undertake aquifer re-injection, but do experience diffuse seepage losses to groundwater from water task areas. These volumes are challenging to accurately quantify at the corporate aggregation level. Our definition of Consumption includes "Other Task Losses" which also accounts for diffuse seepage losses to groundwater. See our 2021 Interactions with Water infographic at: <a href="https://www.aga-reports.com/21/sr/environment/water/">https://www.aga-reports.com/21/sr/environment/water/</a>
Third-party destinations	Not relevant			Our operations do not provide water to third-parties.

## W1.2j

**(W1.2j) Within your direct operations, indicate the highest level(s) to which you treat your discharge.**

	Relevance of treatment level to discharge	Volume (megaliters/year)	Comparison of treated volume with previous reporting year	% of your sites/facilities/operations this volume applies to	Please explain
Tertiary treatment	Relevant	3,257	Higher	1-10	Reverse osmosis-related water treatment technology, managing excess process water to regulatory requirements. For 2021, we have included Tertiary treatment volumes of "Other Managed Water" which was excluded in the 2020 data, and relates to the treatment of run-off stormwater from a closed tailings storage facility to regulatory compliance levels.
Secondary treatment	Relevant	9,810	Much higher	31-40	This includes chemical precipitation-based water treatment and pH adjustment technologies. For 2021, to align with CDP Water definitions, we



					have included volumes of "Other Managed Water" which underwent secondary treatment to meet regulatory requirement levels. These additional volumes were excluded in the 2020 data.
Primary treatment only	Relevant	443	This is our first year of measurement	1-10	For 2021, to align with CDP Water definitions, we have included volumes of "Other Managed Water" which underwent primary treatment to meet regulatory requirement levels. These volumes were excluded in the 2020 data.
Discharge to the natural environment without treatment	Relevant	4,768	This is our first year of measurement	21-30	For 2021, to align with CDP Water definitions, we have included volumes of "Other Managed Water" that were discharged to the environment without requiring treatment. These volumes were excluded in the 2020 data.
Discharge to a third party without treatment	Not relevant				We do not discharge to third parties.
Other	Not relevant				Not applicable, the data reported for the 2020 period was done erroneously.

### W1.3

**(W1.3) Provide a figure for your organization’s total water withdrawal efficiency.**

Revenue	Total water withdrawal volume (megaliters)	Total water withdrawal efficiency	Anticipated forward trend
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Row 1	4,029,000,000	55,478	72,623.3822416093	Unknown, we do not track this metric inhouse, it is of very limited value and hugely exposed to the vagaries of the gold price and the average grades of the ore bodies being mined.
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### W-MM1.3

**(W-MM1.3) Do you calculate water intensity information for your metals and mining activities?**

Yes

### W-MM1.3a

**(W-MM1.3a) For your top 5 products by revenue, provide the following intensity information associated with your metals and mining activities.**

Product	Numerator: Water aspect	Denominator	Comparison with previous reporting year	Please explain
Gold	Total water use	Ton of ore processed	Higher	Owing to the conclusion of the sale of the remaining South African assets which contributed significantly to ore tonnages.

## W2. Business impacts

### W2.1

**(W2.1) Has your organization experienced any detrimental water-related impacts?**

No

## W2.2

**(W2.2) In the reporting year, was your organization subject to any fines, enforcement orders, and/or other penalties for water-related regulatory violations?**

Yes, fines, enforcement orders or other penalties but none that are considered as significant

## W2.2a

**(W2.2a) Provide the total number and financial value of all water-related fines.**

Row 1

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**Total number of fines**

1

**Total value of fines**

35,000

**% of total facilities/operations associated**

9

**Number of fines compared to previous reporting year**

Lower

**Comment**

On Aug 27th, a notice of violation and associated fine of R\$ 183k (US\$35k) was received from the authorities following a Tailings slurry spill at Córrego do Sítio mine in Brazil. This incident is published in our annual Sustainability report.

## W3. Procedures

### W-MM3.2

**(W-MM3.2) By river basin, what number of active and inactive tailings dams are within your control?**

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**Country/Area & River basin**

Argentina

Other, please specify

GHAAS Basin 974

**Number of tailings dams in operation**

1

**Number of inactive tailings dams**

0

**Comment**

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**Country/Area & River basin**

Australia

Other, please specify

GHAAS Basin 174

**Number of tailings dams in operation**

2



**Number of inactive tailings dams**

1

**Comment**

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**Country/Area & River basin**

Brazil

Sao Francisco

**Number of tailings dams in operation**

7

**Number of inactive tailings dams**

0

**Comment**

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**Country/Area & River basin**

Brazil

Tocantins

**Number of tailings dams in operation**

1

**Number of inactive tailings dams**

0



**Comment**

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**Country/Area & River basin**

Ghana

Other, please specify

GHAAS Basin 1184

**Number of tailings dams in operation**

2

**Number of inactive tailings dams**

0

**Comment**

The TSF disclosure forced us to define dormant dams as inactive, previously, we only considered operating dams as being active or inactive. In Ghana, there are 2 operating TSF's, one is active and the other is inactive. In addition to these, there are 5 dormant TSF's that have been defined as inactive in the disclosure.

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**Country/Area & River basin**

Guinea

Niger

**Number of tailings dams in operation**

1

**Number of inactive tailings dams**

0



**Comment**

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**Country/Area & River basin**

United Republic of Tanzania

Other, please specify

Lake Victoria

**Number of tailings dams in operation**

1

**Number of inactive tailings dams**

1

**Comment**

**W-MM3.2a**

**(W-MM3.2a) Do you evaluate and classify the tailings dams under your control according to the consequences of their failure to human health and ecosystems?**

**Row 1**

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**Evaluation of the consequences of tailings dam failure**

Yes, we evaluate the consequences of tailings dam failure

**Evaluation/Classification guideline(s)**

Australian National Committee on Large Dams (ANCOLD)

Ordinance 70.389/17 - Mining National Agency, Brazil

Ghana Minerals Commission (LI 2182)  
Company-specific guidelines

**Tailings dams have been classified as 'hazardous' or 'highly hazardous'**

Yes, tailings dams have been classified as 'hazardous' or 'highly hazardous' (or equivalent)

**Please explain**

Please see link below to AGA's Tailings Disclosure:  
<https://www.anglogoldashanti.com/sustainability/environment/tailings-waste/>

**W-MM3.2b**

**(W-MM3.2b) Provide details for all dams classified as 'hazardous' or 'highly hazardous'.**

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**Tailings dam name/identifier**

