Module: Introduction

Page: W0. Introduction

W0.1

Introduction

Please give a general description and introduction to your organization

Aspen is a pharmaceutical company listed on the Johannesburg Stock Exchange Limited (“JSE”). Aspen employs approximately 10 000 employees and its heritage dates back more than 160 years in South Africa. Aspen supplies branded and generic pharmaceutical products, infant milk nutritionals and consumer healthcare products in selected territories and into more than 150 countries worldwide. The Aspen brand has become synonymous with high quality and affordable products. Aspen recognises that water management is a crucial input to its business and is therefore relevant to Aspen’s sustainability objectives. The Group has 26 manufacturing facilities across 18 sites on six continents. The manufacturing sites contribute to the bulk of Aspen’s water consumption and as such environmental reporting is focussed at a manufacturing site level.
This reporting period presents information for the Group’s manufacturing facilities located in South Africa, France, Netherlands, Brazil, Mexico, Germany, Australia, USA, Kenya and Tanzania. Ghana and New Zealand have been excluded due to lack of verifiable data at this stage. Water is a valuable resource and is used extensively in manufacturing processes, cleaning of equipment and facilities, employee hygiene, steam generation, and to ensure that the required environmental conditions are maintained within the facilities. Aspen is committed to responsible water management and usage at all manufacturing facilities as per the stated Environmental Management Principles.

W0.2

Reporting year

Please state the start and end date of the year for which you are reporting data

Period for which data is reported

Period for which data is reported
Wed 01 Jul 2015 - Thu 30 Jun 2016

W0.3

Reporting boundary

Please indicate the category that describes the reporting boundary for companies, entities, or groups for which water-related impacts are reported

Companies, entities or groups over which operational control is exercised

W0.4

Exclusions

Are there any geographies, facilities or types of water inputs/outputs within this boundary which are not included in your disclosure?

Yes

W0.4a

Exclusions

Please report the exclusions in the following table

Exclusion	Please explain why you have made the exclusion
Kama Industries (Ghana) and New Zealand New Milk have been excluded from this reporting cycle	Ghana and New Zealand have been excluded due to lack of verifiable data at this stage.

Further Information

None

Module: Current State

Page: W1. Context

W1.1

Please rate the importance (current and future) of water quality and water quantity to the success of your organization

Water quality and quantity	Direct use importance rating	Indirect use importance rating	Please explain
Sufficient amounts of good quality freshwater available for use	Vital for operations	Important	Water quality and supply have the potential to impact both Aspen's direct operations and supply chain. Aspen relies on a constant water supply, of adequate quality, to maintain manufacturing processes and compliance to quality standards. Disruptions to water supply present a risk to production, and declining water quality will impact the Groups operating costs as additional processing would be required to ensure product quality. The cost, quality and security of the supply chain are also vulnerable to water supply and quality risks. Aspen sources raw materials from various geographic locations. Commodity-based raw materials from the agricultural sector are specifically vulnerable to changes in climate (changing precipitation regimes and increased frequency and intensity of extreme weather events) and overall water supply and quality.
Sufficient amounts of recycled, brackish and/or produced water available for use	Important	Important	The sites in South Africa continue to benefit from reuse and recycling initiatives that were implemented in prior years, including the reuse of rejected Reverse Osmosis (RO) water in the ablution facilities and cooling towers. The site in Vallejo Mexico makes use of recycled water to water the gardens, and donates clean recycled water from the water treatment plant to other industries. These initiatives were, aimed at reducing Aspen's exposure to increasing water tariffs and supply risk. Additionally, a number of Aspen's direct and indirect operations are situated in water management areas which are reliant on the treatment and recycling of return flows to maintain a positive water balance.

W1.2

For your total operations, please detail which of the following water aspects are regularly measured and monitored and provide an explanation as to why or why not

Water aspect	% of sites/facilities/operations	Please explain
Water withdrawals- total volumes	76-100	Water withdrawals are monitored at 100% of the facilities using a combination of municipal and internal meters. Water withdrawals are monitored as water supply is extremely important in maintaining operations, and represents a growing operational expense.
Water withdrawals- volume by sources	76-100	The facilities source water mainly from municipal sources, except for the French site where groundwater is the main source of water. Consequently, all sites monitor water withdrawal by source.
Water discharges- total volumes	76-100	Water discharge at 100% of the facilities is monitored from municipal accounts and calculations, as waste water discharge represents a significant cost to the operations.
Water discharges- volume by destination	76-100	All the facilities discharge wastewater into the municipal sewer system; some sites do treat the water onsite before discharge. Water discharge at 100% of the facilities is monitored from municipal accounts.
Water discharges- volume by treatment method	76-100	Nutritionals in Johannesburg South Africa and Vallejo in Mexico treat wastewater before discharge to the municipal sewer. All water quality and volumes generated by this facility are measured or calculated.
Water discharge quality data- quality by standard effluent parameters	76-100	All the facilities discharge wastewater into the municipal sewer system; some sites treat the water onsite before discharge. Water discharge at 100% of the facilities is monitored from municipal accounts.
Water consumption- total volume	76-100	Water consumption can be calculated from the total withdrawal and water discharge volumes which Aspen measures and reports on a quarterly basis
Facilities providing fully-functioning WASH services for all workers	Less than 1%	Ablution facilities are provided at all of the operations; however, due to the low water requirements, they are not monitored separately.

W1.2a

Water withdrawals: for the reporting year, please provide total water withdrawal data by source, across your operations

Source	Quantity (megaliters/year)	How does total water withdrawals for this source compare to the last reporting year?	Comment
Fresh surface water	0	Not applicable	Not applicable to Aspen Manufacturing sites
Brackish surface water/seawater	0	Not applicable	Not applicable to Aspen Manufacturing sites
Rainwater	0	Not applicable	Rainwater is harvested for use in the ablutions and gardens at some of the facilities; however the amount is negligible and not specifically measured.
Groundwater - renewable	504.17	This is our first year of measurement	Aspen Notre Dame Bondeville in France makes use of 100% groundwater as this is the most readily abundant supply of water. Aspen sites in Netherlands, Tanzania and Mexico also make use of ground water.
Groundwater - non-renewable	0	Not applicable	Not applicable to Aspen Manufacturing sites.
Produced/process water	0	Not applicable	Not applicable to Aspen Manufacturing sites.
Municipal supply	1285.10	Much higher	The consumption of municipal water has increased by 362% as a result of the change in reporting scope. The South African, Australian and German sites were part of the reporting scope in 2016; for the 2017 report, the scope has been expanded to include the sites in Brazil, Mexico, Netherlands, USA, France, Kenya and Tanzania.
Wastewater from another organization	0	Not applicable	Not applicable to Aspen manufacturing sites.
Total	1789.27	Much higher	Total water consumption has increased by 362% as a result of the change in reporting scope. The South African, Australian and German sites were part of the reporting scope in 2016; for the 2017 report, the scope has been expanded to include the sites in Brazil, Mexico, Netherlands, France, USA, Kenya and Tanzania.

