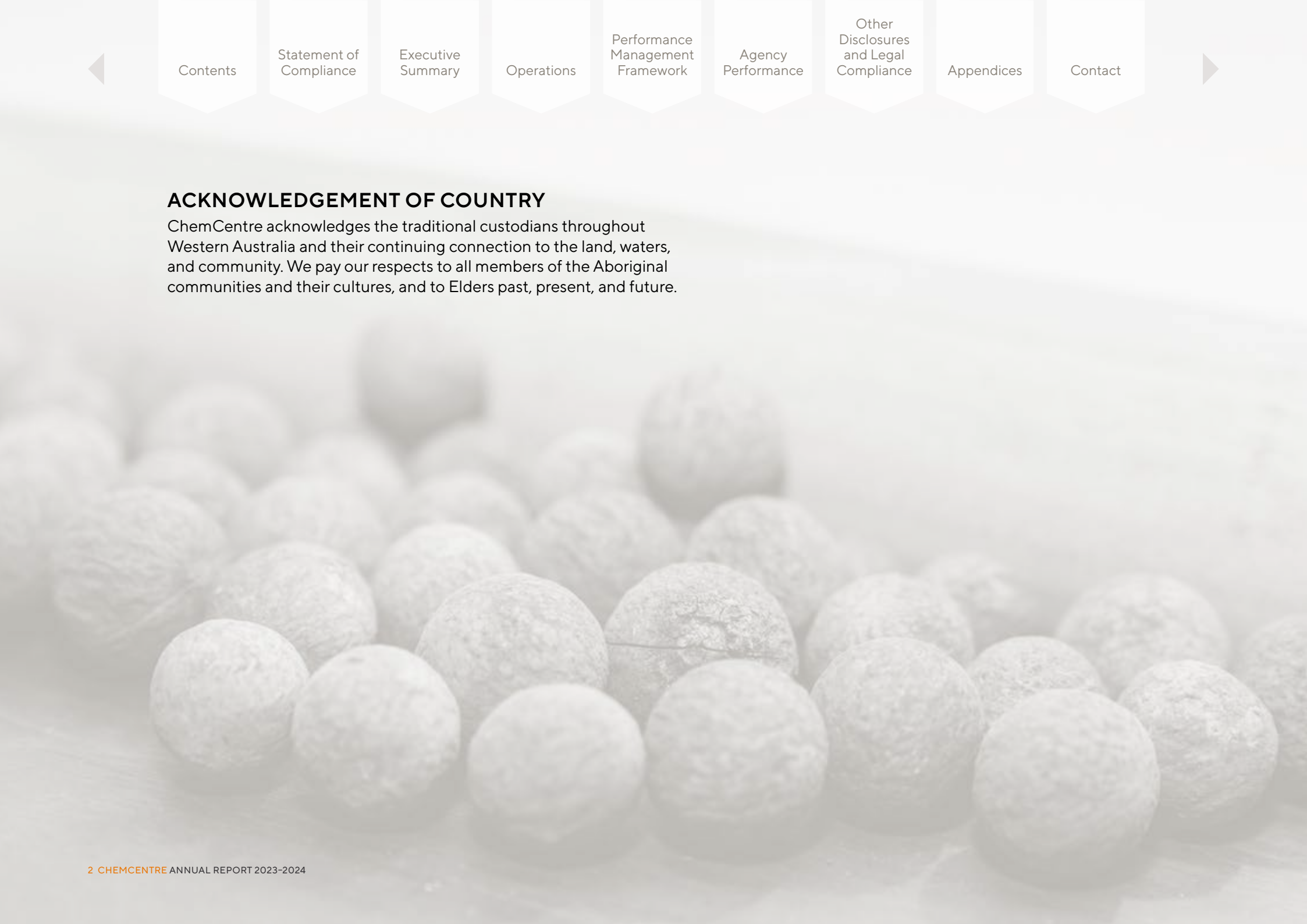
GOVERNMENT OF WESTERN AUSTRALIA

ChemCentre
EXPERT SOLUTIONS

Annual Report
2023-2024

ACKNOWLEDGEMENT OF COUNTRY

ChemCentre acknowledges the traditional custodians throughout Western Australia and their continuing connection to the land, waters, and community. We pay our respects to all members of the Aboriginal communities and their cultures, and to Elders past, present, and future.



