Module: Introduction

Page: Introduction

0.1

Introduction

Please give a general description and introduction to your organization.

AECI is an explosives and specialty chemicals company domiciled in South Africa and listed on the Johannesburg Stock Exchange (JSE). Group businesses service the mining and manufacturing sectors both locally and internationally. AECI's vision is to be the supplier of choice for customers in its chosen markets. The Group aims to be Africa's leading supplier of explosives and mining services and specialty chemicals, mainly to the mining and manufacturing sectors and in key emerging markets around the world.

Regional expansion will leverage the Group's already extensive footprint in Africa and other selected markets in developing countries will also be targeted for growth. South East Asia and Brazil are of particular interest.

AEL will commission three new plants in Africa in 2013. In addition, the investment in a nitric acid plant and an ammonium nitrate solution plant in Bontang, Indonesia, will provide in-country access to a secure source of ammonium nitrate. This will assist in sustaining AEL's growth trend in the region.
In the specialty chemicals cluster, regional growth is being pursued in Africa in key markets that include mining; the water oil, gas and energy sector; agriculture; food production and preservation; and the personal and home care sectors.

Businesses will expand their areas of influence by partnering with their customers as they grow and by maximising the benefits of leading technology. In this regard ImproChem's position subsequent to the acquisition of General Electric's ("GE") Chemical and Monitoring Solutions business in Africa was a noteworthy development in 2012. Potential acquisitions in Brazil are being identified and they will be pursued in line with the Group's risk/reward appetite, as will opportunities in other geographies.

EXPLOSIVES
AEL is the leading developer, producer and supplier of commercial explosives, initiating systems and blasting services for the mining, quarrying and construction markets in Africa. In Indonesia, the company is the second largest supplier of explosives and services to the local mining industry. With its Head Office at Modderfontein in Johannesburg, South Africa, AEL has production facilities and offices throughout Africa and in selected international regions in South East Asia, South America and Europe.

SPECIALTY CHEMICALS
In the specialty chemicals cluster, 15 business units supply specialty chemical raw materials and related services for industrial use across a broad spectrum of

customers in the manufacturing and mining sectors, mainly in Southern Africa. Sales, distribution, production and laboratory facilities are extensive. The cluster has major sites in Johannesburg and Durban, with a number of smaller operations country-wide. AECI's mining chemicals thrust is anchored in Senmin, which operates in Sasolburg.

SPECIALTY FIBRES
SANS Technical Fibers is based in USA. It manufactures and markets a range of high performance, specialty nylon industrial yarns for niche market applications in the USA, Asia and Europe. Previously a stand-alone segment, this business was included in the specialty chemicals cluster from January 2013.

PROPERTY
In addition to its core businesses the Group has a valuable land asset, the release of which is managed carefully. The property activities are overseen by Heartland. This company seeks to optimise the value of the property holdings surplus to AECI's operational requirements by selling land and by selectively investing in revenue-producing buildings in order to grow an existing portfolio of rental properties. The land holdings are significant and are located in prime locations near Johannesburg and Cape Town. More than 3 000 hectares of land are available for redevelopment or sale over the longer term for residential, commercial and industrial end uses and for leasing purposes.

AECI has a total employee complement of about 6 895, many of whom are engaged in the Group's extensive sales, technical service and distribution networks.

0.2

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

Enter the period that will be disclosed.
Sun 01 Jan 2012 - Mon 31 Dec 2012

0.3

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 financial control is exercised

0.4

Exclusions

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

No

0.4a

List of Exclusions

Please describe any exclusion(s) in the following table.

Exclusion	Please explain why you have made the exclusion

Module: Water-Governance

Page: Water-1-ManagementGovernance

1.1

Does your company have a water policy, strategy or management plan?

Yes

1.1a

Please describe your policy, strategy or plan, including the highest level of responsibility for it within your company and its geographical reach.