CVSA TSF

**Country/Area & River basin**

Argentina  
Other, please specify  
GHAAS Basin 974

**Latitude**

68.236944

**Longitude**

48.390277

**Hazard classification**

High / High C

**Guideline(s) used**

Australian National Committee on Large Dams (ANCOLD)  
South Africa SANS 10286

**Tailings dam's activity**

Active

**Current tailings storage impoundment volume (Mm3)**

16.4

**Planned tailings storage impoundment volume in 5 years (Mm3)**

19.8

**Please explain**

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**Tailings dam name/identifier**

CDS II TSF

**Country/Area & River basin**

Brazil  
Sao Francisco

**Latitude**

43.472222

**Longitude**

19.983055

**Hazard classification**

High

**Guideline(s) used**

Ordinance 70.389/17 - Mining National Agency, Brazil

**Tailings dam's activity**

Active

**Current tailings storage impoundment volume (Mm3)**

6.9

**Planned tailings storage impoundment volume in 5 years (Mm3)**

**Please explain**

This tailings dam closure is in progress - hence 'planned tailings storage impoundment' has been left blank.

---

**Tailings dam name/identifier**

CDS 1 TSF

**Country/Area & River basin**

Brazil

Sao Francisco

**Latitude**

43.49388

**Longitude**

20.019166

**Hazard classification**

High

**Guideline(s) used**

Ordinance 70.389/17 - Mining National Agency, Brazil

**Tailings dam's activity**

Active

**Current tailings storage impoundment volume (Mm3)**

0.38

**Planned tailings storage impoundment volume in 5 years (Mm3)**

0.38

**Please explain**

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**Tailings dam name/identifier**

Cuiaba TSF

**Country/Area & River basin**

Brazil

Sao Francisco

**Latitude**

43.726666

**Longitude**

19.868888

**Hazard classification**

High

**Guideline(s) used**

Ordinance 70.389/17 - Mining National Agency, Brazil

**Tailings dam's activity**

Active

**Current tailings storage impoundment volume (Mm3)**

9.9

**Planned tailings storage impoundment volume in 5 years (Mm3)**

**Please explain**

This tailings dam closure is in progress - hence 'planned tailings storage impoundment' has been left blank.

---

**Tailings dam name/identifier**

Cuiaba Open Pit

**Country/Area & River basin**

Brazil

Sao Francisco

**Latitude**

43.746944

**Longitude**

19.864444

**Hazard classification**

High

**Guideline(s) used**

Ordinance 70.389/17 - Mining National Agency, Brazil

**Tailings dam's activity**

Active

**Current tailings storage impoundment volume (Mm3)**

1.94

**Planned tailings storage impoundment volume in 5 years (Mm3)**

2.2

**Please explain**

---

**Tailings dam name/identifier**

Calcine TSF

**Country/Area & River basin**

Brazil

Sao Francisco

**Latitude**

43.839444

**Longitude**

19.961944

**Hazard classification**

High

**Guideline(s) used**

Ordinance 70.389/17 - Mining National Agency, Brazil

**Tailings dam's activity**

Active

**Current tailings storage impoundment volume (Mm3)**

3.8

**Planned tailings storage impoundment volume in 5 years (Mm3)**

4.1

**Please explain**

Note: Closure due to commence.

---

**Tailings dam name/identifier**

Cocoruto TSF

**Country/Area & River basin**

Brazil

Sao Francisco

**Latitude**

43.831111

**Longitude**

19.974444

**Hazard classification**

High



**Guideline(s) used**

Ordinance 70.389/17 - Mining National Agency, Brazil

**Tailings dam's activity**

Active

**Current tailings storage impoundment volume (Mm3)**

4.2

**Planned tailings storage impoundment volume in 5 years (Mm3)**

4.2

**Please explain**

---

**Tailings dam name/identifier**

Rapaunha TSF

**Country/Area & River basin**

Brazil

Sao Francisco

**Latitude**

43.843333

**Longitude**

19.965

**Hazard classification**

High

**Guideline(s) used**

Ordinance 70.389/17 - Mining National Agency, Brazil

**Tailings dam's activity**

Active

**Current tailings storage impoundment volume (Mm3)**

8.7

**Planned tailings storage impoundment volume in 5 years (Mm3)**

8.7

**Please explain**

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**Tailings dam name/identifier**

MSG TSF

**Country/Area & River basin**

Brazil

Tocantins

**Latitude**

49.958055

**Longitude**

14.561666

**Hazard classification**

High

**Guideline(s) used**

Ordinance 70.389/17 - Mining National Agency, Brazil

**Tailings dam's activity**

Active

**Current tailings storage impoundment volume (Mm3)**

16.6

**Planned tailings storage impoundment volume in 5 years (Mm3)**

**Please explain**

This tailings dam closure is in progress - hence 'planned tailings storage impoundment' has been left blank.

---

**Tailings dam name/identifier**

Geita TSF

**Country/Area & River basin**

United Republic of Tanzania

Other, please specify

Lake Victoria

**Latitude**

32.195

**Longitude**

2.848055

**Hazard classification**

High

**Guideline(s) used**

South Africa SANS 10286

**Tailings dam's activity**

Active

**Current tailings storage impoundment volume (Mm3)**

73.4

**Planned tailings storage impoundment volume in 5 years (Mm3)**

89

**Please explain**

---

**Tailings dam name/identifier**

Geita Old TSF

**Country/Area & River basin**

United Republic of Tanzania

Other, please specify

Lake Victoria

**Latitude**

32.181388

**Longitude**

2.865555

**Hazard classification**

High

**Guideline(s) used**

South Africa SANS 10286

**Tailings dam's activity**

Inactive

**Current tailings storage impoundment volume (Mm3)**

1.9

**Planned tailings storage impoundment volume in 5 years (Mm3)**

1.9

**Please explain**

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**Tailings dam name/identifier**

I TSF

**Country/Area & River basin**

Ghana

Other, please specify

GHAAS Basin 1184

**Latitude**

2.053888

**Longitude**

5.246388

**Hazard classification**

High

**Guideline(s) used**

Ghana Minerals Commission (LI 2182)

**Tailings dam's activity**

Inactive

**Current tailings storage impoundment volume (Mm3)**

3.4

**Planned tailings storage impoundment volume in 5 years (Mm3)**

3.4

**Please explain**

---

**Tailings dam name/identifier**

Block 1 Pit

**Country/Area & River basin**

Ghana

Other, please specify

GHAAS Basin 1184

**Latitude**

2.031111

**Longitude**

5.243333

**Hazard classification**

Not applicable.