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STATEMENT OF COMPLIANCE

Hon. Stephen Dawson MLC

Minister for Emergency Services; Innovation and the Digital Economy; Science; Medical Research; Minister Assisting the Minister for State and Industry Development, Jobs and Trade.

In accordance with Section 63 of the *Financial Management Act 2006* we hereby submit for your information and presentation to Parliament, the annual report of ChemCentre for the financial year ended 30 June 2024.

The annual report has been prepared in accordance with the provisions of the *Financial Management Act 2006*.

Tresslyn Walmsley

Chair
ChemCentre Board
27 August 2024

Miriam Stanborough

Deputy Chair
ChemCentre Board
27 August 2024

Executive Summary

Strategic Direction

The community of Western Australia is the primary beneficiary of ChemCentre's services. Our major clients include the Government of Western Australia (directly and through client Departments), Government Trading Enterprises (GTEs), the public, research funding bodies, universities and industry.

ChemCentre strives to fulfill its mission to provide excellence and innovation in chemical and forensic science, emergency response and applied research to government, industry and other stakeholders. This is done in a context where a benefit to the Western Australian taxpayer is clearly demonstrated.

Our overarching strategic objectives are to:

- Mitigate known (and unknown) risks to government associated with public health, public safety and the environment
- Keep the State safe during times of emergency and crisis
- Support the State justice and policing systems
- Support the State's thoroughbred, harness and greyhound racing industries
- Support the sustainable economic development of the State
- Support science capability and engagement in the State
- Develop our people, maintain and enhance organisational capability and strive for financial sustainability
- To earn revenue by engaging in commercial activities that are not inconsistent with the performance of our other functions.

OUR VISION

Chemistry for the benefit of every West Australian.

OUR MISSION

To provide excellence and innovation in chemical and forensic science, emergency response and research to support the administration of justice and a safe and prosperous WA.

OUR PURPOSE

To deliver leading chemistry for Western Australia.

OUR VALUES

Technical Excellence

We advocate technical excellence and use excellent science to inform and improve everything we do.

Innovation

Through method development and targeted, collaborative research and development we continually seek to improve our science.

Integrity

We strive to operate ethically, sustainably, safely and with integrity in all that we undertake.

Respect

We respect our clients, our staff and the responsibilities that we are charged with.

From the Chair

This Annual Report marks my final term at ChemCentre after 10 years as a Director, with the last two as Chair. As previously reported, earlier years were very much focused on building a more robust, sustainable operating model. The results this year now reflect a strong financial performance. As pleasing as that is, ChemCentre's raison d'etre remains delivering value to the State through its chemistry analytics and expertise, across a range of domains.

Looking back over this past decade there have been moments in ChemCentre's history which attest to that value. Prominent was the agency's role in identifying and presenting vital evidence in the successful prosecution of the Claremont serial killer. None was more profound than the role ChemCentre played in the rapid identification of an unknown drug which allowed State health services to save the lives of nine people who became seriously unwell from the drugs taken at a residence.

But for all of these 'critical moments', the work of the agency is principally in the ongoing service delivery to our government and private sector clients. It is this foundational work which allows us to step up at these vital moments. ChemCentre has a unique market position, recognised nationally and internationally for its expertise, quality and independence, employing more than 90 scientists across a range of specialist areas.

For many people outside of the agency, ChemCentre's most visible contribution is our emergency response services. Our operational relationship with the Department of Fire and Emergency Services (DFES) remains strong. We remain focused on ensuring we can deliver the essential capability required to support the State in this critical service area.