Country or region	Description of policy, strategy or plan	Position of responsible person
Company-wide	During 2011 and 2012 AECI embarked on an extensive environmental targeting process called Green Gauge which essentially focused on resource efficient assessments related to water and energy. The water related component of these assessments focused on water conservation and demand management in order to ensure that the Group addresses the management of water in a consistent and integrated manner. AECI is therefore committed to: a. Minimising water risk impact from business activities by ensuring that operational activities are optimised to reduce water demand and enhance water conservation where practically possible. b. Ensuring continuous improvement facilitated by ongoing monitoring and reporting of water use c. Implementing water re-use and recycling projects where possible in order to reduce raw water demand and minimise the disposal of effluent. d. Creating awareness about the importance of water resources to facilitate responsible water resource management by employees in consideration of impacts on upstream and downstream users and the environment. e. Adhering to local, provincial and national regulatory requirements pertaining to water and wastewater management.	Sub-set of the board

1.1b

Does the water policy, strategy or plan specify water-related targets or goals?

Yes

1.1c

Please describe these water-related targets or goals and the progress your company has made against them.

Country or region	Category of target or goal type	Description of target or goal	Progress against target or goal
Company-wide	Direct operations	AECI has set an interim target for 2103 based on the resource efficiency assessments which were conducted at 15 prioritised sites. The interim target is to reduce water consumption by 14% across the Group based on	Nine businesses within the Group have set business based targets for water reductions which will contribute towards the achievement of the

Country or region	Category of target or goal type	Description of target or goal	Progress against target or goal
		the 2010 baseline.	Group target.

1.1d

You may explain here why your company does not have a water policy, strategy or plan and if you intend to put one in place.

1.2

Do you wish to report any actions outside your water policy, strategy or management plan that your company has taken to manage water resources or engage stakeholders in water-related issues?

Country or region	Category of action	Description of action and outcome
South Africa	Watershed management	Nulandis which is a wholly owned AECI business in the Western Cape has partnered with the Breede River Catchment Forum and the Department of Water Affairs to engage in river clean-up activities.
South Africa	Public policy	AECI companies are signatories of Responsible Care in South Africa. Responsible Care is the chemical industry's unique global initiative that drives continuous improvement in safety, health and environmental (SHE) performance, together with open and transparent communication with stakeholders. Responsible Care embraces the development and application of sustainable chemistry, helping our industry contribute to sustainable development while allowing us to meet the world's growing need for essential chemicals and the products those chemicals make possible. The Responsible Care Standing Committee, currently chaired by AECI's Group Manager for Technology and SHE, is responsible for guiding the programme. One of the key fundamentals of this is that there is open communication on safety, health and environmental matters with interested parties, both inside and outside the industry. Key stakeholder issues pertaining to aspects such as water pollution incidents, remediation actions and progress reports and Responsible Care management practice standard on Community Interaction are addressed during the CAER meetings.

Module: Water-RisksOpps

Page: Water-2-indicators-op

2.1

Are any of your operations located in water-stressed regions?

Yes

2.1a

Please specify the method(s) you use to characterize water-stressed regions (you may choose more than one method).

Method used to define water stress	Please add any comments here:
Internal company knowledge Regional government assessments or databases	The assessment of the location of the operational units in water-stressed areas is based on in-house knowledge of location of specific sites and the relevant Internal Strategic Perspectives (ISPs) conducted by the Department of Water Affairs.

2.1b

Please list the water-stressed regions where you have operations and the proportion of your total operations in that area.

Country or region	River basin	Proportion of operations located in this region (%)	Further comments
South Africa		41 – 50	Several AECI operations are located in the Upper Vaal and Crocodile West Marico Water management areas.
South Africa		31 – 40	Several AECI operations are located in the Mvoti-Mzimkulu Water

Country or region	River basin	Proportion of operations located in this region (%)	Further comments
			Management Area.

2.1a

Please specify the method(s) you use to characterize water-stressed regions.

Method used to define water stress	Please add any comments here:

2.1c

You may explain here why you are not able to identify which of your operations are located in regions subject to water stress and whether you have plans to investigate this in the future.

2.2

Are there other indicators (besides water stress) which you wish to report that help you to identify which of your operations are located in regions subject to water-related risk?

Yes

2.2

Are there other indicators (besides water stress) which you wish to report that help you to identify which of your operations are located in regions subject to water-related risk?

2.2

Are there other indicators (besides water stress) which you wish to report which help you to identify which of your operations are located in regions subject to water-related risk?

2.2a

Please list the regions at risk where you have operations, the relevant risk indicator and proportion of your total operations in that area.

Country or region	River basin	Risk Indicator	Proportion of operations located in this region (%)	Further comments
South Africa		Tightening of regulations	11-20	AEL's operations in the Modderfontein area fall within the Crocodile West Marico Water Management Area. Regulatory requirements in terms of Water Use Licenses have become more stringent in comparison to previous years. The critical factor in this aspect is the lack of continuity of officials dealing with the authorisation process.