**Guideline(s) used**

Other, please specify

Not applicable

**Tailings dam's activity**

Inactive

**Current tailings storage impoundment volume (Mm3)**

5.3

**Planned tailings storage impoundment volume in 5 years (Mm3)**

5.3

**Please explain**

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**Tailings dam name/identifier**

Block 2 Pit

**Country/Area & River basin**

Ghana

Other, please specify

GHAAS Basin 1184

**Latitude**

2.053888

**Longitude**

5.246388

**Hazard classification**



Not applicable.

**Guideline(s) used**

Other, please specify

Not applicable

**Tailings dam's activity**

Inactive

**Current tailings storage impoundment volume (Mm3)**

12

**Planned tailings storage impoundment volume in 5 years (Mm3)**

12

**Please explain**

---

**Tailings dam name/identifier**

GTSF

**Country/Area & River basin**

Ghana

Other, please specify

GHAAS Basin 1184

**Latitude**

2.053888

**Longitude**

5.246388





**Hazard classification**

High

**Guideline(s) used**

Ghana Minerals Commission (LI 2182)

**Tailings dam's activity**

Active

**Current tailings storage impoundment volume (Mm3)**

38.7

**Planned tailings storage impoundment volume in 5 years (Mm3)**

41.7

**Please explain**

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**Tailings dam name/identifier**

Kokotesua TSF

**Country/Area & River basin**

Ghana

Other, please specify

GHAAS Basin 1184

**Latitude**

1.665555

**Longitude**

6.221111



**Hazard classification**

High

**Guideline(s) used**

Ghana Minerals Commission (LI 2182)

**Tailings dam's activity**

Inactive

**Current tailings storage impoundment volume (Mm3)**

3.4

**Planned tailings storage impoundment volume in 5 years (Mm3)**

0

**Please explain**

---

**Tailings dam name/identifier**

Pompora TSF

**Country/Area & River basin**

Ghana

Other, please specify

GHAAS Basin 1184

**Latitude**

1.653111

**Longitude**

6.221666

**Hazard classification**

High

**Guideline(s) used**

Ghana Minerals Commission (LI 2182)

**Tailings dam's activity**

Inactive

**Current tailings storage impoundment volume (Mm3)**

24

**Planned tailings storage impoundment volume in 5 years (Mm3)**

24

**Please explain**

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**Tailings dam name/identifier**

South TSF

**Country/Area & River basin**

Ghana

Other, please specify

GHAAS Basin 1184

**Latitude**

1.718611

**Longitude**

6.194444



**Hazard classification**

High

**Guideline(s) used**

Ghana Minerals Commission (LI 2182)

**Tailings dam's activity**

Active

**Current tailings storage impoundment volume (Mm3)**

40.4

**Planned tailings storage impoundment volume in 5 years (Mm3)**

45.5

**Please explain**

---

**Tailings dam name/identifier**

Siguiro TSF

**Country/Area & River basin**

Guinea

Niger

**Latitude**

9.408055

**Longitude**

11.518611

**Hazard classification**

High

**Guideline(s) used**

South Africa SANS 10286

**Tailings dam's activity**

Active

**Current tailings storage impoundment volume (Mm3)**

132.4

**Planned tailings storage impoundment volume in 5 years (Mm3)**

175.3

**Please explain**

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**Tailings dam name/identifier**

CTD TSF

**Country/Area & River basin**

Australia

Other, please specify

GHAAS Basin 174

**Latitude**

-29.115247

**Longitude**

122.459198

**Hazard classification**

ANCOLD - Low

**Guideline(s) used**

Australian National Committee on Large Dams (ANCOLD)

**Tailings dam's activity**

Active

**Current tailings storage impoundment volume (Mm3)**

49.5

**Planned tailings storage impoundment volume in 5 years (Mm3)**

62.1

**Please explain**

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**Tailings dam name/identifier**

TSF 1

**Country/Area & River basin**

Australia

Other, please specify

GHAAS Basin 174

**Latitude**

-29.078111

**Longitude**

122.446415

**Hazard classification**

ANCOLD - Low

**Guideline(s) used**

Australian National Committee on Large Dams (ANCOLD)

**Tailings dam's activity**

Inactive

**Current tailings storage impoundment volume (Mm3)**

5.9

**Planned tailings storage impoundment volume in 5 years (Mm3)**

5.9

**Please explain**

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**Tailings dam name/identifier**

Tropicana

**Country/Area & River basin**

Australia

Other, please specify

GHAAS Basin 174

**Latitude**

-29.232247



**Longitude**

124.552143

**Hazard classification**

ANCOLD - High C

**Guideline(s) used**

Australian National Committee on Large Dams (ANCOLD)

**Tailings dam's activity**

Active

**Current tailings storage impoundment volume (Mm3)**

45.7

**Planned tailings storage impoundment volume in 5 years (Mm3)**

77.8

**Please explain**

**W-MM3.2c**

**(W-MM3.2c) To manage the potential impacts to human health or water ecosystems associated with the tailings dams in your control, what procedures are in place for all of your dams?**

Procedure	Detail of the procedure	Please explain
Life of facility plan	A life of facility plan that identifies minimum specifications and performance objectives for the operating and closure phases	AGA has developed a Tailings Management Framework which provides guidance and standards for the different phases of development of Tailings facilities.



	<p>A life of facility plan that includes an identification of potential chemical and physical risks from the design and construction phases</p> <p>A life of facility plan that considers post-closure land and water use</p> <p>A life of facility plan that details the financial and human resources needed</p>	
Acceptable risk levels	<p>Establishment of site-level guidance and standards for acceptable risk levels based on an evaluation of potential chemical and physical risks</p> <p>Establishment of site-level guidance and standards for acceptable risk levels for third party safety in consultation with potentially affected communities, employees and relevant government bodies</p> <p>Establishment of site-level guidance and standards for acceptable risk levels across all life stages, including post-closure</p> <p>Establishment of company-wide standards for acceptable risk levels that follow a company policy to eliminate or minimize water-related risks associated with tailings dams</p>	<p>AGA has developed a comprehensive tailings management system to ensure that all of our tailings storage facilities meet company-wide criteria. The system is fleshed out in AGA's Tailings Management Framework which provides guidance and standards for the different phases of development of Tailings facilities.</p>
Operating plan	<p>An operating plan that is aligned with your established acceptable risk levels and critical controls framework</p> <p>An operating plan that includes the operating constraints of the dam and its construction method</p> <p>An operating plan that considers the consequences of breaching the operating constraints of the dam</p>	<p>AGA has developed a Tailings Management Framework (TMF) which provides guidance and standards for the different phases of development of Tailings facilities. Facility-level Operating plans, in terms of the TMF and local legislation are developed and implemented for each facility.</p>

