



**Path West**  
**Submission to the**  
**Climate Change**  
**Health WA Inquiry**

30 August 2019

## Introduction

PathWest is the pathology and forensic arm of the WA Health system, providing excellence and innovation in pathology and forensic services, testing, teaching and research – positively contributing to the health and wellbeing of the entire WA community. As Western Australia's leading referral pathology laboratory, PathWest responds to the needs of medical practitioners throughout the State, providing accurate information to inform 70 per cent of clinical decisions and 100 per cent of cancer diagnoses.

PathWest has a large network of laboratories and collection centres spread across the State, and employs experienced, expert pathologists, skilled scientific and technical staff using the most modern equipment and techniques.

PathWest is committed to managing and limiting our environmental footprint through a program of innovative and best practice processes in order to lessen our impact on climate change.

## Assessment of PathWest

An initial assessment of PathWest current practices demonstrates that there is significant work to be done to embed environmentally friendly practices into everyday activity across the organisation. Some internal waste management procedures exist, but there is no overarching environmental policy. It is evident that there is a need to reinforce sustainable practices across the organisation through targeted education and communications promoting increased awareness and compliance.

### Reviewing current practices

PathWest includes an environmental sustainability disclosure within procurement documents. All tender respondents must disclose the environmental sustainability practices that their company has in place. The information is reviewed and considered, but at this stage is not part of the evaluation process.

PathWest is keen to more actively engage with suppliers to understand their environmental policies, including writing to the organisations top ten vendors to understand initiatives the companies have in place to limit their environmental impact, and what role PathWest can play in supporting this. It is hoped that this will be a step towards enhancing PathWest's relationship with suppliers with respect to climate change mitigation.

PathWest has a waste management policy and a number of recycling initiatives in place, including paper, cardboard and Styrofoam recycling. Through conversations with a range of staff across PathWest, it is apparent that these practices are not uniformly practiced, including a lack of recycling in corporate areas.

### Reviewing procurement data

A review of procurement data was undertaken to determine the amount of plain paper being used by PathWest. In 2018/19, PathWest purchased more than 12 million sheets of paper. The production of this equates to:

- 1441 trees
- 120 million litres of water (based on 10Ltrs per sheet).

Many respondents to the survey expressed their concerns about the amount of paper waste generated by PathWest. It is noted, the transition to the new laboratory information system, should rely significantly less on paper.

The procurement review also revealed that PathWest purchased almost 110,000 plastic, paper or polystyrene cups during 2018/19.

## What is PathWest willing to do or contribute following the Inquiry?

### Short Term Objectives

#### Environmental Management System

The initial step in addressing PathWest's impact on climate health will be the development of an Environmental Management System (EMS) and formation of an EMS working group. This working group will comprise representatives from the organisation's executive, management and ground staff, so as to demonstrate leadership support, provide adequate resources and empowerment, and facilitate 'grass-roots' initiatives respectfully.

#### Environmental Policy

An initial task of the EMS working group will be the articulation of the organisation's environmental goals through an environmental policy, the foundation of which is built on the '3R' principles to Reduce, Reuse and Recycle. Key features of such a policy will address the need to:

- Establish and maintain procedures which specify environmental objectives and targets and direct efforts towards continual improvement.
- Minimise consumption of materials, energy and water.
- Reduce waste through the reduction in the use, reuse or recycling of materials
- Review environmental practices at least annually.
- Engage in advocacy by encouraging customers, suppliers and other stakeholders to mirror the organisation's commitment to environmental responsibility.

#### Early initiatives

During the development of this report, surveying of PathWest staff, discussions with other laboratories and review of the literature, a number of opportunities and potential initiatives are already apparent as follows:

Opportunity	Potential Initiatives
Reduction of energy consumption	<ul style="list-style-type: none"> <li>• Introduce policies for purchase of equipment with low-energy consumption</li> <li>• Consolidate instruments and equipment</li> <li>• Use light-emitting diodes (LEDs) for lighting</li> <li>• End-of-day walk through to ensure unnecessary electrical items are switched off</li> <li>• Switch off computers at the end of work-day</li> <li>• Use of motion sensors for lights or alarms</li> <li>• Automatic temperature setbacks throughout the office areas and storeroom at night</li> </ul>
Green purchasing policies	<p>Pre-purchase considerations for instruments, equipment:</p> <ul style="list-style-type: none"> <li>• Introduce energy and water consumption assessment in the evaluation, giving weightage to low-consumption items</li> <li>• Encourage and work with manufacturers to use environmentally friendly manufacturing processes</li> </ul> <p>Packaging:</p> <ul style="list-style-type: none"> <li>• Insist that minimum packaging materials be used</li> <li>• Work with suppliers to take back packaging materials for reuse after supply of instruments and equipment</li> <li>• Negotiate with suppliers to take back used containers</li> </ul> <p>Use recycled and recyclable lab furniture where possible</p>
Wastes	<p>Chemical Wastes – implement a hazardous and overall waste reduction plan which should include:</p> <ul style="list-style-type: none"> <li>• Control of chemicals through inventory management, from ordering to disposal</li> <li>• Appropriate disposal of cardboard and paper wastes</li> </ul>

