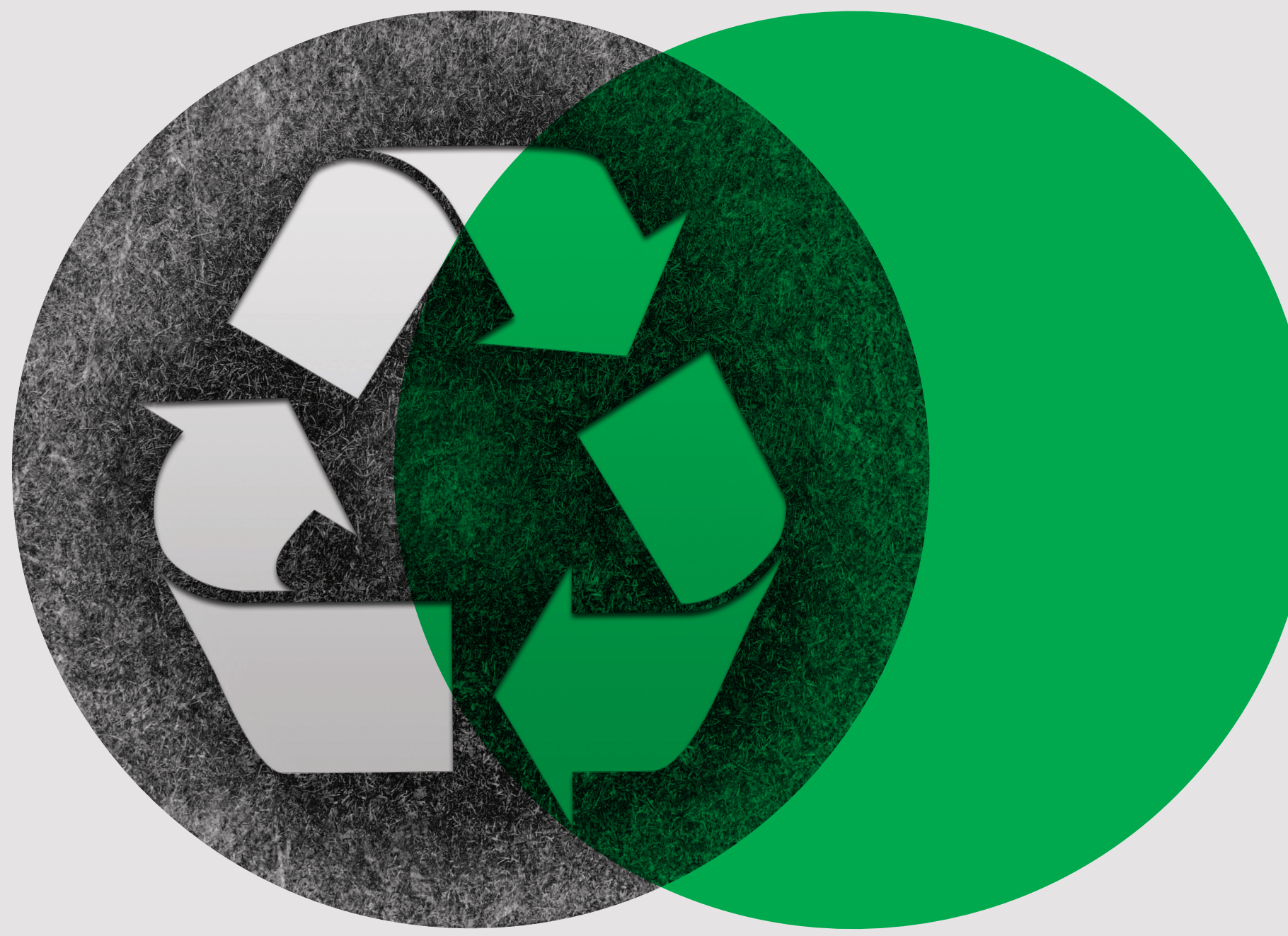


Achieving Environmental Management Systems (ISO 14001) Certification at the RCPAQAP

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Background

Helping to create a sustainable planet is seen as a significant responsibility to most individuals and the wider community but increasingly important to businesses and organisations who want to minimise their environmental footprint and maximise the effective use of resources. Benefits to an organisation of implementing an environmental management system (EMS) include improved environmental awareness and community relationships, cost savings and business efficiencies, regulatory compliance, improved marketing opportunities and corporate image and reduced risk of disaster.