	<p>An operating plan that includes periodic review of the foundations and slope materials</p> <p>An operating plan that evaluates the effectiveness of the risk management measures and whether performance objectives are being met</p>	
Assurance program	<p>An assurance program for the operating phase of the facility that details the procedures for the inspections, audits and reviews</p> <p>An assurance program for each phase of the facilities' life that includes the frequency of the various levels of inspections, audits and reviews</p> <p>An assurance program for each phase of the facilities' life that includes the scope of the various levels of inspections, audits and reviews</p> <p>An assurance program that details the competence requirements for the persons undertaking the inspections, audits and reviews</p> <p>An assurance program that includes an external audit covering the life of facility or the operating plans</p>	Only professional geotechnical consultants are used for expert inspections, audits and reviews of AGA's tailings facilities.
Change management process	<p>Inclusion of a formal change management process for the construction phase of the facility</p> <p>Inclusion of a formal change management process for the operating phase of the facility</p> <p>Inclusion of a formal change management process for the closure and decommissioning phase of the facility</p> <p>Inclusion of a change management process in the assurance program</p>	Each phase of Tailings facility development is documented to provide direction for design, construction, operation, decommissioning, closure and post closure.

	Inclusion of the results from external audits of operating plans or life of facility plans into the change management process	
Approval	Other, please specify Regional & Corporate Tailings Engineers.	<p>The EHS and C-suite managers are not required to approve the operating plan, the life of facility plan, the assurance programme and the change management process.</p> <p>The operating plan and the life of facility plan are approved by the Regional and Corporate Tailings Engineers.</p> <p>The results of the assurance programme and change management process are presented to the Executives and C-suite managers annually.</p> <p>The Global Industry standard on Tailings management was published in 2020. The standard requires the appointment of an accountable executive for TSFs. AGA through the membership of the ICMM have committed to complying to the standard by 2023.</p>
Other management procedure	Other, please specify Inhouse Tailings Management Framework	<p>AGA has developed a Tailings Management Framework which provides guidance and standards for the different phases of development of Tailings facilities. The AGA Tailings Management process incorporates four levels of review.</p> <p>At the most basic level, Tailings facility managers at each operation are responsible for day to day operations and adherence to the operating plan. Tailings management experts at Regional level are responsible for providing geotechnical advice to the operations. Each tailings facility is reviewed on a two to five year basis by an independent third party geotechnical consultant. The operational and regional tailings facility management is audited by the corporate tailings engineer to check compliance against the AGA Tailings management framework.</p>

Other management procedure	Other, please specify The Global Industry Standard on Tailings Management	The Global Industry Standard on Tailings management was published in 2020. AGA through the membership of the ICMM have committed to complying to the standard by 2023.
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### W3.3

**(W3.3) Does your organization undertake a water-related risk assessment?**

Yes, water-related risks are assessed

### W3.3a

**(W3.3a) Select the options that best describe your procedures for identifying and assessing water-related risks.**

**Value chain stage**

Direct operations

**Coverage**

Full

**Risk assessment procedure**

Other, please specify

Internal risk management standard

**Frequency of assessment**

More than once a year

**How far into the future are risks considered?**

1 to 3 years

**Type of tools and methods used**

Enterprise risk management

**Tools and methods used**

ISO 31000 Risk Management Standard

**Contextual issues considered**

Water availability at a basin/catchment level

Water quality at a basin/catchment level

Stakeholder conflicts concerning water resources at a basin/catchment level

Water regulatory frameworks

Access to fully-functioning, safely managed WASH services for all employees

**Stakeholders considered**

Employees

Investors

Local communities

Regulators

Water utilities at a local level

Other water users at the basin/catchment level

**Comment**

With regards to supply chain, suppliers are evaluated in regard to sustainability issues, but this does not currently include their water consumption. Our focus is on human rights, safety and environmental management systems.

## W3.3b

**(W3.3b) Describe your organization's process for identifying, assessing, and responding to water-related risks within your direct operations and other stages of your value chain.**

The company incorporates water management risk within the company's Enterprise Risk management system (AuRisk). Internal company knowledge gained over many years, comprising site knowledge and understanding and the experience and knowledge of internal, regional and corporate staff, are utilised in the AuRisk assessments. Water risks include environmental, operational, stakeholder (where applicable) and regulatory perspectives. All are

evaluated per site, with risk information being captured and updated in AuRisk, with related risk mitigation actions being captured and tracked. Additionally, the company utilises the BowTie Risk assessment methodology and appropriate management systems e.g. ISO 14001 to aid in the understanding and management of specific risks (e.g. water pollution).

Supply chain risks from water have been assessed as low, so suppliers are not covered in the detailed risk assessment process. Government databases, at the local, regional and national levels, are usually very useful and are drawn upon to the extent that we can, considering that some of our operations are in remote parts of underdeveloped countries.

In aligning our water reporting to the ICMM Consistent Water Reporting guide, we undertook an analysis of our operating sites' water context using the WRI Aqueduct Water Risk Atlas. The results of this analysis were adapted with local site knowledge and a Group overview is summarized in our 2021 Sustainability Report under the Environmental Stewardship section. Sites water risk by type is defined in the report as part of water related risks.

## W4. Risks and opportunities

### W4.1

**(W4.1) Have you identified any inherent water-related risks with the potential to have a substantive financial or strategic impact on your business?**

No

### W4.1a

**(W4.1a) How does your organization define substantive financial or strategic impact on your business?**

The company's risk matrix defines 6 levels of potential consequence and 6 levels of potential likelihood. There are also 6 types of risk category including financial. Potential threats with a risk index of 25 and higher are considered significant. In financial terms, this translates as a threat with a consequence of between \$1m and \$10m and a Likelihood of 66% or greater (Very Likely or Almost Certain). Water is required to sustain gold recovery operations at the company's gold plants which process ore from mining operations. If water supply becomes constrained, gold production volumes could be affected in roughly equal proportions. The water risks considered are those with a potential risk index of 25 or greater, principally with a potential financial impact of between \$1m and \$10m.



## W4.2b

**(W4.2b) Why does your organization not consider itself exposed to water risks in its direct operations with the potential to have a substantive financial or strategic impact?**

	Primary reason	Please explain
Row 1	Risks exist, but no substantive impact anticipated	In prior years, we answered yes to question 4.1 above. This was directly due to the water risks associated with the South African mines where AGA had to pump underground water from neighboring mines to prevent flooding of AGA mines. Since September 2020, the sale of the remaining South African assets were concluded. At our current operations, we do not have any inherent water risks that could emanate in a substantive financial or strategic impact. Furthermore, our water management standard mandates the comprehensive understanding of water risks and the implementation of tailored management and monitoring plans, supported by context-specific objectives and targets.