W1.2b

Water discharges: for the reporting year, please provide total water discharge data by destination, across your operations

Destination	Quantity (megaliters/year)	How does total water discharged to this destination compare to the last reporting year?	Comment
Fresh surface water	0	Not applicable	Not applicable to Aspen Manufacturing sites.
Brackish surface water/seawater	0	Not applicable	Not applicable to Aspen Manufacturing sites.
Groundwater	0	Not applicable	Not applicable to Aspen Manufacturing sites.
Municipal/industrial wastewater treatment plant	1438.77	Much higher	The total amount of water discharged has increased by 427% as a result of the change in reporting scope. The South African, Australian and German sites were part of the reporting scope in 2016; for the 2017 report, the scope has been expanded to include the sites in Brazil, Mexico, Netherlands, France, USA, Kenya and Tanzania.
Wastewater for another organization	0	Not applicable	Not applicable to Aspen manufacturing sites.
Total	1438.77	Much higher	The total amount of water discharge has increased by 427% as a result of the change in reporting scope. The South African, Australian and German sites were part of the reporting scope in 2016; for the 2017 report, the scope has been expanded to include the sites in Brazil, Mexico, Netherlands, France, USA, Kenya and Tanzania.

W1.2c

Water consumption: for the reporting year, please provide total water consumption data, across your operations

Consumption (megaliters/year)	How does this consumption figure compare to the last reporting year?	Comment
350.82	Much higher	Currently, consumption is calculated as withdrawals minus discharges, and is not specifically measured. This is an

Consumption (megaliters/year)	How does this consumption figure compare to the last reporting year?	Comment
		estimated value based on the assumption that all water not discharged is consumed by the sites. Water consumption has increased by 206% as a result of the change in reporting scope. The South African, Australian and German sites were part of the reporting scope in 2016; for the 2017 report, the scope has been expanded to include the sites in Brazil, Mexico, Netherlands, France, USA, Kenya and Tanzania.

W1.3

Do you request your suppliers to report on their water use, risks and/or management?

No

W1.3a

Please provide the proportion of suppliers you request to report on their water use, risks and/or management and the proportion of your procurement spend this represents

Proportion of suppliers %	Total procurement spend %	Rationale for this coverage

W1.3b

Please choose the option that best explains why you do not request your suppliers to report on their water use, risks and/or management

Primary reason	Please explain
Reporting implementation in progress	Aspen is at the initial stages of establishing the best way to collect information from key suppliers

W1.4

Has your organization experienced any detrimental impacts related to water in the reporting year?

No

W1.4a

Please describe the detrimental impacts experienced by your organization related to water in the reporting year

Country	River basin	Impact driver	Impact	Description of impact	Length of impact	Overall financial impact	Response strategy	Description of response strategy

W1.4b

Please choose the option below that best explains why you do not know if your organization experienced any detrimental impacts related to water in the reporting year and any plans you have to investigate this in the future

Primary reason	Future plans

Further Information

Thresholds for each category above are as follows: “Much lower” pertains to data of decreasing trend which has a difference of 30% or more from the preceding financial years’ data. “Lower” pertains to data of decreasing trend which has a difference of more than10% and less than 30% from the preceding financial years’ data. “About the same” pertains to data which has less than a 10% difference (greater or lesser) from the preceding financial years’ data. “Higher” pertains to data of increasing trend which has a difference of more than 10% and less than 30% from the preceding financial years’ data. “Much higher” pertains to data of increasing trend which has a difference of 30% or more from the preceding financial years’ data.

Module: Risk Assessment

Page: W2. Procedures and Requirements

W2.1

Does your organization undertake a water-related risk assessment?

Water risks are assessed

W2.2

Please select the options that best describe your procedures with regard to assessing water risks

Risk assessment procedure	Coverage	Scale	Please explain
Water risk assessment undertaken independently of other risk assessments	Direct operations and supply chain	Some facilities and some suppliers	In accordance with the King III Code of Corporate Practice and Conduct, the Board of Directors of Aspen (“the Board”) is responsible for the governance of risk. The Board has delegated this function to its Audit & Risk Committee. Water risk is relevant to the direct operations and supply chain. The following aspects are considered in the current risk review process: (i) The effectiveness of environmental management systems. (ii) Responsible water consumption and conservation. (iii) The environmental risks impacting operations. An independent desktop water risk assessment was done for the South African operations in 2015; Aspen intends to conduct internal water risk assessments for the rest of the Group by the next reporting cycle.

W2.3

Please state how frequently you undertake water risk assessments, at what geographical scale and how far into the future you consider risks for each assessment

Frequency	Geographic scale	How far into the future are risks considered?	Comment
Annually	River basin	>6 years	As risk management is essential to the effective execution of each function, risk identification is a live and on-going process at the operational and functional level.
Annually	Facility	Up to 1 year	Facilities in South Africa are now being engaged to record water disruptions and to report on performance of municipal water providers, which are also being assessed from available government audit reports (Blue Drop reports. etc.). Aspen intends to formalise all water assessments in the coming year, and all sites will be expected to update the risk assessments annually or after an incident affecting any water management or infrastructure.

W2.4

Have you evaluated how water risks could affect the success (viability, constraints) of your organization's growth strategy?

Yes, evaluated over the next 1 year

W2.4a

Please explain how your organization evaluated the effects of water risks on the success (viability, constraints) of your organization's growth strategy?

Risk management is an embedded attribute of Aspen's corporate culture and is inherent in all its business decisions, activities and transactions. An integrated approach to risk management is implemented, giving due considerations to economic, environmental and social indicators which impact the Company and its stakeholders. Strategic, operational, financial and compliance risk assessments are conducted annually at a business unit/site level and significant risks are escalated to the Group level. The impact of top risks on the Group's strategies is considered by the Group Executive Risk Forum on a quarterly basis. Water risks are identified, assessed and managed at an asset/site level, for example water scarcity has the potential of disrupting or delaying production output or could constrain production growth potential. The risks are evaluated by combining impacts (e.g. financial and reputational), as well as the likelihood of occurrence.

As a more specific example, independent water management site audits have been undertaken for the South African manufacturing operations. As part of this process, external water management specialists have engaged with the facility staff responsible for water utility management as well as other facility management staff in order to understand the growth plans for the next financial year, the impacts of these plans on expected total water consumption, the current level of facility engagement with local municipal water service providers regarding water supply risks, and whether the availability of water supply presents any potential constraints on these plans.

W2.4b

What is the main reason for not having evaluated how water risks could affect the success (viability, constraints) of your organization's growth strategy, and are there any plans in place to do so in the future?