2.2a

Please list the regions at risk where you have operations, the relevant risk indicator and proportion of your total operations in that area.

Country or region	River basin	Risk Indicator	Proportion of operations located in this region (%)	Further comments

2.2a

Please list the regions at risk where you have operations, the relevant risk indicator and proportion of your total operations in that area.

Country or region	River basin	Risk Indicator	Proportion of operations located in this region (%)	Further comments

2.2b

You may explain here why you do not wish to report or why you do not use other indicators to identify which of your operations are located in regions subject to water-related risk.

2.2b

You may explain here why you do not use or wish to report other indicators to identify which of your operations are located in regions subject to water-related risk.

2.2b

You may explain here why you do not use or wish to report other indicators to identify which of your operations are located in regions subject to water-related risk.

2.3

Please specify the total proportion of your operations that are located in the regions at risk which you identified in questions 2.1 and/or 2.2.

75%

2.3

Please specify the total proportion of your operations that are located in the regions at risk which you identified in questions 2.1 and/or 2.2.

2.3

Please specify the total proportion of your operations that are located in the regions at risk which you identified in questions 2.1 and /or 2.2.

2.4

Please specify the basis you use to calculate the proportions used for questions 2.1 and/or 2.2.

Basis used to determine proportions	Please add any comments here
Number of facilities	

2.4

Please specify the basis you use to calculate the proportions used for questions 2.1 and/or 2.2.

Basis used to determine proportions	Please add any comments here

2.4

Please specify the basis you use to calculate the proportions used for questions 2.1 and/or 2.2

Basis used to determine proportions	Please add any comments here

Page: water-indicators-sc

2.5

Do any of your key inputs or raw materials (excluding water) come from regions subject to water-related risk?

No

2.5a

Please state or estimate the proportion of your key inputs or raw materials that come from regions subject to water-related risk.

Country or region	River basin	Input or material	Proportion of key input or raw material that comes from region at risk (%)	Unit used for calculating percentage	Further comments

2.5b

You may explain here why you are not able to identify if any of your key inputs or raw materials come from regions subject to water-related risk and whether you have plans to explore this issue in the future.

Page: water-3-riskassess-op

3.1

Is your company exposed to water-related risks (current or future) that have the potential to generate a substantive change in your business operation, revenue or expenditure?

Yes

3.1a

Please describe (i) the current and/or future risks to your operations, (ii) the ways in which these risks affect or could affect your operations before taking action, (iii) the estimated timescale of these risks, and (iv) your current or proposed strategies for managing them.

Country or region	River basin	Risk type	Potential business impact	Estimated timescale (years)	Risk management strategies
South Africa	Other: Vaal River Catchment	06. Regulatory: Higher water prices	If no water is available, many of AECI's water intensive products will not be able to be produced and therefore there will be a decrease in product availability and a subsequent loss of revenue.	1 – 5	As the company's operations are located in an area where water is considered a scarce resource, AECI recognises that water availability may in future be constrained as a result of increasing industrial pressure on water supply and as a result of climate change, and therefore needs to be conserved. Going forward, AECI will look to become an active participant in matters relating to water management in its areas of operation. This could be done through a number of means including discussing water issues with local community members as well as continuous dialogue with local, regional and national government water departments.
South Africa	Other: Vaal River Catchment	03. Physical: Increased water stress or scarcity	South Africa is generally regarded as a water-stressed country. With water resources already under pressure in South Africa, Climate Change could lead to a further decline in the availability of water resources and the chemical processing and services industry could be more vulnerable to fluctuating water availability, precipitation patterns, altered groundwater levels and changing stream flow patterns. This can potentially affect water balances which could result in a shortage of the water supply available from rivers and boreholes. Moreover,	1 – 5	AECI is currently looking at ways to decrease dependency on water supplied from other sources. Through a climate change strategy, water has been identified as a potential climate risk that AECI will need to address going forward. Water Conservation and Demand Management assessments have been conducted at 15 prioritised sites in order to quantify and understand the business risks related to water. The assessments have allowed the sites to identify potential areas of saving, re-use and recycling in order to reduce