	<ul style="list-style-type: none"> <li>• Share surplus chemicals with other labs</li> <li>• Substitute hazardous chemicals with non-hazardous chemicals whenever possible</li> <li>• Purchase a Styrofoam compressor</li> </ul>
Reduction of water consumption	<ul style="list-style-type: none"> <li>• Use chiller baths instead of continuous water flow</li> <li>• Use low water consumption toilets, urinals (as long as your pipes are angled correctly)</li> <li>• Install automatic shut off valves in all sinks</li> <li>• Give preference to the purchase of instruments with low water consumption.</li> </ul>
Administration	<p>Reduce paper usage:</p> <ul style="list-style-type: none"> <li>• Use both sides of paper</li> <li>• Recycle used paper</li> <li>• Introduce paper audits to monitor usage</li> <li>• Switch to non-paper electronic systems where possible</li> </ul> <p>Printer usage</p> <ul style="list-style-type: none"> <li>• Reduction in printer numbers and centralisation of printer location</li> </ul>
Recycling	<ul style="list-style-type: none"> <li>• Provide easy workplace access to recycling of printer cartridges, mobile phones, coffee pods, batteries and IT equipment</li> <li>• Introduce policies for purchase of recycled paper, paper towels, toilet paper and stationary</li> </ul>

### Intermediate term objectives

As with any organisational change, processes must be developed to assess their effectiveness, ensure their sustainability and promote further growth.

### Staff Training and Engagement

Maintaining staff motivation as to the need for an organisational EMS can be facilitated at the group level through workplace educational sessions, the intranet, and workplace electronic newsletters, and at the individual level during performance management reviews. Such education, training and performance management will facilitate ongoing staff motivation, reinforce leadership support, and encourage identification of future initiatives.

### Auditing

Crucial to demonstration of any initiatives success or shortcomings, assessment of financial outcomes of initiatives, and staff feedback to promote sustained motivation for change, will require regular transparent auditing via mechanisms such as organisational purchasing data (paper), corporate payables (water and electricity), staff training records, EMS working group meeting minutes and aspects of supplier contracts addressing environmental concerns.

### Embedding the EMS into existing Quality Management System

Sustained efficient implementation of the EMS can effectively be facilitated through incorporation into PathWest's existing laboratory Quality Management System (QMS). An EMS seen as a component of the laboratory's QMS will utilise well established processes and understanding for documentation, audit and review amongst all stakeholders.

### Long term Objectives

A long term aspirational goal will be the certification to ISO 14001 Environmental Management Systems Standard. This standard assists an organisation to (1) minimise any harmful environmental impact as a result of its operation; (2) comply with existing laws, regulations and other environmental requirements; and (3) embrace steps to continually improve environmental performance. This would likely be done in a stepwise fashion, identifying two or three pilot laboratory sites for initial certification. Establishment of auditing

procedures, as outlined in the above paragraph, will also facilitate possible future ISO14001 certification.

### **Staff engagement**

A short survey regarding PathWest's environmental impact in the workplace was disseminated to all staff to gauge the current environmentally friendly initiatives already in place, collect views on this, and generate ideas for the future. 103 responses were received in one week, with results indicating that a range of staff placed an importance on developing an environmentally conscious workplace. Many were already contributing to environmentally friendly initiatives, and had ideas and suggestions for future practices.

Creating an environmentally friendly workplace was important to 98 per cent of respondents, with 82 per cent expressing that they were already performing basic environmentally conscious activities within their workplace, such as car-pooling and using public transport, recycling, and using mugs/cups over paper and Styrofoam alternatives. Many staff members had implemented specific actions to be environmentally friendly in the workplace, for example, the Collie branch laboratory have developed a recycling program, as well as encouraging staff to use shredded paper in compost at home and feed their worm farms.

Staff ideas for the future included:

- Requesting support from management to uphold and encourage recycling initiatives;
- Lobbying manufacturers and suppliers to adopt and use environmentally conscious packaging and materials; and
- Installing solar panels, harnessing geothermal energy, and utilising natural light in the laboratories and other PathWest buildings.

The survey demonstrated the over-arching willingness of staff to contribute their time and energy to reducing theirs and the company's impact on climate change.

### **Conclusion**

PathWest is a large, laboratory focused, healthcare organisation with sites throughout Western Australia, and as such has a not insignificant environmental footprint through its usage of paper, water, electricity and hazardous materials. The development of an Environmental Management System as outlined above is an appropriate structured approach that will identify and minimise PathWest and its suppliers' environmental impact, while ensuring efficient use of resources such as power, water, paper and plastics.

This system need not be complicated nor duplicative, but rather one which promotes organisational change through leadership motivation, staff empowerment, grass roots initiatives and a process of documentation, audit and review already well established in our Quality Management System. Indeed staff desire for such organisational change, often a major hurdle to any workplace change, is already high as demonstrated through our internal survey.

PathWest looks forward to this opportunity to address our environmental organisational responsibility.

### **References**

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3. Ross J et al. Improving laboratory economic and environmental performance by the implementation of an environmental management system. Springer Nature 2019.
4. James C. How environmentally friendly is your workplace. PathWest staff survey; August 2019.