Research and innovation also represent a valuable contribution to the State. We are in the second year of an important research project exploring the development of a routine forensic process for identifying individuals using genetically variant peptides in human hair evidence. If successful, this capability will support the criminal justice system by enabling human identification using hair, which will be a complementary technique to DNA identification.

I also want to acknowledge recent advances in ChemCentre's corporate services arena. One of their vital projects has been to develop our bespoke laboratory information management system, which is now fully deployed across our Forensic Science Laboratory. ChemCentre also remains committed to advancing cyber security controls and data protection measures. These represent important milestones for the agency.

Whilst the critical role of ChemCentre is recognised across Government and among our key stakeholders, we can never take that support for granted. This year saw an independent review of the Act – undertaken every five years – and with it, extensive commentary on the functioning of the agency. The board was delighted to receive such affirming feedback. To quote just one brief passage from the report:

> *"Overwhelmingly, stakeholder feedback expressed the view that ChemCentre provided high quality, independent chemical information, advice, and analytical services. Commentary from its major clients indicated that ChemCentre performed an essential service."*

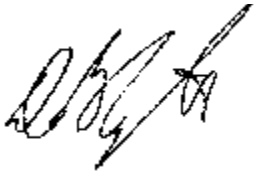
I would like to acknowledge the contribution of the staff at ChemCentre. ChemCentre is fundamentally a knowledge-driven organisation. The commitment of the staff to the agency and its role within the State is something they should be proud of.

The upcoming retirement of our current CEO – Peter McCafferty – will see a new CEO appointed in the coming months. We thank Peter for his contribution over a long career with ChemCentre, finishing with an impressive track record as CEO for the last seven years. We are also recruiting for a new Director – Scientific Services. Add to this the appointment of a new Director – Forensic Science Laboratory 18 months ago, these changes will bring fresh thinking and insight into the conversation.

The board is keen to see the agency continue to drive innovation and excellence in service delivery and in research and innovation, growing the agency's footprint and capability as we respond to needs and opportunities across the State. With sustained commitment to our guiding values – technical excellence; innovation; integrity; respect – we remain confident the organisation will continue to flourish.

I challenge the agency to make further bold strides and substantively increase its contribution to the State over the next decade, with only limited increases in resourcing. Significant gains should be possible by harnessing the abilities of both robotics and other AI-enabled tools. While the pathway forward isn't yet clear, we have the knowledge and skills to aim high for the change that can occur over 10 years.

In closing I would like to thank my fellow board members – past and present – for their contribution during my time on the board, and for their ongoing commitment to the future of ChemCentre.



David Blyth

Chair
ChemCentre Board

From the CEO

After seven years as Chief Executive Officer this is my last Annual Report. It has been an honour and a privilege to have led this organisation over this time. I will be leaving ChemCentre after a total of 32 years, ample time to reflect on both my career and ChemCentre's evolution.

I started at ChemCentre as a bench chemist, undertaking analyses for nutrients and heavy metals. This was after several jobs in industry, where I was at times a ChemCentre client. The work that I sent ChemCentre was generally difficult, such as determining low-level mercury in samples containing precious metals or low-level heavy metals in seawater. More than 32 years ago, these analyses were not routinely feasible at any other laboratory in Australia. With the technology available at the time, the work was neither cheap nor quick, but the expertise demonstrated by ChemCentre was incredibly valuable and the quality of the results was never in question.

Fast-forward 32 years and I know that we have become a much more client-centric organisation. The quality of the work is still paramount, and embedded in our culture of scientific rigor. However, we now deliver prices and turnarounds that are equal to providers of equivalent services.

The technology applied to our scientific work is continuously changing, as scientific instruments become more capable, and less expensive in real terms. We are genuinely able to do more with less, and pass on these savings and additional capabilities to our clients.

Over the years we moved out of areas where others could service market needs, but reacted with agility when other organisations were not able to deliver or found lacking. This has been demonstrated in our world leading work in synthetic cannabinoids, leaching environmental assessments and low-level cyanide analysis, to name a few examples.