Main reason	Current plans	Timeframe until evaluation	Comment

W2.5

Please state the methods used to assess water risks

Method	Please explain how these methods are used in your risk assessment
Internal company knowledge Regional government databases WRI Aqueduct WWF-DEG Water Risk Filter Other: IPCC Climate Change Projections; Stakeholder Engagement; Independent river basin studies	Risks are identified, inter alia, through the monitoring of internal incidents, results of internal meetings/forums/discussions, interaction with identified stakeholders including suppliers, water utilities and government departments, and the review of catchment relevant documentation. Water risk is area specific, and consequently the mechanisms chosen are designed to ensure area-specific risks are identified for assessment. The facility engineering managers at each facility have a good understanding of the level of service currently received from our water suppliers and potential quality and supply risks. Facility management teams ensure that key risks relevant to each area/department are escalated via the quarterly risk review.

W2.6

Which of the following contextual issues are always factored into your organization's water risk assessments?

Issues	Choose option	Please explain
Current water availability and quality parameters at a local level	Relevant, included	Disruptions to water supply presents a risk to production and growth, and declining water quality could impact the Group’s operating cost. This risk is informed by internal monitoring, company knowledge and engagement with the water providers
Current water regulatory frameworks and tariffs at a local level	Relevant, included	Water and wastewater tariffs represent a growing cost to operations. Current issues are informed by municipal accounts, regional government databases, engagement with the local water utility providers, and monitoring national government policy in relation to water tariffs.
Current stakeholder conflicts concerning water resources at a local level	Relevant, included	A number of regions in which Aspen’s operations are situated are characterised by a water deficit, and consequently, increasing competition between stakeholders. Aspen is kept informed of any conflicts and possible consequences through engagement with the water provider, regional

Issues	Choose option	Please explain
		government databases and independent river basin studies.
Current implications of water on your key commodities/raw materials	Relevant, included	Aspen has a diverse supply chain incorporating numerous raw materials, including agricultural products. Water and climate related issues experienced in the geographic locations supplying the facilities can impact operations by impacting the sustainable supply of certain raw materials. Stakeholder engagement with key suppliers will be implemented in the future, as practical, to further inform our exposure to water-related risks.
Current status of ecosystems and habitats at a local level	Not relevant, explanation provided	Although Aspen appreciates the importance of ecosystem services in maintaining a sustainable water resource, and vice versa, reliance is placed on water utilities, the Department of Environmental Affairs and the Department of Water and Sanitation to ensure that these ecosystems are appropriately managed and risks evaluated. All of Aspen's facilities are situated in highly modified and built-up areas (i.e. industrial parks); none are located in critical habitat areas or are sufficiently close so as to have a significant impact on such habitats. Furthermore, Aspen undertakes insignificant direct abstraction of water. Hence, beyond implementing water efficiency measures, these issues can only be effectively managed upstream of the operations by water utilities and regulators.
Current river basin management plans	Relevant, not yet included	Water stress and quality within the basins supplying the relevant water service providers have a direct impact on Aspen's water supply. Aspen recognises the importance of staying informed of river basin plans in order to assess the risk with respect to water supply and cost. Mechanisms to include this aspect into the risk assessment process are currently being explored, primarily via engagement with local water utilities who can keep Aspen's facilities informed of river basin risks at a local level.
Current access to fully-functioning WASH services for all employees	Relevant, included	Aspen provides ablution facilities for employees at all of the sites; however, the risk posed to these facilities is evaluated in terms of water supply to the operation as a whole and not separately.
Estimates of future changes in water availability at a local level	Relevant, included	Decreasing water availability will directly impact Aspen's operations. Aspen monitors this risk using regional government and municipal databases, river basin studies and climate change projections as well as via engagement with local water utilities.
Estimates of future potential regulatory changes at a local level	Relevant, included	Water and wastewater tariffs represent a growing cost to Aspen's operations. Future risk is informed by regional government /municipal databases and engagement with water providers and regulatory authorities.
Estimates of future potential stakeholder conflicts at a local level	Relevant, included	Increasing water deficits have been projected for a number of water management areas in which Aspen's facilities are situated. These deficits are expected to stimulate competition amongst stakeholders. Aspen keeps informed of potential conflicts and possible consequences through engagement with the water provider, regional government databases and independent river basin studies.
Estimates of future implications of water on your key commodities/raw materials	Relevant, included	Aspen has a diverse supply chain incorporating numerous raw materials. Water and climate related issues experienced in the regions supplying our operations can impact operations directly. Future risk in this regard is informed using the WRI Aqueduct database. Stakeholder engagement with key suppliers will be implemented in future, as practical; to further inform the exposure to water-related

Issues	Choose option	Please explain
		risks.
Estimates of future potential changes in the status of ecosystems and habitats at a local level	Not relevant, explanation provided	Although Aspen appreciates the importance of ecosystem services in maintaining a sustainable water resource, reliance is placed on water service providers and the Department of Water and Sanitation to ensure that these ecosystems are appropriately managed and risks evaluated.
Scenario analysis of availability of sufficient quantity and quality of water relevant for your operations at a local level	Relevant, not yet included	Aspen is currently developing a framework for assessing likely scenarios and their implications for adequacy of water quality and quantity at the local operations level for South African operations.
Scenario analysis of regulatory and/or tariff changes at a local level	Relevant, not yet included	Scenario analysis to inform water related regulatory and financial risk will be considered in the future.
Scenario analysis of stakeholder conflicts concerning water resources at a local level	Relevant, not yet included	Scenario analysis to inform water related stakeholder risk will be considered in the future.
Scenario analysis of implications of water on your key commodities/raw materials	Relevant, not yet included	Scenario analysis to inform water related supply chain risk will be considered in the future.
Scenario analysis of potential changes in the status of ecosystems and habitats at a local level	Not relevant, explanation provided	Although Aspen appreciates the importance of ecosystem services in maintaining a sustainable water resource, reliance is placed on water service providers, the Department of Environmental Affairs and the Department of Water and Sanitation to ensure that these ecosystems are appropriately managed and risks evaluated.
Other	Not evaluated	None.

W2.7

Which of the following stakeholders are always factored into your organization's water risk assessments?

Stakeholder	Choose option	Please explain
Customers	Relevant, included	Water related issues that impact Aspen’s operations have the potential to negatively affect customers. Aspen will consider including the impact on customers into the risk assessment process.