Country or region	River basin	Risk type	Potential business impact	Estimated timescale (years)	Risk management strategies
			this is set to happen at the same time as socio-economic development will increase the demand for water. The major overall effect of pressure on water availability is on AECI's integrated water balance which guides AECI's in determining the quantity of water available for planning and operations. In the northern regions of the country where AECI's operations are located, the already dry winter rainfall region is expected to become drier. AECI does rely quite heavily on water availability and a scarcity in water could have a slowing effect on productivity. If water availability becomes scarcer, this may lead to an increase in operational costs as more supply will be required from municipal suppliers. AECI currently uses 4.87 billion litres of water per annum. If water shortages increase, this cost is likely to rise by 20 – 30%.		water demand and enhance water conservation. Specific targets for reduced consumption have been set at nine of the sites assessed while targets are being developed for the remaining sites. It is anticipated that the assessments and targets will aid in enhanced water management on AECI sites.
South Africa	Other: Vaal River Catchment, Crocodile West-Marico Catchment	01. Physical: Declining water quality	For operations where a Water Use License is required and/or has been issued, an Integrated Water and Waste Management Plan has been developed and is being used to monitor and manage water quality related aspects. The greatest impact is related to the deteriorating quality of incoming water due to upstream impacts which are outside the control of the company.	Current	AECI has implemented effective water monitoring networks in areas where water quality is a matter of concern. Specific measures are being taken to measure the quality of water in upstream water courses. The information is shared with the Department of Water Affairs in order to ensure that upstream impacts are addressed in regulatory requirements relevant to AECI operations. Water quality impacts from AECI operations have been addressed as part of the water assessments which have been conducted on specific sites with the main aim of reducing effluent generation, separating of storm water from effluent channels and re-using and recycling of process water where technically feasible.
Company-		15. Other:	Many AECI operations are located close to	Current	AECI is committed to maintain ongoing efforts

Country or region	River basin	Risk type	Potential business impact	Estimated timescale (years)	Risk management strategies
wide		Reputational damage	communities and it is therefore essential that beneficial relationships with the surrounding stakeholders are manitained. in the event of a significant environmental incident, AECI would suffer great reputational damage.		to minimize operational impacts on the environment in order to continue to be accepted as a responsible citizen by the communities in which we operate and other stakeholders. Recognising this, AECI aims to ensure that business activities within the Group are conducted in a sustainable manner. This environmental vision is based on three critical environmental footprint reduction goals; namely, resource conservation, energy conservation and pollution prevention. This vision and the associated goals are the pivotal drivers for our climate change strategy.

3.1b

Please explain why you do not consider your company to be exposed to any water-related risks that have the potential to generate a substantive change in your business operation, revenue or expenditure.

3.1c

Please explain why you do not know if your company is exposed to any water-related risks that have the potential to generate a substantive change in your business operation, revenue or expenditure, and if you have plans to assess this risk in the future.

3.2

What methodology and what geographical scale (e.g. country, region, watershed, business unit, facility) do you use to analyze water-related risk across your operations?

Risk methodology	Country or geographical scale
It is essential that AECI protects the environment in which it operates in order to continue being an acceptable corporate citizen in the territories in which it has a presence. The Board also takes into account material changes and trends in the risk profile and considers whether the control systems adequately support the board in achieving the risk management objectives. AECI's risk management process comprises both bottom-up and top-down elements and follows a holistic approach in identifying, analysing, evaluating, treating, monitoring and reviewing risks. With this process, together with enhanced application software currently being installed, AECI ensures that management of risks is an integral part of its Corporate Governance system and that risk management is integrated into its day-to-day business activities. The bottom-up identification and prioritization process is supported by workshops with the management teams of the Group's businesses i.e. at asset level. The top-down element involves management at AECI Limited level. This ensures that potential risks are discussed at the top management level and are included in the subsequent reporting process, if found to be relevant. Each subsidiary has developed at business specific risk matrix and related aspects register. The Risk Committee approves the risk strategy and the policies that are formulated and implemented by the Executive Committee and Senior Management. This system assists the Board in discharging its responsibility for ensuring that the wide range of risks associated with all of the Group's operations are managed effectively in support of the creation and preservation of stakeholder wealth and well-being. Full reviews of the risk control and disclosure processes are undertaken regularly. The AECI risk analysis is depicted on a 5X5 risk rating scale consisting of potential impact and estimated probability. The potential impacts are minor, moderate, serious, major or severe and are in turn linked to a qualitative and quantitative residual risk value. The estimated probability is based on the following: • Almost certain = monthly basis • Likely = once in one year • Possible – once in three years • Unlikely = once in five years • Rare = more than five years	Region in country

Page: water-riskassess-sc

3.3

Do you require your key suppliers to report on their water use, risks and management?