## W4.2c

**(W4.2c) Why does your organization not consider itself exposed to water risks in its value chain (beyond direct operations) with the potential to have a substantive financial or strategic impact?**

	Primary reason	Please explain
Row 1	Risks exist, but no substantive impact anticipated	There are immaterial volumes of water contained in purchased products, being limited to liquid reagents that are purchased and where water is used as a carrier (e.g. acids, peroxide, liquid cyanide, etc.).

## W4.3

**(W4.3) Have you identified any water-related opportunities with the potential to have a substantive financial or strategic impact on your business?**

Yes, we have identified opportunities, and some/all are being realized

## W4.3a

**(W4.3a) Provide details of opportunities currently being realized that could have a substantive financial or strategic impact on your business.**

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**Type of opportunity**

Efficiency

**Primary water-related opportunity**

Other, please specify

Water storage opportunity

**Company-specific description & strategy to realize opportunity**

Project: Water storage at Geita Gold Mine

At Geita Gold Mine, we have embarked on seeking out water storage opportunities to reduce water intake from Lake Victoria (which is a permitted water source for the mine). This is an on-going water savings project which seeks to utilize on-site water storage facilities such as the lakes in the old mined-out pits of Geita Hill West as well as Lone Cone. As such, these water storage facilities are utilized as the raw/bulk water supply for the mine.

Since the implementation, we are able to annually reduce the operations water intake from the Nungwe Bay (Lake Victoria), reducing the overall pumping and reducing water usage from a national water resource. The mine is successfully recycling water from the tailings storage facilities and using water from the storage pits mentioned previously for the production circuit. The mine does not utilise water from Lake Victoria for production but conducts minimal pumping to keep the pipelines open and to supply communities with water through the offtake points.

**Estimated timeframe for realization**

Current - up to 1 year

**Magnitude of potential financial impact**



Medium-high

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

2,000,000

**Potential financial impact figure – minimum (currency)**

**Potential financial impact figure – maximum (currency)**

**Explanation of financial impact**

The utilization of the pits as water storage facilities have resulted directly in the following savings for the operation:

1. Reduction in pumping costs - savings in diesel and reduction in GHG emissions, also reduction in pump maintenance due to the reduced pumping.
2. The mine has reduced water abstraction from a national water resource and contributed to the conservation of water.

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**Type of opportunity**

Efficiency

**Primary water-related opportunity**

Improved water efficiency in operations

**Company-specific description & strategy to realize opportunity**

Project: Improved water management efficiency (transitioning to Filter Tailings facilities)

In Brazil, there has been an upgrade of the prior Site Wide Water Balances (SWWB) in preparation to transitioning from conventional to Filter tailings (Cuiaba/Lamego, Queiroz, Corrego do Sitio and Mineracao Serra Grande). Presently, all the mine sites have updated and signed-off

SWWB in spreadsheet format. These are fine for daily and monthly water accounting, but have limitations for complex modelling applications and forward predictive analysis. All mines in Brazil are introducing the GoldSim water balance software (a dynamic simulation software) to move beyond the spreadsheet and make it easy to build and maintain forward predictive interactive dynamic models.

During 2021, the first drafts of water balance in GoldSim for all sites were developed. This initiative will provide probabilistic analyses to assist with the transition from conventional to filtered tailings and the decommissioning of all existing conventional tailing dams in Brazil.

**Estimated timeframe for realization**

1 to 3 years

**Magnitude of potential financial impact**

Medium

**Are you able to provide a potential financial impact figure?**

No, we do not have this figure

**Potential financial impact figure (currency)**

**Potential financial impact figure – minimum (currency)**

**Potential financial impact figure – maximum (currency)**

**Explanation of financial impact**

Future cost savings are expected to be substantial due to improved water management efficiency as well as overall higher water recycling volumes.

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**Type of opportunity**

Efficiency

### **Primary water-related opportunity**

Improved water efficiency in operations

### **Company-specific description & strategy to realize opportunity**

Project: Tropicana Gold Mine Site Wide Water Optimization

Our Tropicana Gold Mine in Australia embarked on a site wide water optimization project which aimed to use less water from aquifers and included the utilization of water by preference i.e. water from higher efficiency bores that have a lower energy consumption but still higher water yields. The site also embarked on using variable speed technology for the pumps which resulted in a reduction in energy usage and the ability to switch off most of the direct diesel generator bores. At the moment, bores on the electricity supply grid are only being used.

The strategy used the site water balance to focus on making the site water usage more efficient from both a demand and supply perspective with an additional focus on lowering maintenance. This was done by:

- 1) Removing low efficiency bores from water supply borefields, resulting in lower energy consumption and lower maintenance.
- 2) Equipping all water supply bores with variable speed technology to optimize water yields and using less energy.
- 3) Increasing the pumping from bore fields with a preferred water quality, which is more efficient for processing plant extractive chemistry (lower chemical dosage and higher pH levels).
- 4) Increasing water recovery from the recovery bores for a recycling perspective.
- 5) Increasing water recovery from TSF decant pumps for a recycling perspective.

The above has resulted in:

- a) recycled water increases of >25%
- b) a reduction of low efficiency bores by >50%
- c) a reduction in cyanide dosage in the plant by ~35%
- d) a reduction in diesel consumption up to 35% in variable speed drive bores.

### **Estimated timeframe for realization**

Current - up to 1 year

### **Magnitude of potential financial impact**

Medium

**Are you able to provide a potential financial impact figure?**

No, we do not have this figure

**Potential financial impact figure (currency)**

**Potential financial impact figure – minimum (currency)**

**Potential financial impact figure – maximum (currency)**

**Explanation of financial impact**

In financial terms, savings estimates are derived from the following:

- 1) Reduction in cyanide dosing in the Processing Plant.
- 2) Reduction in diesel consumption for pumping water.
- 3) Reduction in generator services for 'mothballed' generators.
- 4) Reduction in bore pump maintenance for replacing pumps and infrastructure.

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**Type of opportunity**

Other

**Primary water-related opportunity**

Other, please specify

Risk Mitigation

**Company-specific description & strategy to realize opportunity**

Project: Waste rock facility encapsulation



During 2021, rehabilitation of Iduapriem's Block 1 waste rock facility commenced. The waste rock facility that required active treatment of low pH seepage water, was reworked to encapsulate acid generating rock more effectively, and to reduce rainfall infiltration.