Stakeholder	Choose option	Please explain
Employees	Relevant, included	Ensuring the highest quality in hygiene standards at Aspen's facilities is imperative. Consequently, water issues with the potential to impact employee hygiene will be considered within the risk assessment process.
Investors	Relevant, included	Risks to Aspen's production have the potential to impact the organisation's current and future investor portfolio.
Local communities	Relevant, included	Climate change and water stressors have the potential to negatively impact community health. Consequently, health implications and the possible requirements placed upon Aspen's product line and production levels are considered.
NGOs	Relevant, included	Certain NGO's, such as the WWF, play an important role in managing and assessing various countries' water resources, and, consequently, their initiatives are considered in Aspen's water risk assessment process.
Other water users at a local level	Relevant, included	Other water users are considered for two reasons: (i) the declining water resource will need to be shared between all water users; the characteristics and projected growth of this sector is therefore important; and (ii) these water users have the potential to negatively impact the quality of the water resource.
Regulators	Relevant, included	Changes in regulations and tariffs implemented by regulators with the objective of managing water resources will directly impact Aspen's operations, and consequently regulators are an important stakeholder group in the risk assessment process.
River basin management authorities	Relevant, included	The effectiveness of water basin management to adequately manage the resource will directly impact on water availability and quality.
Statutory special interest groups at a local level	Relevant, not yet included	Not currently included in the assessment. Statutory special interest groups will be factored into the risk assessment process, where relevant, in future submissions.
Suppliers	Relevant, included	An uninterrupted supply of raw materials is imperative in maintaining production. Consequently, suppliers are factored into risk assessments.
Water utilities at a local level	Relevant, included	The current and future performance of water utilities in managing water supply has a direct impact on Aspen's operations.
Other	Not evaluated	Not applicable.

W2.8

Please choose the option that best explains why your organisation does not undertake a water-related risk assessment

Primary reason	Please explain

Further Information

A detailed risk assessment was only done for South African operations. A project has been initiated to conduct the risk assessment for all Aspen manufacturing sites. We anticipate finishing the project by December 2017.

Module: Implications

Page: W3. Water Risks

W3.1

Is your organization exposed to water risks, either current and/or future, that could generate a substantive change in your business, operations, revenue or expenditure?

Yes, direct operations and supply chain

W3.2

Please provide details as to how your organization defines substantive change in your business, operations, revenue or expenditure from water risk

A substantive change is defined as any material loss in the ability to operate and manufacture products, including loss of revenue in any of the regions. Aspen considers material issues to be those that have the potential to substantially impact Aspen's ability to create and sustain value for our stakeholders. Both quantitative and qualitative factors are taken into account in determining materiality.

W3.2a

Please provide the number of facilities* per river basin exposed to water risks that could generate a substantive change in your business, operations, revenue or expenditure; and the proportion of company-widefacilities this represents

Country	River basin	Number of facilities exposed to water risk	Proportion of company-wide facilities that this represents (%)	Comment
South Africa	Mzimvubu-Tsitsikamma(WMA)	2	6-10	All of the operations are exposed to water-related risk with varying degrees of significance.
South Africa	Limpopo (WMA)	1	1-5	All of the operations are exposed to water-related risk with varying degrees of significance.
South Africa	Berg-Olifants (WMA)	1	1-5	All of the operations are exposed to water-related risk with varying degrees of significance.
Germany	Other: Schlei/Trave River Basin District	1	1-5	All of the operations are exposed to water-related risk with varying degrees of significance.
Australia	Other: South East Coast (Victoria) River Region	1	1-5	All of the operations are exposed to water-related risk with varying degrees of significance.
France	Seine	1	11-20	All of the operations are exposed to water-related risk with varying degrees of significance.
Netherlands	Rhine	1	41-50	All of the operations are exposed to water-related risk with varying degrees of significance.
Brazil	Other: Sao Mateus	1	Less than 1%	All of the operations are exposed to water-related risk with varying degrees of significance.
Mexico	Panuco	2	6-10	All of the operations are exposed to water-related risk with varying degrees of significance.
Kenya	Galana	1	1-5	All of the operations are exposed to water-related risk with varying degrees of significance.
Tanzania	Other: Msimbazi	1	1-5	All of the operations are exposed to water-related risk with varying degrees of significance.
United States of America	Mississippi River	1	1-5	All of the operations are exposed to water-related risk with varying degrees of significance.

W3.2b

For each river basin mentioned in W3.2a, please provide the proportion of the company's total financial value that could be affected by water risks

Country	River basin	Financial reporting metric	Proportion of chosen metric that could be affected	Comment
South Africa	Mzimvubu-Tsitsikamma(WMA)	% cost of goods sold	21-30	Estimated based on cost of sales of the operations based in this river basin as a percentage of the Group cost of sales
South Africa	Limpopo (WMA)	% cost of goods sold	1-5	Estimated based on cost of sales of the operations based in this river basin as a percentage of the Group cost of sales
South Africa	Berg-Olifants (WMA)	% cost of goods sold	1-5	Estimated based on cost of sales of the operations based in this river basin as a percentage of the Group cost of sales
Germany	Other: Schlei/Trave River Basin District	% cost of goods sold	1-5	Estimated based on cost of sales of the operations based in this river basin as a percentage of the Group cost of sales
Australia	Other: South East Coast (Victoria) River Region	% cost of goods sold	11-20	Estimated based on cost of sales of the operations based in this river basin as a percentage of the Group cost of sales
France	Seine	% cost of goods sold	11-20	Estimated based on cost of sales of the operations based in this river basin as a percentage of the Group cost of sales
Netherlands	Rhine	% cost of goods sold	11-20	Estimated based on cost of sales of the operations based in this river basin as a percentage of the Group cost of sales
Brazil	Other: Sao Mateus	% cost of goods sold	1-5	Estimated based on cost of sales of the operations based in this river basin as a percentage of the Group cost of sales
Mexico	Panuco	% cost of goods sold	1-5	Estimated based on cost of sales of the operations based in this river basin as a percentage of the Group cost of sales
Kenya	Galana	% cost of goods sold	1-5	Estimated based on cost of sales of the operations based in this river basin as a percentage of the Group cost of sales

Country	River basin	Financial reporting metric	Proportion of chosen metric that could be affected	Comment
Tanzania	Other: Msimbazi	% cost of goods sold	1-5	Estimated based on cost of sales of the operations based in this river basin as a percentage of the Group cost of sales
United States of America	Mississippi River	% cost of goods sold	6-10	Estimated based on cost of sales of the operations based in this river basin as a percentage of the Group cost of sales

W3.2c

Please list the inherent water risks that could generate a substantive change in your business, operations, revenue or expenditure, the potential impact to your direct operations and the strategies to mitigate them

Country	River basin	Risk driver	Potential impact	Description of potential impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
South Africa	Other: Mzimvubu - Tsitsikamma, Berg and Olifants and Limpopo WMA's	Physical-Increased water stress	Other: Higher operating costs / price increases above inflation.	The water management areas in which the facilities are situated are characterised by water balance deficits, with the Berg and Olifants WMA water deficit projected to increase	1-3 years	Highly probable	Medium	Other: Development of facility-specific water management plans	ZAR 500 000	A detailed risk assessment was done for the South African operations. An internal project has been initiated to conduct the risk assessment for all Aspen

Country	River basin	Risk driver	Potential impact	Description of potential impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
				significantly by 2025. The opportunity to augment water supply in these WMA's is limited. Current government plans propose investment in desalination, catchment transfers, and effluent treatment and reuse. These augmentation strategies are costly and consequently it is anticipated that there will be a significant impact on water tariffs within the respective regions. The Draft National Pricing Strategy gazetted by the Department of Water and Sanitation on 13 Nov 2015 is noted in this regard and the implications of this strategy on						Manufacturing sites. It is anticipated that this project will be completed by December 2017. Aspen will consider developing water management plans for each of its South African manufacturing facilities which will identify and prioritize management, monitoring, reporting and engagement initiatives at each operation.