No

3.4

Is your supply chain exposed to water-related risks (current or future) that have the potential to generate a substantive change in your business operation, revenue or expenditure?

Don't know

3.4a

Please describe (i) the current and/or future risks to your supply chain, (ii) the ways in which these risks affect or could affect your operations before taking action, (iii) the estimated timescale of these risks and, (iv) your current or proposed strategies for managing them.

Country or region	River basin	Risk type (to supplier)	Potential business impact (to responding company)	Estimate timescale (years)	Risk management strategies (by responding company)

3.4b

Please explain why you do not consider your supply chain to be exposed to any water-related risks that have the potential to generate a substantive change in your business operation, revenue or expenditure.

3.4c

Please explain why you do not know if your supply chain is exposed to any water-related risks that have the potential to generate a substantive change in your business operation, revenue or expenditure, and if you have plans to assess this risk in the future.

Although AECI has engaged in an extensive water use, conservation and demand management assessment, this process has largely focused on obtaining a better understanding of the AECI operations. It is essential that the company focuses on understanding its own risk and required mitigation measures. Once these have been comprehensively addressed, it will more logically feasible to address supply chain risk exposures.

Page: Water-4-Impacts

4.1

Has your business experienced any detrimental impacts related to water in the past five years?

Yes

4.1a

Please describe these detrimental impacts including (i) their financial impacts and (ii) whether they have resulted in any changes to company practices.

Country	Impact indicator	Description of impact	Response strategy
South Africa	Water Stress	Most of the companies within the AECI Group use water from municipal sources and discharge effluent to municipal sewers for treatment. Discussions with the authorities have indicated that water reductions need to be considered by all operations which are supplied with water.	The AECI Green Gauge process was comprised of water, waste and energy audits. The water assessments conducted at prioritised sites focused on water management practices with the specific aim of reducing water demand and enhancing water re-use and re-cycling where possible. Site specific water reduction targets have been set at the sites where assessments were carried out. This exercise is currently being rolled out at nine additional sites.
South Africa	Tightening of regulations	AEL withdraws water from a natural water resource and also discharges effluent into the natural water resource. The most critical aspect related to this water use is the Water Use License (WUL) that has been issued by the Department of Water Affairs. The WUL specifies very stringent compliance conditions which will require capital intensive projects to be implemented in order to ensure compliance.	In order to ensure compliance to the WUL that has been issued to AECI, a specific compliance management project database has been developed. Key priority projects have been identified in terms of the potential to facilitate compliance to the conditions of the WUL. The status of the implementation of the projects is monitored on a monthly basis by the AECI EXCO. Ongoing discussions also take place with the Department of Water Affairs to ensure that initiatives for achievement of compliance are acceptable to the Department.

4.1b

Please explain why you do not know whether your business has experienced any detrimental impacts related to water in the past five years and if you have any plans to explore this in the future?

Page: Water-5-Opportunities

5.1

Do water-related issues present opportunities (current or future) that have the potential to generate a substantive change in your business operation, revenue or expenditure?

Yes

5.1a

Please describe (i) the current and/or future opportunities, (ii) the ways in which these opportunities affect or could affect your operations (iii) the estimated timescale and (iv) your current or proposed strategies for exploiting them.

Country or region	Opportunity type	Potential business impact	Estimated timescale	Strategy to exploit opportunity
South Africa	Increased brand value	AECI sees a reputational advantage being gained if water conservation and water management are successfully integrated into business operations. Equally, if AECI's water related products see an increase in demand, the company will as a result begin to see an increase in revenues and profits. This may be magnified if clients and customers value products that have been created with minimal impact on water supply.	1 – 5	Identify potential areas and customers where water treatment technologies such as those developed by ImproChem can be further applied and marketed.
Company-wide	Cost savings	As part of the AECI Green Gauge process, water waste and energy assessments were carried out at 15 prioritised sites with one of the key features being the reduction of consumption and costs. The water balance assessments focused on reduction of operational demands and	Current	The resource efficiency assessments have been characterised by the development of a comprehensive opportunities database which prioritises initiatives to achieve reductions in consumption. The identified opportunities have been used to set realistic and

Country or region	Opportunity type	Potential business impact	Estimated timescale	Strategy to exploit opportunity
		enhancement of re-use and re-cycling opportunities.		achievable targets. The implementation of the initiatives and the achievement of the targets will realise water and cost savings.