The RCPAQAP is committed to providing an efficient, high quality and customer focused service to laboratories and operates a well-established quality management system with existing accreditation to ISO/IEC 17043:2010 Proficiency Testing and certification to ISO 9001:2015 Quality Management Systems. The integration of an environmental management system into the existing QMS means only one management system is required with fewer procedures and bureaucracy and environmental principles can be seen as part of the overall company philosophy and strategy. This approach has been beneficial as less investment was required and existing corporate knowledge relating to quality management was exploited.

Method

In 2015 RCPAQAP began working on creating an environmental management system with the establishment of a 'Green Team' comprising key staff such as the CEO and Manager, Laboratory Procurement and Facility, as well as others with an interest in environmental issues and seeking ways to reduce the company's environmental impact.

An Environmental Policy was developed and specifically committed the organisation not only to complying with applicable laws and regulations in all its operations, but to minimising risks and impacts through the development of robust and documented systems to implement, measure, monitor, and disseminate excellent environmental performance both within its operations and to the broader community. *Refer to Table 1.*

Table 1. RCPAQAP Environmental Policy – key features

Providing a safe and healthy workplace
Complying with our legal obligations
Having an environmentally sustainable aware culture, where responsibility is assigned and understood
Being an environmentally responsible neighbour in our community
Conserving natural resources by reducing, reusing and recycling
Striving to minimise pollution
Ensuring the responsible use of energy throughout the organisation
Participating in efforts to improve environmental protection and understanding
Taking steps to improve environmental performance continually
Applying a systematic approach that is consistent with the international environment management system standard ISO 14001
Conducting rigorous audits, evaluations, and self-assessments of the implementation of this policy
Working with suppliers who promote sound environmental practices
Enhancing awareness among our employees, volunteers, and users – educating and motivating them to act in an environmentally responsible manner

Results

The preliminary review by the Green team identified activities that had a significant impact on the environment and developing methods to monitor these with the aim of establishing overall goals and targets for these. The opportunities which were initially identified are summarised in Table 2 along with outcomes.

The engagement of staff was vital during the implementation and operation of the EMS and an internal communication strategy was critical to convey the activities and goals of the green team. While quality principles were well understood within the company, it was important that staff recognised the concepts of an EMS and that they felt empowered in relation to environmental opportunities and processes. While reducing waste and energy consumption and recycling were the top priorities identified by staff in an initial survey, gaining a better understanding of the company's environmental impact resulted in a broader approach to managing resources and building an environmentally aware culture throughout the organisation. Creating and maintaining an internal environment where staff can be fully involved through discussion and communication remains a focus for the leadership team.

Leading up to and following certification, the EMS Committee continued to identify ways to further to improve on previous environmental achievements. A summary of cost savings is displayed in Table 3.

Table 2. Initial EMS Initiatives and Outcomes

Opportunity	Initiatives	Outcomes
Printer usage	<ul style="list-style-type: none">Reducing the number of printers	All unnecessary printers were removed offsite and only two remain
Printer paper usage	<ul style="list-style-type: none">Double sided printingUser authenticationIntroduction of electronic Survey Reports	The amount of paper used onsite was reduced to half and millions of sheets of paper were saved with the introduction of PDF reports
Electricity consumption	<ul style="list-style-type: none">LED lightsTinted windowsTurning off equipment when not in useLight sensors installedAir conditioner reprogrammed to run only in rooms required out of hours	All initiatives helped reduce our energy consumption from an average 46,000 kW's to 33,000 kW's
Biological waste	Use of certified waste removal contractors	Reduced risk of contamination
General Waste	Regular auditing of waste containers is conducted	Correct separation of general, hazardous and recyclable waste
Recycling	<div>Recycled materials<ul style="list-style-type: none">Printer cartridgesMobile phonesCoffee podsIT equipment and laboratory equipmentBatteries</div> <div>Recycled supplies purchased<ul style="list-style-type: none">Paper towelsToilet paperStationary</div>	<div>Staff also encouraged to bring their recycling to dispose of using our facility</div> <div>Thinking Green with recycling and purchasing, including life cycle of products</div>
Suppliers	Green Assessment	Most suppliers have environmental credentials

Table 3. Summary of costs and savings

Green Initiatives	Costs	Savings
Tinting windows	\$5,350	
Electrical labour and parts costs	\$9,323	
LED lights	\$22,000	
ISO:14001 Certification	\$5,000	
Logistics automation	\$118,000	
Paper conservation		\$142,401
Postage		\$715,018
Logistics automation reduction in plastic		\$8,600
Energy conservation		\$73,849
Costs	\$137,604.46	
Savings		\$939,868.68
TOTAL SAVINGS		\$802,264.22

Conclusion

The main purpose for adopting an environmental management system is to establish a structured approach for identifying and managing it environmental impact and to meet legal obligations and organisational and stakeholder objectives. The integration of the EMS into the existing quality management system has benefits including organisational efficiencies and existing corporate knowledge around quality principles. There have been improved environmental awareness and performance, business efficiencies and cost savings, regulatory compliance, improved corporate image, marketing opportunities and reduced risk of business disruption. Certification to ISO 14001:2015 increases accountability of the system and embeds the concept of continual improvement in the minds of both internal staff and external stakeholders. Since the implementation process began, there has been a cultural change at the RCPAQAP, with the environmental issues given the same importance as the quality and workplace health and safety management systems in all business decisions.