Country	River basin	Risk driver	Potential impact	Description of potential impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
				the business will be assessed and monitored.						
South Africa	Other: Mzimvubu - Tsitsikamma, Berg and Olifants and Limpopo WMA's	Physical-Increased water stress	Other: Reduced water allocations / Imposition of periodic water restrictions	As above. Depending on annual variability in rainfall affecting the catchment water supply, and given that the catchments are already under stress, restrictions may be imposed on business operations.	1-3 years	Unlikely	High	Other: Development of facility-specific water management plans	ZAR 500 000	A detailed risk assessment was done for South African operations. An internal project has been initiated to conduct the risk assessment for all Aspen Manufacturing sites. It is anticipated that this project will be completed by December 2017. Aspen will consider developing water management plans for each of its South African manufacturing facilities which will identify and prioritise management, monitoring,

Country	River basin	Risk driver	Potential impact	Description of potential impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
										reporting and engagement initiatives at each operation.
South Africa	Other: Mzimvubu - Tsitsikamma, Berg and Olifants and Limpopo WMA's	Physical-Increased water stress	Other: Periodic disruption to water supply resulting from poor water service provider infrastructure and maintenance	In South Africa, certain water service providers are have poor infrastructure maintenance, resulting in periodic water supply disruptions. The facilities are serviced by the following water utilities: City of Cape Town, City of Ekurhuleni, Buffalo City, and NMBM Municipality. Generally, this risk is well-managed via engagement with the water service providers as part of the industrial zone forums in which Aspen facility engineering staff actively participate.	1-3 years	Unlikely	Medium	Other: Development of a facility-specific water management plans	ZAR 500 000	In South Africa, certain water service providers have poor infrastructure maintenance, resulting in periodic water supply disruptions. The facilities are serviced by the following water utilities: City of Cape Town, City of Ekurhuleni, Buffalo City, and NMBM Municipality. Generally, this risk is well-managed via engagement with the water service providers as part of the industrial zone

Country	River basin	Risk driver	Potential impact	Description of potential impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
				Nevertheless, Aspen is cognisant of this risk and actively seeks to monitor and manage it across all sites.						forums in which Aspen facility engineering staff actively participate. Nevertheless, Aspen is cognisant of this risk and actively seeks to monitor and manage it across all sites.

W3.2d

Please list the inherent water risks that could generate a substantive change in your business operations, revenue or expenditure, the potential impact to your supply chain and the strategies to mitigate them

Country	River basin	Risk driver	Potential impact	Description of potential impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
South Africa	Pongola-Umzimkulu (WMA)	Physical-Drought	Other: Production disruption	Aspen's operations rely on a number of agricultural raw	1-3 years	Highly probable	Medium	Other: Development of a group-	To be established.	A detailed risk assessment was done for South

Country	River basin	Risk driver	Potential impact	Description of potential impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
			leading to reduced output and higher operating costs.	materials, for example sugar, maize starch, palm oil and lactose. Sugar is sourced from the east coast of KwaZulu-Natal which is projected to become severely water stressed in the near future. Disruption in supply could impact production and supply chain costs. For example: Droughts in various parts of the country severely affected sugar crops and the by-product of sugar production, molasses. Molasses is used in the synthesis of alcohol and solvents. Sugar, molasses and solvents are key ingredients used in the production of pharmaceutical products. The				wide water strategy.		African operations. An internal project has been initiated to conduct the risk assessment for all Aspen Manufacturing sites. It is anticipated that this project will be completed by December 2017. Aspen will consider developing water management plans for each of its South African manufacturing facilities which will identify and prioritise management, monitoring, reporting and engagement initiatives at each operation.

Country	River basin	Risk driver	Potential impact	Description of potential impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
				supplier was forced to obtain supply from an alternative source and this led to an increase in alcohol and solvent pricing. The Draft National Pricing Strategy gazetted by the Department of Water and Sanitation on 13 November 2015 is also noted in this regard and the implications of this strategy on the business will be assessed and monitored.						

W3.2e

Please choose the option that best explains why you do not consider your organization to be exposed to water risks in your direct operations that could generate a substantive change in your business, operations, revenue or expenditure

Primary reason	Please explain

W3.2f

Please choose the option that best explains why you do not consider your organization to be exposed to water risks in your supply chain that could generate a substantive change in your business, operations, revenue or expenditure

Primary reason	Please explain

W3.2g

Please choose the option that best explains why you do not know if your organization is exposed to water risks that could generate a substantive change in your business operations, revenue or expenditure and discuss any future plans you have to assess this

Primary reason	Future plans

Further Information

No further information

Attachments

https://www.cdp.net/sites/2017/69/1069/Water 2017/Shared Documents/Attachments/Water2017/W3.WaterRisks/Aspen Water Risk - Final Report.pdf

Page: W4. Water Opportunities

W4.1

Does water present strategic, operational or market opportunities that substantively benefit/have the potential to benefit your organization?

Yes

W4.1a

Please describe the opportunities water presents to your organization and your strategies to realize them

Country or region	Opportunity	Strategy to realize opportunity	Estimated timeframe	Comment
Other: All Aspen Pharmacare sites	Improved water efficiency	Continuous improvement projects are put in place to recycle water and improve water efficiency. Water conservation projects undertaken to date include the re-use of water from the reverse osmosis (RO process) and the installation of storage/buffer tanks to allow for the use of recycled water in the ablution blocks. Sites in the South African operations have been recycling water since 2010. The Mexican site located in Vallejo recycles clean water from the water treatment plant and donates the water to other neighbouring industries instead of discharging to the municipal sewer.	1-3 years	Aspen continues to investigate water conservation and efficiency opportunities, and is considering developing a group wide water strategy which will prioritise water efficiency initiatives at the operations most exposed to water risk.
Other: All Aspen Pharmacare sites	Cost savings	Improved water efficiency and increased water recycling will reduce exposure to water tariffs by decreasing abstraction and discharge.	1-3 years	Aspen continues to investigate water conservation and efficiency opportunities, and is considering developing a group wide water strategy which will prioritise water efficiency initiatives at the operations most

Country or region	Opportunity	Strategy to realize opportunity	Estimated timeframe	Comment
				exposed to water risk.

W4.1b

Please choose the option that best explains why water does not present your organization with any opportunities that have the potential to provide substantive benefit

Primary reason	Please explain

W4.1c

Please choose the option that best explains why you do not know if water presents your organization with any opportunities that have the potential to provide substantive benefit

Primary reason	Please explain

Further Information

No further information.