5.1b

Please explain why you do not consider water-related issues to present opportunities to your company that have the potential to generate a substantive change in your business operation, revenue or expenditure or supply chain.

5.1c

Please explain why you do not know whether water-related issues present opportunities to your company that have the potential to generate a substantive change in your business operation, revenue or expenditure.

Page: Water-6-tradeoffs

6.1

Has your company identified any linkages or trade-offs between water and carbon emissions in its operations or supply chain?

Yes

6.1a

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

Linkage or trade-off	Policy or action
Linkage	Many manufacturing process at the Group plants are characterised by heating and cooling processes and requirements. During the energy assessments conducted at various sites it was apparent that there are numerous opportunities in terms of optimisation of heating and cooling process and infrastructure such as insulations of pipes and storage vessels, reducing pressure head across chillers, replacement of aged cooling towers, optimisation of thermal fluid temperatures at night, optimisation of reactor heating/cooling processes, optimisation os steam baths etc. Most of these energy and emission saving initiatives will also result in water savings.

Module: Water-Accounting

Page: Water-7-Withdrawals

7.1

Are you able to provide data, whether measured or estimated, on water withdrawals within your operations?

Yes

7.1a

Please report the water withdrawals within your operations for the reporting year.

Country or region	River basin	Withdrawal type	Quantity (megaliters/year)	Proportion of data that has been verified (%)	Comments
South Africa	Other: Crocodile West Marico,	Municipal water	4234.07	76-100	Based on utility bills received

Country or region	River basin	Withdrawal type	Quantity (megaliters/year)	Proportion of data that has been verified (%)	Comments
	Mvoti-Mzimkulu, Berg River				from service providers
South Africa	Other: Crocodile West Marico, Mvoti-Mzimkulu, Berg River	Surface	498.42	76-100	Based on metered withdrawal volumes
South Africa	Other: Crocodile West Marico, Mvoti-Mzimkulu, Berg River	Groundwater	253.19	76-100	Based on measured water abstractions
Brazil	Amazon	Municipal water	15.37	76-100	Based on utility bills received from service providers
Brazil	Amazon	Surface	24.92	76-100	Based on metered withdrawal volumes
Brazil	Amazon	Groundwater	11.30	76-100	Based on measured water abstractions
United States of America	Other: Mayo River	Municipal water	77.69	76-100	Based on utility bills received from service provider

7.1b

Please explain why you are not able to provide data for water withdrawals.

7.2

Are you able to provide data, whether measured or estimated, on water recycling/reuse within your operations?

Yes

7.2

Are you able to provide data, whether measured or estimated, on water recycling/reuse within your operations?

7.2a

Please report the water recycling/reuse within your operations for the reporting year.

Country or region	River basin	Quantity (megaliters/year)	Proportion of data that has been verified (%)	Comments
South Africa	Other: Mvoti-Mzimkulu	435.6	76-100	

7.2a

Please report the water recycling/reuse within your operations for the reporting year.

Country or region	River basin	Quantity (megaliters/year)	Proportion of data that has been verified (%)	Comments

7.2b

Please explain why you are not able to provide data for water recycling/reuse within your operations.

7.2b

Please explain why you are not able to provide data for water recycling/reuse within your operations.

7.3

Please use this space to describe the methodologies used for questions 7.1 and 7.2 or to report withdrawals or recycling/reuse in a different format to that set out above.

During 2012 all AECI sites were provided with a reporting standard which clearly specified the required parameters for reporting including boundary setting, types of water use, measurement units and frequency of reporting. This has enabled sites to understand reporting requirements more clearly and has greatly improved the quality of the data being reported. The improved knowledge and understanding has also ensured that the reporting segregates the different types of water and associated uses.

7.3

Please use this space to describe the methodologies used for questions 7.1 and 7.2 or to report withdrawals or recycling/reuse in a different format to that set out above.

7.4

Are any water sources significantly affected by your company's withdrawal of water?