However, focusing purely on providing data ignores the expertise that accompanies ChemCentre reports. We don't just provide numbers - every report is backed up by strict chain of custody protocols and quality assurance so our work can stand up in a court of law if required. This expertise includes advice prior to sample collection to ensure every sample collected is properly representative, appropriately preserved and analysed within any regulatory holding times.

We also recognise that regulations and requirements are constantly being reviewed. Our scientists participate in national and international forums to keep up to date with dynamic changes in the market, providing clients with expertise that is current and mindful of changes on the horizon.

Our collaborative research has also changed significantly over the years as we moved from being 'just' a provider of analytical services enabling other's research, to driving research with demonstratable benefits in line with ChemCentre's strategic direction. A key consideration in the research that we pursue is that it must provide a benefit to our stakeholders, the people of Western Australia, so that our work delivers expertise and value to ensure a safe and prosperous WA.

For example, our collaborations with Cooperative Research Centres (CRCs) continue to thrive. A four-year project with CRC Transformation in Mining Economies is now underway 'Mine Pit Lake Assessment and Management: A National Initiative to Support Mine Closure and Regional Opportunities'. With CRC End Food Waste Australia, we are embarking on a 3.5-year project seeking to add value to the 'spent grain' that is a by-product from beer brewing across Australia. We also continue to engage with CRC Future Battery Industries.

Governance and accountability at ChemCentre remain strong as processes that maintain an exemplary standing are entrained in the way we operate. This culture mimics our practices in quality and workplace health and safety. Quality and safety are integral parts of everything we do, not something that is considered an add-on task. Independent audits of our work, health and safety system and processes over the last year found no non-conformances, confirming we continue to operate at an industry high standard.

One challenge that we continue to address is ensuring that the benefits of our research are fully communicated and widely appreciated by our stakeholders. Doing great work demands that we tell people about it. Scientists can be modest of their achievements, but it is important for us as an organisation to ensure that the great work we do, over so many areas, is recognised.

ChemCentre is also committed to supporting the State Government's emissions reduction targets and is progressing profiling our emissions and developing our reduction plan, and exploring how we can service the needs of industry.

An organisation like ChemCentre is entirely dependent on its staff, and we are incredibly fortunate to have a highly capable and motivated workforce. During my time at ChemCentre, including as CEO, I am very proud of what we have all achieved. In the words of a former colleague *'we have evolved from being a group of scientists doing some business to a scientific business.'* The significance of this transformation cannot be understated.

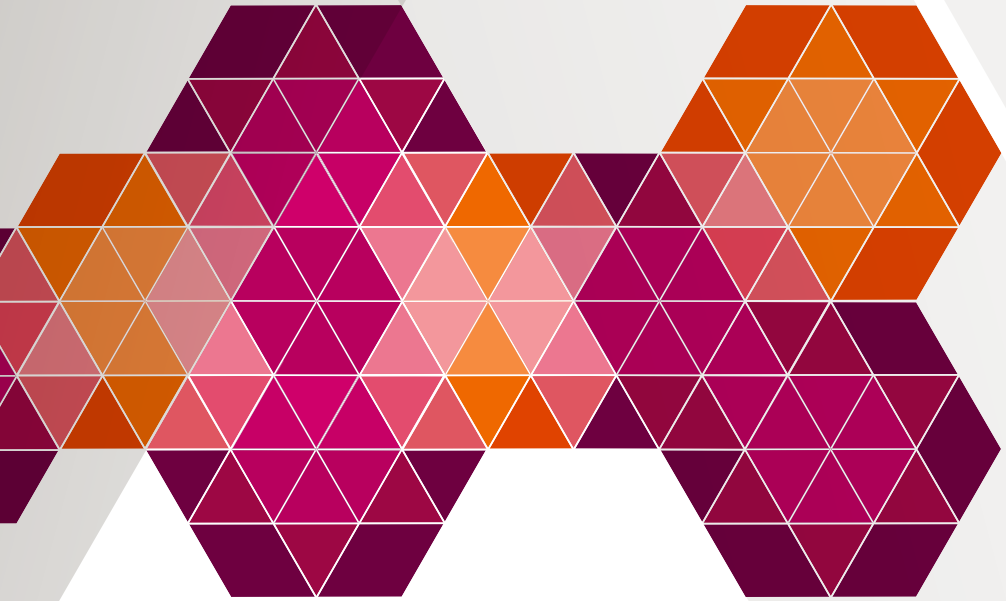
I am proud to acknowledge one of our dedicated employees, Barry Price and his contribution over 50 years as an environmental chemistry scientist at ChemCentre, who worked on key projects that will continue to serve the West Australian community into the future. We wish Barry a long and well-deserved retirement.