Module: Accounting

Page: W5. Facility Level Water Accounting (I)

W5.1

Water withdrawals: for the reporting year, please complete the table below with water accounting data for all facilities included in your answer to W3.2a

Facility reference number	Country	River basin	Facility name	Total water withdrawals (megaliters/year) at this facility	How does the total water withdrawals at this facility compare to the last reporting year?	Please explain
Facility 1	South Africa	Mzimvubu-Tsitsikamma(WMA)	Port Elizabeth	155.11	About the same	There is a small decrease of 4% in water usage which is directly linked to production activity. Please see the Further information box.
Facility 2	South Africa	Mzimvubu-Tsitsikamma(WMA)	East London	19.23	About the same	There is a small increase of 6% in water usage which is directly linked to production activity. Please see the Further information box.
Facility 3	South Africa	Limpopo	Johannesburg	93.24	About the same	There is a small increase of 9% in water usage which is directly linked to production activity. Please see the Further information box.
Facility 4	South Africa	Berg-Olifants (WMA)	Fine Chemical Corporation	53.42	Higher	New thermal utilities fully operational and increased production at the site, resulting in increased water usage.
Facility 5	Germany	Other:	Bad Oldesloe	35.66	About the same	There is a small decrease of 8% in water directly linked to production activity. Please see the Further information box.

Facility reference number	Country	River basin	Facility name	Total water withdrawals (megaliters/year) at this facility	How does the total water withdrawals at this facility compare to the last reporting year?	Please explain
Facility 6	Australia	Other: South East Coast (Victoria) River Region	Dandenong	46.67	About the same	There is a small increase of 6% in water usage which directly linked to production activity. Please see the Further information box.
Facility 7	France	Seine	Notre Dame Bondeville (NDB)	272.58	This is our first year of measurement	This is this site's first year of reporting to Water Disclosure.
Facility 8	Netherlands	Rhine	Oss	810.91	This is our first year of measurement	This is this site's first year of reporting to Water Disclosure.
Facility 9	Brazil	Other: Sao Mateus	Vitoria	5.96	This is our first year of measurement	This is this site's first year of reporting to Water Disclosure.
Facility 10	Mexico	Panuco	Vallejo	153.94	This is our first year of measurement	This is this site's first year of reporting to Water Disclosure.
Facility 11	Kenya	Galana	Beta	28.31	This is our first year of measurement	This is this site's first year of reporting to Water Disclosure.
Facility 12	Tanzania	Other: Msimbazi	Shelys	29.13	This is our first year of measurement	This is this site's first year of reporting to Water Disclosure.
Facility 13	United States of America	Mississippi River	Aspen API	85.11	This is our first year of measurement	This is this site's first year of reporting to Water Disclosure.

Further Information

Thresholds for each category above are as follows: “Much lower” pertains to data of decreasing trend which has a difference of 30% or more from the preceding financial years’ data. “Lower” pertains to data of decreasing trend which has a difference of more than10% and less than 30% from the preceding financial years’ data. “About the same” pertains to data which has less than a 10% difference (greater or lesser) from the preceding financial years’ data. “Higher” pertains to data of increasing trend which has a difference of more than 10% and less than 30% from the preceding financial years’ data. “Much higher” pertains to data of increasing trend which has a difference of 30% or more from the preceding financial years’ data.

Attachments

https://www.cdp.net/sites/2017/69/1069/Water 2017/Shared Documents/Attachments/Water2017/W5.FacilityLevelWaterAccounting(I)/Scope emissions for CDP WDP 2017.xls

Page: W5. Facility Level Water Accounting (II)

W5.1a

Water withdrawals: for the reporting year, please provide withdrawal data, in megaliters per year, for the water sources used for all facilities reported in W5.1

Facility reference number	Fresh surface water	Brackish surface water/seawater	Rainwater	Groundwater (renewable)	Groundwater (non-renewable)	Produced/process water	Municipal water	Wastewater from another organization	Comment
Facility 1	0	0	0	0	0	0	155.11	0	All water utilised at this facility is withdrawn from the local Municipal water supplies.
Facility 2	0	0	0	0	0	0	19.23	0	All water utilized at this facility is withdrawn from the local Municipal water supplies.
Facility 3	0	0	0	0	0	0	93.24	0	Almost all water utilized is withdrawn

Facility reference number	Fresh surface water	Brackish surface water/seawater	Rainwater	Groundwater (renewable)	Groundwater (non-renewable)	Produced/process water	Municipal water	Wastewater from another organization	Comment
									from Municipal water supplies. An unmetered but small volume (estimated at circa 1% of annual usage) is withdrawn from an on-site borehole for use in garden irrigation.
Facility 4	0	0	0	0	0	0	53.42	0	All water utilized at this facility is withdrawn from the local Municipal water supplies.
Facility 5	0	0	0	0	0	0	35.66	0	All water utilized at this facility is withdrawn from the local Municipal water supplies.
Facility 6	0	0	0	0	0	0	46.67	0	All water utilized at this facility is withdrawn from the local Municipal water supplies.
Facility 7	0	0	0	272.58	0	0	0	0	This site only makes use of groundwater because it is the most abundant water source in the region.
Facility 8	0	0	0	131.48	0	0	679.43	0	Water utilized at this facility is withdrawn from both the local Municipal water supplies and groundwater.

Facility reference number	Fresh surface water	Brackish surface water/seawater	Rainwater	Groundwater (renewable)	Groundwater (non-renewable)	Produced/process water	Municipal water	Wastewater from another organization	Comment
Facility 9	0	0	0	0	0	0	5.96	0	All water utilized at this facility is withdrawn from the local Municipal water supplies.
Facility 10	0	0	0	86.26	0	0	67.68	0	Water utilized at this facility is withdrawn from both the local Municipal water supplies and groundwater.
Facility 11	0	0	0	0	0	0	28.31	0	All water utilized at this facility is withdrawn from the local Municipal water supplies.
Facility 12	0	0	0	13.85	0	0	15.28	0	Water utilized at this facility is withdrawn from both the local Municipal water supplies and groundwater.
Facility 13	0	0	0	0	0	0	85.11	0	All water utilized at this facility is withdrawn from the local Municipal water supplies.