No

7.4a

Please list any water sources significantly affected by your company's withdrawal of water.

Country or geographical reach	River basin	Water source	Impact	Company action and outcomes

7.4b

You may explain here why your company's withdrawal of water does not significantly affect any water sources.

Most of the operations in the Group obtain their raw water needs from Municipal sources and do not withdraw directly from a water resource. While these operatins may be located in water sensitive areas, there has been no indication that the water consumption of these operations has significantly affected a water source.

Heartland Leasing (Umbogintwini and Modderfontein) obtain raw water from natural sources under license from the Department of Water Affairs (DWA). No indication has been provided by the DWA that the abstractions significantly affect the respective water resources.

No water is withdrawn withdraw from a Ramsar-listed wetland or any other nationally or internationally proclaimed conservation area.

AECI's withdrawals do not account for an average of 5% or more of the annual average volume of the relevant water courses which are also not considered to be particularly sensitive.

7.4c

Please explain why you do not know if any water sources are significantly affected by your company's withdrawal of water.

Page: Water-8-Discharges

8.1

Are you able to identify discharges of water from your operations by destination, by treatment method and by quantity and quality using standard effluent parameters?

Yes

8.1a

Please explain why you are not able to identify discharges from your operations by destination, treatment method , quantity and quality, and whether you have any plans to put in place systems that would enable you to do so.

8.2

Did your company pay any penalties or fines for significant breaches of discharge agreements or regulations in the reporting period?

No

8.2a

Please describe the location and impact of the discharge that was the subject of the significant breach(es), the associated fines and any actions taken to minimise the risk of future non-compliance.

Country or region	River basin	Impact	Fines and penalties	Company action and outcomes

8.3

Are any water bodies and related habitats significantly affected by discharges of water or runoff from your operations?

Yes

8.3a

Please list any water bodies and associated habitats which are significantly affected by discharge of water or runoff from your operations.

Country or region	River basin	Water body	Impact	Company action and outcomes
South Africa	Other: Crocodile West-	Modderfontein Spruit	AEL, a subsidiary of AECI, discharges into the Modderfontein Spruit in the Gauteng Province of South Africa. The quality of the	Engagement with the DWA is on-going. Progress has been made with resolution of some concerns which were raised with the Department. Outstanding issues are still being negotiated in a

Country or region	River basin	Water body	Impact	Company action and outcomes
	Marico		water discharged has the potential to cause a negative impact on downstream users.	cooperative manner. A number of projects are in progress, and once fully implemented will improve the move towards compliance. These projects, generally speaking, are of a capital intensive nature and have been scheduled to be implemented between 2012 and 2016.

8.3b

You may explain here why your company's discharge of water does not significantly affect any water bodies or associated habitats.

8.3c

Please explain why you do not know if any water bodies and associated habitats are significantly affected by discharge of water or runoff from your operations.

Page: Water-9-Intensity

9.1

Please provide any available financial intensity values for your company's water use across its operations.

Country or region	River basin	Financial metric	Water use type (megaliters)	Currency	Financial intensity (Currency/mega-liter)	Please provide any contextual details that you consider relevant to understand the units or figures you have provided.

Country or region	River basin	Financial metric	Water use type (megaliters)	Currency	Financial intensity (Currency/mega-liter)	Please provide any contextual details that you consider relevant to understand the units or figures you have provided.
Company-wide		Revenue	Water use in operations	ZAR (R)	2671681.891	Based on 2012 data. Water use in operations comprises all water consumed by the subsidiaries in the Group. This excluded water which has been re-used or recycled.
Company-wide		Profit	Water use in operations	ZAR (R)	240150.4298	Based on 2012 data. Water use in operations comprises all water consumed by the subsidiaries in the Group. This excluded water which has been re-used or recycled.

9.2

Please provide any available water intensity values for your company's products or services across its operations.

Country or region	River basin	Product	Product unit	Water unit	Water intensity (Water unit/product unit)	Water use type	Please provide any contextual details that you consider relevant to understand the units or figures you have provided.
							AECI's business is characterised by a vast range of products and materials. Since each subsidiary produces, manfactures or deals in a different commodity, there is no uniform product or service which can be used as a groupwide indicator for intensity calculations.

Module: Sign Off

Page: Sign Off

Please enter the name of the individual that has signed off (approved) the response and their job title

Kavita Pema
Group Environmental Specialist