**Estimated timeframe for realization**

1 to 3 years

**Magnitude of potential financial impact**

Low-medium

**Are you able to provide a potential financial impact figure?**

**Potential financial impact figure (currency)**

**Potential financial impact figure – minimum (currency)**

**Potential financial impact figure – maximum (currency)**

**Explanation of financial impact**

We are mitigating the regulatory risk, not having to pay possible fines that may arise and are therefore unable to provide a potential financial impact figure.

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**Type of opportunity**

Other

**Primary water-related opportunity**

Other, please specify

Groundwater treatment

### **Company-specific description & strategy to realize opportunity**

Project: In-situ groundwater remediation at Geita Gold Mine

AngloGold Ashanti is rolling out a novel in-situ water remediation project at the Geita mine in Tanzania, working with a local Tanzanian/German joint venture partner that will use a process where naturally occurring bacteria directly remediates sulphate in groundwater. The technology – known as In-situ TSF Bioremediation – is ground-breaking. The AngloGold Ashanti team worked to adapt it to the mining context, making them the first to introduce it on a mine site. The fact that the remediation takes place at the site of contamination is key, as it means the process has a very low environmental impact. It can be used instead of more intrusive water remediation solutions such as constructing a water processing plant, digging trenches and pumping the water back to a TSF.

With a successful concept study completed in 2020, the project is to be rolled out in three phases at Geita. This in-situ remediation approach has scope to be applied at other sites where it could be used not only at TSFs, but around pits as part of decommissioning. The process uses naturally occurring bacteria in the ground water to remove contaminants such as sulphate and nitrate and because the bacteria is in-situ, the process, once established, will become self-sustaining after a few years. For the process to work, a carbon source – in this instance, vegetable oil – is introduced to the impacted area, providing food for the micro bacteria. A combination of sulphur, sulphate and nitrate reducing bacteria carry out the remediation.

After acclimatising, the bacteria convert the nitrates to nitrogen gas and precipitate the sulphates to physical sulphides. Vegetable oil is added over the course of a few months, while the team determines how much, and how often, this needs to take place in order to sustain the contamination busting bacteria. This process will, over time, build a barrier that prevents the spread of sulphate enriched water beyond the reaction zone.

During 2021, the in-situ groundwater remediation project in Tanzania progressed more slowly than planned, with a joint venture partnership between Sensatec Tanzania and German-based technology provider established late last year. Phase 1 of the production scale project is planned to start in earnest during 2022.

### **Estimated timeframe for realization**

1 to 3 years

### **Magnitude of potential financial impact**



Medium-high

**Are you able to provide a potential financial impact figure?**

**Potential financial impact figure (currency)**

**Potential financial impact figure – minimum (currency)**

**Potential financial impact figure – maximum (currency)**

**Explanation of financial impact**

We are mitigating the regulatory risk, not having to pay possible fines that may arise as a result of the pollution plume which has been affecting downstream farmers. We are therefore unable to provide a potential financial impact figure.

## **W6. Governance**

### **W6.1**

**(W6.1) Does your organization have a water policy?**

Yes, we have a documented water policy that is publicly available

#### **W6.1a**

**(W6.1a) Select the options that best describe the scope and content of your water policy.**

Scope	Content	Please explain
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Row 1	Company-wide	<p>Description of water-related performance standards for direct operations</p> <p>Reference to international standards and widely-recognized water initiatives</p> <p>Commitment to water stewardship and/or collective action</p> <p>Other, please specify</p> <p>Incorporated within group Environmental and, Health &amp; Safety policies.</p>	<p>We make all our company policies and standards available on our website as a result of our commitment to transparency and so that stakeholders can keep us accountable to our commitments. Our policies and performance standards apply across the entire company because people are the same everywhere. They incorporate scope for more stringent local requirements but set a minimum standard across the entire organisation. We have an Environment policy that includes water, and then a water management standard that sets out specific requirements regarding water management.</p>
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## W6.2

**(W6.2) Is there board level oversight of water-related issues within your organization?**

Yes

## W6.2a

**(W6.2a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for water-related issues.**

Position of individual	Please explain
<p>Other, please specify</p> <p>Board Social, Ethics and Sustainability</p>	<p>The Board Social, Ethics and Sustainability Committee has this responsibility. It has an overview of sustainability policy and strategy, including water. The committee is one of five committees that assist the Board in discharging its responsibilities. The functioning of the committees is guided by their terms of reference which are approved by the Board and reviewed annually or as required. During 2021, all Board committees were chaired by independent non-executive directors.</p>



## W6.2b

**(W6.2b) Provide further details on the board’s oversight of water-related issues.**

	Frequency that water-related issues are a scheduled agenda item	Governance mechanisms into which water-related issues are integrated	Please explain
Row 1	Scheduled - all meetings	Monitoring implementation and performance Setting performance objectives	Water use and intensity performance data and surface & groundwater quality risks for the company, its operating units and important developments in the sphere of water (such as legislation changes) are standard content in the reports tabled before the Board Social, Ethics and Sustainability Committee. The reports outline the rationale for observed trends in performance data and discuss any developments in the water management that may impact on the company, including management’s planned response. The Committee may in its review of the information presented and its deliberations, direct the company along a course of action.

## W6.2d

**(W6.2d) Does your organization have at least one board member with competence on water-related issues?**

	Board member(s) have competence on water-related issues	Criteria used to assess competence of board member(s) on water-related issues
Row 1	Yes	Dr. Kojo Busia Chairperson of the Social, Ethics and Sustainability Committee Independent Non-Executive Director PhD, MA, BA  Dr Busia has over 25 years of professional experience in African natural resources governance and management

		working at both bilateral and multilateral organisations. He recently held the position of chief of the Natural Resources Management Section, Technology, Climate Change and Natural Resource Management Division, at the United Nations Economic Commission Africa (UNECA).
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## W6.3

**(W6.3) Provide the highest management-level position(s) or committee(s) with responsibility for water-related issues (do not include the names of individuals).**

### **Name of the position(s) and/or committee(s)**

Other, please specify  
Executive Committee

### **Responsibility**

Other, please specify  
Both assessing and managing water-related risks and opportunities

### **Frequency of reporting to the board on water-related issues**

Quarterly

### **Please explain**

The company's Executive Committee is the top tier of management and are accountable to the Board of Directors. Executive Committee members include the CEO, the CFO and the Executive Vice Presidents (EVPs) responsible for Operations (COOs), Sustainability, Technical matters, Human Resources, Strategy & Business Development and Legal & Governance. Some EVPs have more direct accountability for tracking and/or managing water-related issues such as implementing projects and/or tracking legislation or other developments and shaping the company strategies to mitigate water management risk(s).