W5.2

Water discharge: for the reporting year, please complete the table below with water accounting data for all facilities included in your answer to W3.2a

Facility reference number	Total water discharged (megaliters/year) at this facility	How does the total water discharged at this facility compare to the last reporting year?	Please explain
Facility 1	99.56	Lower	Approximately 10ML of water was recycled and used in ablutions and cooling towers.
Facility 2	15.52	About the same	There is a small increase of 3% in water discharge.
Facility 3	61.49	About the same	There is a small increase of 2% in water discharge.
Facility 4	35.07	Much higher	The increase is mainly due to increase in production, which resulted in increased water usage and, subsequently, to an increase in discharged water. Please note estimated values are used for discharge.
Facility 5	25.36	Higher	Estimated values are used for discharge.
Facility 6	23.71	This is our first year of measurement	This is the site's first year of reporting to Water Disclosure.
Facility 7	220.47	This is our first year of measurement	This is the site's first year of reporting to Water Disclosure.
Facility 8	810.91	This is our first year of measurement	This is the site's first year of reporting to Water Disclosure.
Facility 9	1.06	This is our first year of measurement	This is the site's first year of reporting to Water Disclosure.
Facility 10	61.10	This is our first year of measurement	This is the site's first year of reporting to Water Disclosure.
Facility 11	0.68	This is our first year of measurement	This is the site's first year of reporting to Water Disclosure
Facility 12	3.99	This is our first year of measurement	This is the site's first year of reporting to Water Disclosure.
Facility 13	79.85	This is our first year of measurement	This is the site's first year of reporting to Water Disclosure.

W5.2a

Water discharge: for the reporting year, please provide water discharge data, in megaliters per year, by destination for all facilities reported in W5.2

Facility reference number	Fresh surface water	Municipal/industrial wastewater treatment plant	Seawater	Groundwater	Wastewater for another organization	Comment
Facility 1	0	99.56	0	0	0	Approximately10 megalitres of water was recycled and used in ablutions and cooling towers
Facility 2	0	15.52	0	0	0	All water is discharged directly into the municipal sewer
Facility 3	0	61.49	0	0	0	Approximately 15 megalitres of water was recycled and used in ablutions and cooling towers. The site has a water treatment plant where water is treated before discharged
Facility 4	0	35.07	0	0	0	All water is discharged directly into the municipal sewer.
Facility 5	0	25.36	0	0	0	All water is discharged directly into the municipal sewer.
Facility 6	0	23.71	0	0	0	All water is discharged directly into the municipal sewer.
Facility 7	0	220.47	0	0	0	All water is treated onsite before discharge into the municipal sewer.
Facility 8	0	810.91	0	0	0	All water is treated onsite before discharge into the municipal sewer.
Facility 9	0	1.06	0	0	0	All water is discharged directly into the municipal sewer.
Facility 10	0	51.81	0	1.33	7.96	The site donated about 9 megalitres of clean water for use to other neighbouring industries. The site has a water treatment plant where water is treated before discharge.
Facility 11	0	0.68	0	0	0	All water is treated on site before discharge into the municipal sewer.
Facility 12	0	3.99	0	0	0	All water is treated on site before discharge into the municipal sewer.
Facility 13	0	79.85	0	0	0	All water is treated on site before discharge into the municipal sewer.

W5.3

Water consumption: for the reporting year, please provide water consumption data for all facilities reported in W3.2a

Facility reference number	Consumption (megaliters/year)	How does this compare to the last reporting year?	Please explain
Facility 1	55.55	Much higher	Inclusion of new facilities at the Port Elizabeth site.
Facility 2	3.71	Higher	Variation in production mix.
Facility 3	31.75	Higher	Increased production volumes.
Facility 4	18.35	Lower	Variation in production mix.
Facility 5	10.30	About the same	There is a slight decrease of 1%.
Facility 6	22.96	Lower	Divestment of facilities in Australia.
Facility 7	52.11	This is our first year of measurement	This is the site's first year of reporting to Water Disclosure.
Facility 8	0	This is our first year of measurement	This is the site's first year of reporting to Water Disclosure.
Facility 9	4.90	This is our first year of measurement	This is the site's first year of reporting to Water Disclosure.
Facility 10	92.84	This is our first year of measurement	This is the site's first year of reporting to Water Disclosure.
Facility 11	27.63	This is our first year of measurement	This is the site's first year of reporting to Water Disclosure.
Facility 12	25.14	This is our first year of measurement	This is the site's first year of reporting to Water Disclosure.
Facility 13	5.26	This is our first year of measurement	This is the site's first year of reporting to Water Disclosure.

W5.4

For all facilities reported in W3.2a what proportion of their water accounting data has been externally verified?

Water aspect	% verification	What standard and methodology was used?
Water withdrawals- total volumes	76-100	AA1000AS

Water aspect	% verification	What standard and methodology was used?
Water withdrawals- volume by sources	76-100	AA1000AS
Water discharges- total volumes	51-75	Water discharge either estimated from calculations obtained from the service providers, or some sites have water meters to measure the quantities discharged.
Water discharges- volume by destination	Not verified	Water discharge either estimated from calculations obtained from the service providers, or some sites have water meters to measure the quantities discharged.
Water discharges- volume by treatment method	Not verified	Water discharge either estimated from calculations obtained from the service providers, or some sites have water meters to measure the quantities discharged.
Water discharge quality data- quality by standard effluent parameters	Not verified	Water discharge either estimated from calculations obtained from the service providers, or some sites have water meters to measure the quantities discharged.
Water consumption- total volume	51-75	Consumption is calculated as withdrawals minus discharges, and discharge is not specifically measured.

Further Information

Thresholds for each category above are as follows: “Much lower” pertains to data of decreasing trend which has a difference of 30% or more from the preceding financial years’ data. “Lower” pertains to data of decreasing trend which has a difference of more than10% and less than 30% from the preceding financial years’ data. “About the same” pertains to data which has less than a 10% difference (greater or lesser) from the preceding financial years’ data. “Higher” pertains to data of increasing trend which has a difference of more than 10% and less than 30% from the preceding financial years’ data. “Much higher” pertains to data of increasing trend which has a difference of 30% or more from the preceding financial years’ data.

Module: Response

Page: W6. Governance and Strategy

W6.1

Who has the highest level of direct responsibility for water within your organization and how frequently are they briefed?

Highest level of direct responsibility for water issues	Frequency of briefings on water issues	Comment
Board of individuals/Sub-set of the Board or other committee appointed by the Board	Scheduled-quarterly	Aspen's Board is responsible for ensuring that the Group is a responsible corporate citizen by considering both the financial aspects of the business and the impact that the business operations have on the physical and social environments in which Aspen operates. The Board ratifies the Group's material sustainability Key Performance Indicators (KPIs) annually. The Group's sustainability management performance objectives are monitored on the basis of these approved KPIs. Aspen's Social&Ethics Committee (subcommittee of the Board) is responsible for governance of the Group's social, environmental and human rights performance in accordance with the relevant regulations, guidelines and recommendations. Under the direction of Dr Morne Geyser, Group Strategic Operations Executive, the Group SHE department develops and promotes Aspen's environmental management principles and standards, and monitors the alignment of business unit environmental management systems to the Group standards.

W6.2

Is water management integrated into your business strategy?