I leave ChemCentre knowing that it continues to demonstrate its value to the State through consistent delivery of robust and purposeful science across forensic science, environmental chemistry, agronomics, emergency response and occupational health, to ensure a safe and prosperous WA.

Peter McCafferty

Chief Executive Officer
ChemCentre

Operations



Who We Are

ChemCentre is a statutory authority within the Western Australian Government operating under the *Chemistry Centre (WA) Act 2007*. ChemCentre has a long and proud heritage protecting the State, tracing its origins back to the gold rush in the 1890s.

We work from analytical laboratories on Whadjuk Noongar country within the Resources and Chemistry Precinct at Curtin University, Bentley. Our staff proudly include many internationally recognised scientists.

ChemCentre offers a unique combination of scientific excellence and applied scientific expertise:

- Internationally recognised expertise and experience in our specialist fields
- State-of-the-art analytical equipment and methods
- National Association of Testing Authorities (NATA), Therapeutic Goods Administration (TGA) accreditation and Good Manufacturing Practice (GMP) certification across key specialist areas
- Applied research and innovation to identify and develop new science to assess and manage emerging risks and opportunities
- Collaborative scientific networks at state, national and international levels
- Assisting Western Australian businesses to main a market advantage through targeted chemistry-based science.

Organisational Structure

*position advertised before 30 June 2024

What We Do

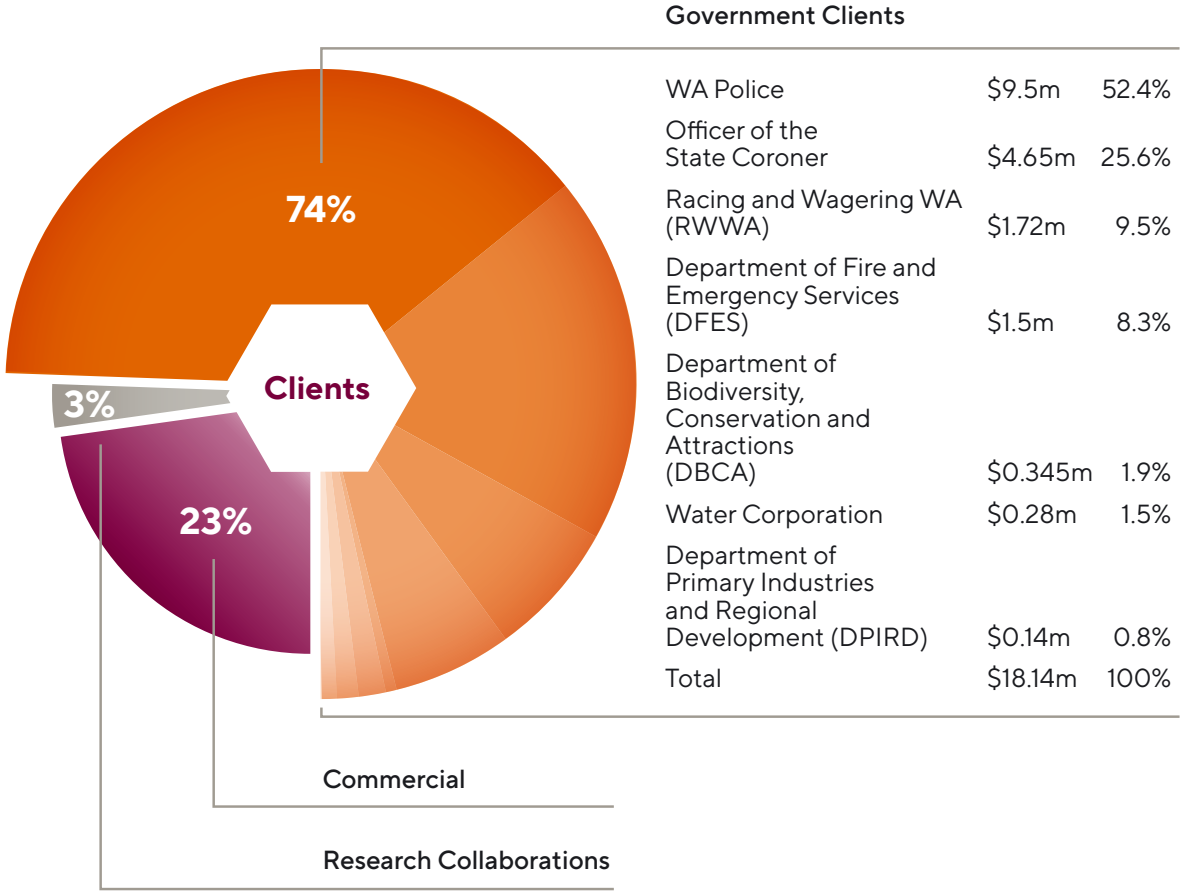
ChemCentre delivers services and advice to support the broad, high-level State Government goals of:

Western Australian Jobs Plan:

- Diversifying the Western Australian economy, creating local jobs for the future.