Quarterly reports to the Board on Water Withdrawals, Water Withdrawal Intensity are provided. In addition, any material Water quality related issues/risks and mitigation actions are communicated.

## W6.4

**(W6.4) Do you provide incentives to C-suite employees or board members for the management of water-related issues?**

	Provide incentives for management of water-related issues	Comment
Row 1	Yes	The annual Bonus and Deferred Share Plan scheme for C-Suite and senior managers across the company incorporates a zero target for significant environmental incidents, which include water-related incidents (spills).

## W6.4a

**(W6.4a) What incentives are provided to C-suite employees or board members for the management of water-related issues (do not include the names of individuals)?**

	Role(s) entitled to incentive	Performance indicator	Please explain
Monetary reward	Corporate executive team	Other, please specify Water-related spills and incidents.	The annual Bonus and Deferred Share Plan scheme for C-Suite and senior managers across the company incorporates a zero target for significant environmental incidents, which include water-related incidents (spills).
Non-monetary reward	Other, please specify Site General Managers	Reduction of water withdrawals Reduction in consumption volumes Improvements in efficiency - direct operations	Site General Managers are accountable for and have KPIs related to maintaining their operations' certification to the ISO14001 Environment Management System Standard and the International Cyanide Management Code. Both systems include requirements around responsible water management, both quality and volumes utilized. If not delivered upon, the certification is put in jeopardy – and if lost the performance record and reputation of the role incumbents is tarnished. Sustaining these certifications enhances the reputation and sustainability credentials of the role incumbents, contributing to a greater likelihood that they would be considered for more senior roles.

		Improvements in waste water quality - direct operations	
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## W6.5

**(W6.5) Do you engage in activities that could either directly or indirectly influence public policy on water through any of the following?**

Yes, trade associations

Yes, other

## W6.5a

**(W6.5a) What processes do you have in place to ensure that all of your direct and indirect activities seeking to influence policy are consistent with your water policy/water commitments?**

At Country level, engagement on water policy is channelled through mining associations e.g. Minerals Council of Australia, Ghanaian Chamber of Mines.

At International level, we provide input into the discourse on water through our membership of the International Council on Mining and Metals (ICMM). In some cases, the ICMM represents its members with on UN-level policy development e.g. the Minamata Convention on Mercury.

## W6.6

**(W6.6) Did your organization include information about its response to water-related risks in its most recent mainstream financial report?**

Yes (you may attach the report - this is optional)

 AGA-Annual Financial Statement\_2021.pdf

 Please see attached Annual Financial Statement, published on AGA's website (link below for ease of navigation):

<https://www.aga-reports.com/21/wp-content/uploads/2022/03/AGA-AFS21.pdf>

## W7. Business strategy

### W7.1

**(W7.1) Are water-related issues integrated into any aspects of your long-term strategic business plan, and if so how?**

	Are water-related issues integrated?	Long-term time horizon (years)	Please explain
Long-term business objectives	Yes, water-related issues are integrated	5-10	Assessing risks and opportunities related to water are a critical part of feasibility study approvals by the Board for greenfield mine development(s) and brownfields site expansion projects. This typically spans over aspects of licensing, hydrogeology, water balance changes (shortages or excesses) and the potential need to either import additional water or to treat and release excess water.
Strategy for achieving long-term objectives	Yes, water-related issues are integrated	5-10	In achieving the company's long-term business objectives, it is imperative to constantly review water risks and opportunities to the enterprise. This includes review of the physical weather changes forecasted as a result of climate change. During 2021, physical climate risk assessments were undertaken across all operations using the RCP 8.5 climate scenario. In addition, high level climate adaptation plans were developed.
Financial planning	Yes, water-related issues are integrated	5-10	Following the 2021 physical climate risk assessments, all operations are developing more detailed adaptation measures, in so far as these relate to water management requirements. The costs of these measures will be included in the company's financial planning for the next few years.

### W7.2

**(W7.2) What is the trend in your organization's water-related capital expenditure (CAPEX) and operating expenditure (OPEX) for the reporting year, and the anticipated trend for the next reporting year?**

Row 1

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**Water-related CAPEX (+/- % change)**

-79

**Anticipated forward trend for CAPEX (+/- % change)**

-45

**Water-related OPEX (+/- % change)**

0

**Anticipated forward trend for OPEX (+/- % change)**

0

**Please explain**

Routine OPEX costs are directly related to water treatment activities which were not materially changed in 2020 from 2021. It is not possible to cleanly extract "water-related expenditure" from our accounting systems since water management is integral to many business activities. We are unable to meaningfully forecast changes in water-related CAPEX expenditure as these are subject to periodic approval(s) of feasibility studies. OPEX expenditure is estimated to be materially unchanged as there was no material changes in water management activities.

**W7.3**

**(W7.3) Does your organization use scenario analysis to inform its business strategy?**

	Use of scenario analysis	Comment
Row 1	Yes	<p>Risks and opportunities will change over time, depending on the success of global action to limit temperature increases and associated political, economic and physical climate responses. This is the justification behind taking a scenario-based approach to assess and manage our climate-related risks and opportunities.</p> <p>Using the latest climate data and projections, for a range of climate hazards, operational teams were guided through a participatory</p>

		<p>approach to consider how risks may change out to the 2030s, focusing on the worst case scenario – RCP 8.5 – which would require the most robust adaptation measures.</p> <p>Please see our published 2020/21 Climate Change Report:  <a href="https://www.anglogoldashanti.com/sustainability/environment/energy-climate-change/">https://www.anglogoldashanti.com/sustainability/environment/energy-climate-change/</a></p>
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### W7.3a

**(W7.3a) Provide details of the scenario analysis, what water-related outcomes were identified, and how they have influenced your organization’s business strategy.**

	Type of scenario analysis used	Parameters, assumptions, analytical choices	Description of possible water-related outcomes	Influence on business strategy
Row 1	Climate-related	<p>Water related outcomes were identified as part of AGA's climate change strategy. When planning our response to individual physical climate risks, we considered risk management actions that can be applied to many areas of the business – including informational, governance and policy-related, operational changes and physical modifications.</p> <p>The latest climate data and projections, for a range of climate hazards, were considered to determine how risks may change out to the 2030s, focusing on the worst case scenario – RCP 8.5 – which would require the most robust adaptation measures.</p>	<p>Possible water-related outcomes are mapped out in our published Climate Change Report at county and site level as follows:</p> <p>AUSTRALIA:                      1) 23% increase in maximum 1-day precipitation totals for both Sunrise Dam and Tropicana.                      2) 12% and 25% increase in maximum 5-day precipitation totals for Sunrise Dam and Tropicana, respectively.</p>	<p>Influence on business strategy are outlined in our published Climate Change report at country level as follows (coinciding with the 'possible water-related outcomes'):</p> <p>AUSTRALIA:                      1 &amp; 2) Supply chain disruption, particularly bulk reagents, due to extreme rainfall/flooding.                      3) Lightning strikes and fires during storm events.</p> <p>GHANA, TANZANIA &amp; GUINEA:                      1 &amp; 2) Geotechnical instability and erosion</p>