Yes

W6.2a

Please choose the option(s) below that best explains how water has positively influenced your business strategy

Influence of water on business strategy	Please explain

Influence of water on business strategy	Please explain
Introduction of water management KPIs	Aspen's strategic objective, "To practise good corporate citizenship", supports the Group's objectives around climate change and responsible environmental management. To this end, Aspen's sustainability management initiatives promote the themes of "Preserving our environment" and "Managing efficient utilisation of scarce resources". These initiatives are monitored by material key performance indicators, including water consumption, which are reported to the Board. These indicators flag areas of risks and opportunities within the environmental management systems and programmes. Aspen's business strategy is defined at a Board level and the Board is made aware of potential climate change risks and opportunities via existing reporting channels e.g. Audit & Risk Committee, Social & Ethics Committee and the Executive Risk Forum. Aspen's Group Environmental Management Principles formally describes the Group's commitment to "Promoting the efficient use of resources such as energy, water, paper and production materials with due regard to the scarcity of natural resources and the environmental impact resulting from the utilisation and application of such resources in conducting our business activities."

W6.2b

Please choose the option(s) below that best explains how water has negatively influenced your business strategy

Influence of water on business strategy	Please explain
No measurable influence	To date water risk has had no measurable influence on the business strategy. However, in future, increased capital and operational costs may be incurred should the business be required to explore or adopt alternative water supply options. In addition, costs could be incurred if the water quality levels deteriorate to a level where additional processing is required prior to use.

W6.2c

Please choose the option that best explains why your organization does not integrate water management into its business strategy and discuss any future plans to do so

Primary reason	Please explain

W6.3

Does your organization have a water policy that sets out clear goals and guidelines for action?

Yes

W6.3a

Please select the content that best describes your water policy (tick all that apply)

Content	Please explain why this content is included
Other: Incorporated within group environmental, sustainability or EHS policy	Aspen's strategic objective, "To practise good corporate citizenship", supports the Group's objectives around climate change and responsible environmental management. To this end, Aspen's sustainability management initiatives promote the themes of "Preserving our environment" and "Managing efficient utilisation of scarce resources". These initiatives are monitored by material key performance indicators, including water consumption, which are reported to the Board. These indicators flag areas of risks and opportunities within the environmental management systems and programmes. Aspen's business strategy is defined at a Board level and the Board is made aware of potential climate change risks and opportunities via existing reporting channels e.g. Audit & Risk Committee, Social & Ethics Committee and the Executive Risk Forum. Aspen's Group Environmental Management Principles formally describes the Group's commitment to "Promoting the efficient use of resources such as energy, water, paper and production materials with due regard to the scarcity of natural resources and the environmental impact resulting from the utilisation and application of such resources in conducting our business activities."

W6.4

How does your organization's water-related capital expenditure (CAPEX) and operating expenditure (OPEX) during the most recent reporting year compare to the previous reporting year?

Water CAPEX (+/- % change)	Water OPEX (+/- % change)	Motivation for these changes
0	0	Note: The data is not readily available as Aspen currently does not have a mechanism in place to record spend related specifically to water.

Further Information

No further information.

Page: W7. Compliance

W7.1

Was your organization subject to any penalties, fines and/or enforcement orders for breaches of abstraction licenses, discharge consents or other water and wastewater related regulations in the reporting year?

Yes, not significant

W7.1a

Please describe the penalties, fines and/or enforcement orders for breaches of abstraction licenses, discharge consents or other water and wastewater related regulations and your plans for resolving them

Facility name	Incident	Incident description	Frequency of occurrence in reporting year	Financial impact	Currency	Incident resolution
Nutritionals: Johannesburg	Penalty	Additional non-compliance tariff for an effluent discharge that did not meet municipal standards in terms of pH and suspended solids.	1	8850.00	ZAR (R)	The out of specification event was caused by a temporary problem with the water treatment plant, which was resolved the same day.

W7.1b

What proportion of your total facilities/operations are associated with the incidents listed in W7.1a?

3%

W7.1c

Please indicate the total financial impacts of all incidents reported in W7.1a as a proportion of total operating expenditure (OPEX) for the reporting year. Please also provide a comparison of this proportion compared to the previous reporting year

Impact as % of OPEX	Comparison to last year
0.00	Much lower

Further Information

No further information

Page: W8. Targets and Initiatives

W8.1

Do you have any company wide targets (quantitative) or goals (qualitative) related to water?

Yes, targets and goals

W8.1a

Please complete the following table with information on company wide quantitative targets (ongoing or reached completion during the reporting period) and an indication of progress made

Category of target	Motivation	Description of target	Quantitative unit of measurement	Base-line year	Target year	Proportion of target achieved, % value
Reduction in consumptive volumes	Other: Resource Conservation	Johannesburg Nutritional site: Recycling of cooling and seal water from the plant	% reduction of water sourced from municipal supply	2015	2016	100%
Reduction in wastewater	Water stewardship	Mexico: Donation of treated clean water from the Vallejo water treatment plant to other industries	Other: % reduction of water sourced from the Municipality by other industries downstream	2015	2016	100%
Reduction in consumptive volumes	Other: Resource Conservation	Mexico: Re-use of treated water from the Vallejo water treatment plant for gardening	% reduction of water sourced from municipal supply	2015	2016	100%

W8.1b

Please describe any company wide qualitative goals (ongoing or reached completion during the reporting period) and your progress in achieving these

Goal	Motivation	Description of goal	Progress
Other: Promote water conservation and water recycling	Other: Promote water conservation and water recycling	Identification and implementation of feasible water recycling projects at the manufacturing facilities. Review and setting of water conservation targets. Continued awareness of developments in water efficient technology suitable for the pharmaceutical industry.	This is ongoing

W8.1c

Please explain why you do not have any water-related targets or goals and discuss any plans to develop these in the future

Further Information

Resource conservation is a fundamental KPI within the Aspen business and all sites are encouraged to continuously investigate ways to utilise our resources efficiently.

Module: Linkages/Tradeoff

Page: W9. Managing trade-offs between water and other environmental issues

W9.1

Has your organization identified any linkages or trade-offs between water and other environmental issues in its value chain?

No

W9.1a

Please describe the linkages or trade-offs and the related management policy or action

Environmental issues	Linkage or trade-off	Policy or action

Further Information

Module: Sign Off

Page: Sign Off

W10.1

Please provide the following information for the person that has signed off (approved) your CDP water response

Name	Job title	Corresponding job category
Dr Morne Geyser	Group Executive: Strategic Operations	Board/Executive board

W10.2

Please indicate that your organization agrees for CDP to transfer your publicly disclosed data regarding your response strategies to the CEO Water Mandate Water Action Hub.

Note: Only your responses to W1.4a (response to impacts) and W3.2c&d (response to risks) will be shared and then reviewed as a potential collective action project for inclusion on the WAH website.

By selecting Yes, you agree that CDP may also share the email address of your registered CDP user with the CEO Water Mandate. This will allow the Hub administrator to alert your company if its response data includes a project of potential interest to other parties using water resources in the geographies in which you operate. The Hub will publish the project with the associated contact details. Your company will be provided with a secure log-in allowing it

to amend the project profile and contact details.

Yes

Further Information

None