Figure 1. RCPAQAP electricity Consumption June 2014–May 2018 (kilowatts per month)

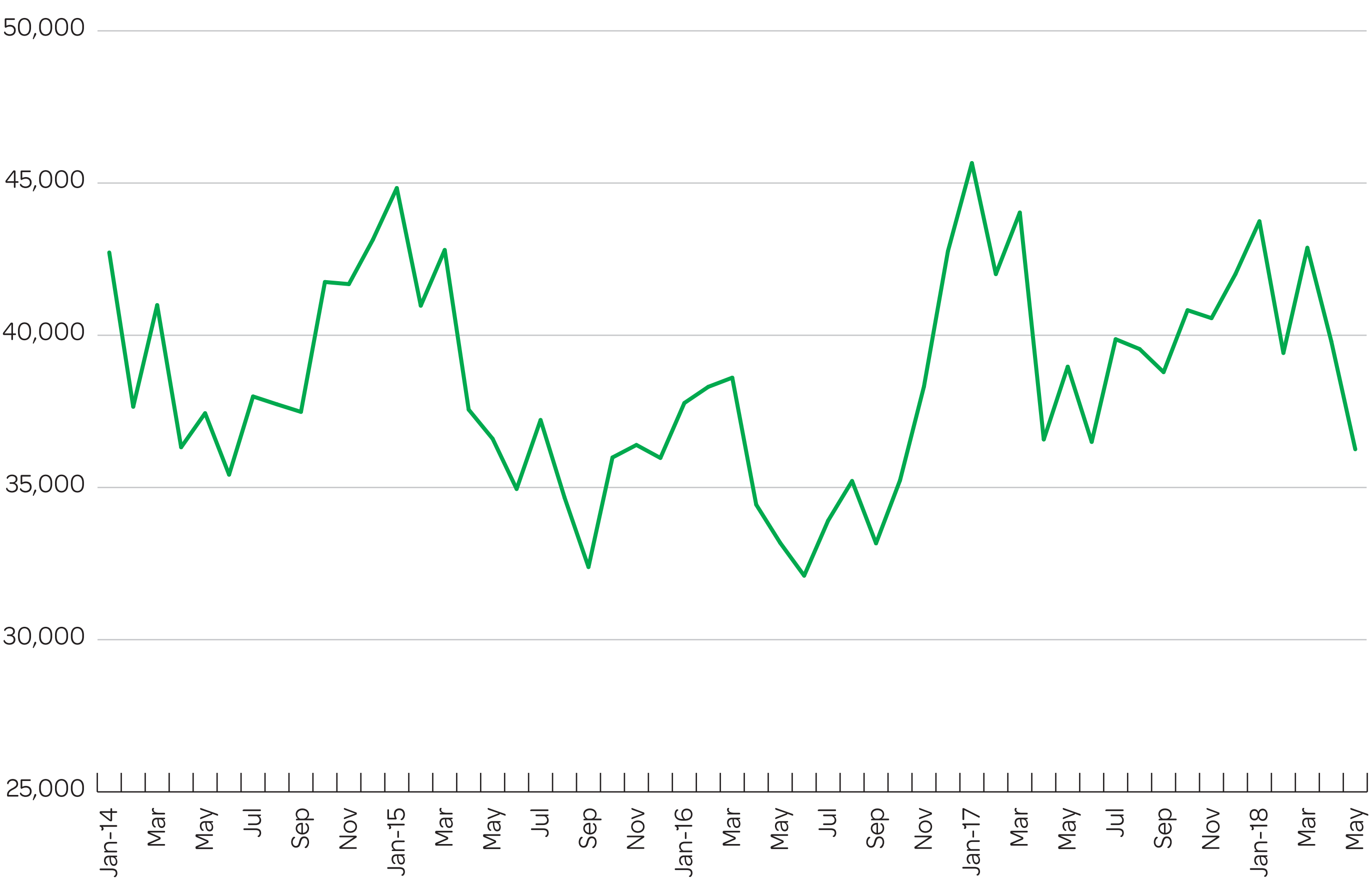


Figure 2. RCPAQAP recycling station within the complex which accommodates all recycling opportunities