		<p>Quantitative modelling and risk assessments were undertaken.</p>	<p>3) Tropical cyclones are projected to decrease in frequency but increase in intensity.</p> <p>GHANA, TANZANIA &amp; GUINEA:</p> <p>1) Increase in maximum 1-day precipitation totals. 2) Increase in maximum 5-day precipitation totals. 3) At all mine sites current water stress is 'high' and this is not projected to change by 2030 for Geita (Tanzania), Iduapriem (Ghana) and Siguiri (Guinea). 4) For Obuasi (Ghana), projections indicate an increase in water stress by up to twice more than current risk.</p> <p>BRAZIL:</p> <p>1) 14% and 25% increase in maximum 1-day precipitation totals at Serra Grande and AGA Mineração, respectively. 2) 10% and 19% increase in maximum 5-day precipitation totals at Serra Grande and AGA</p>	<p>(e.g. pit wall, mine infrastructure, Tailings Storage Facility (TSF) landforms/ structures, rehabilitated areas, waste rock dumps, filtered tailings, etc.).</p> <p>3) Failure of rehabilitation objectives and limited regeneration of habitats. 4) Community and stakeholder concerns about reduced water availability.</p> <p>BRAZIL:</p> <p>1 &amp; 2) Geotechnical instability and erosion (e.g. pit wall, mine infrastructure, TSF landforms/structures, rehabilitated areas, waste rock dumps, filtered tailings, etc.). 3) Reduction in groundwater/aquifer recharge/decrease in water availability from boreholes, leading to water availability issues/intervention around water abstraction and use. Community concern about elevated dust emissions/reduced ability to undertake dust suppression activities.</p> <p>ARGENTINA:</p> <p>1 &amp; 2) Extreme precipitation leading to potential challenges in pollution control. 3) Potential community and stakeholder concerns about reduced water availability. Changes in water management regimes.</p>
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			<p>Mineração, respectively.</p> <p>3) Current water stress at these mines range between 'low-medium' and 'high' and this is not projected to change by 2030.</p> <p>ARGENTINA:</p> <p>1) 22% increase in maximum 1-day precipitation totals.</p> <p>2) 20% increase in maximum 5-day precipitation totals.</p> <p>3) Current water stress at the mine is 'medium-high' and this is not projected to change by 2030.</p> <p>Please see pages 19 and 20 of AGA's published Climate Change report.</p>	<p>Please see pages 19 and 20 of AGA's published Climate Change report.</p>
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## W7.4

**(W7.4) Does your company use an internal price on water?**

Row 1

**Does your company use an internal price on water?**

No, and we do not anticipate doing so within the next two years

**Please explain**

The relevance of an internal water price has not been assessed, principally because water is recognized as being an environmental and social good that is strongly governed by the basin, regulatory and social context. As such, the 'value' of water is unique to each location (and context) and does not lend itself to being valued with a common 'price' across the organisation.

**W7.5**

**(W7.5) Do you classify any of your current products and/or services as low water impact?**

	Products and/or services classified as low water impact	Please explain
Row 1	Yes	Downstream use of our product (gold) is as a store of wealth (in refined gold bars), aesthetic and cultural value (jewelry and other art objects), and low water impact technologies e.g. as a signal conductor in electronics, and specialised reflective surfaces (James Webb telescope).

**W8. Targets**

**W8.1**

**(W8.1) Describe your approach to setting and monitoring water-related targets and/or goals.**

	Levels for targets and/or goals	Monitoring at corporate level	Approach to setting and monitoring targets and/or goals
Row 1	Company-wide targets and goals Site/facility specific targets and/or goals	Targets are monitored at the corporate level	All operations are required to account for their water use to a maximum inaccuracy of 10%. Accounting system accuracy outside of that range requires investigation and correction.  Annually, the company has a target of Zero environmental incidents categorised as 'Reportable' namely,

			High, Major or Extreme severity, as defined by the company's environmental incident classification system. This includes incidents of non-compliance to host country discharge water quality limits.
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## W8.1a

**(W8.1a) Provide details of your water targets that are monitored at the corporate level, and the progress made.**

### Target reference number

Target 1

### Category of target

Water pollution reduction

### Level

Company-wide

### Primary motivation

Water stewardship

### Description of target

Annually, the company has a target of Zero environmental incidents categorised as 'Reportable' namely, High, Major or Extreme severity, as defined by the company's environmental incident classification system. This includes incidents of water-related spills and non-compliance to host country discharge water quality limits.

### Quantitative metric

Other, please specify

Zero significant water-related incidents

### Baseline year

2021



**Start year**

2021

**Target year**

2021

**% of target achieved**

0

**Please explain**

Regrettably, 5 Reportable process water-related spills occurred during 2021.

## W9. Verification

### W9.1

**(W9.1) Do you verify any other water information reported in your CDP disclosure (not already covered by W5.1a)?**

Yes

### W9.1a

**(W9.1a) Which data points within your CDP disclosure have been verified, and which standards were used?**

Disclosure module	Data verified	Verification standard	Please explain
W1 Current state	Water withdrawals and Water discharges.	ISAE 3000	Limited assurance is provided by an external assurer annually, testing alternate sites over a period of time.



## W10. Sign off

### W-FI

**(W-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.**

### W10.1

**(W10.1) Provide details for the person that has signed off (approved) your CDP water response.**

	Job title	Corresponding job category
Row 1	Vice President: Environment and Industry Associations	Other, please specify Group Vice President; Head of Discipline

### W10.2

**(W10.2) Please indicate whether your organization agrees for CDP to transfer your publicly disclosed data on your impact and risk response strategies to the CEO Water Mandate's Water Action Hub [applies only to W2.1a (response to impacts), W4.2 and W4.2a (response to risks)].**

Yes

## Submit your response

**In which language are you submitting your response?**

English

**Please confirm how your response should be handled by CDP**



	I understand that my response will be shared with all requesting stakeholders	Response permission
Please select your submission options	Yes	Public

**Please confirm below**

I have read and accept the applicable Terms