Safe, Strong and Fair Communities:

- Supporting our local and regional communities to thrive.
- In this context, our work involves scientific services, emergency response, forensic science, research and innovation, business and corporate services, and education and outreach.



Government Clients		
WA Police	$9.5m	52.4%
Officer of the State Coroner	$4.65m	25.6%
Racing and Wagering WA (RWWA)	$1.72m	9.5%
Department of Fire and Emergency Services (DFES)	$1.5m	8.3%
Department of Biodiversity, Conservation and Attractions (DBCA)	$0.345m	1.9%
Water Corporation	$0.28m	1.5%
Department of Primary Industries and Regional Development (DPIRD)	$0.14m	0.8%
Total	$18.14m	100%

At a Glance - the year in review

Research and Innovation

$2.68m Capital investment

Partner in 3 Co operative Research Centres

- End Food Waste
- Future Battery Industries
- Transformations in Mining Economies (TiME)

Scientific Services Division

Total Jobs 4,700+

Total Analytes 145,000+

Forensic Science Laboratory

Illicit drug seizures 4,820 certificates issued

Clan laboratory callouts 40 callouts responded to

Traffic enforcement toxicology 7,160 cases analysed

Major and Serious Crime 620 cases reported

Coronial Toxicology 2,250 reports issued to Coroner

Department of Health E-cigarette and Vaping Compliance 500 samples analysed

Racing Chemistry 9,050 samples analysed

Expertise for 10 committees and advisory panels

Emergency Response

24/7 HAZMAT Emergency Response

26 Incidents

30% regional (26)

30% outside Perth metro area: South Hedland, Karratha, Pinjarra, Marble Bar, Southern Cross, Albany, Karnup, Kalgoorlie, Northam

Deployment time – under 20 minutes, 100% compliance, 24/7

Chemical Education
10 PhD students and 1 Post-Doctoral student supervised

Collaborations with:

- 7 State, 3 National and 2 International Universities
- 7 State and National Institutes
- 5 Government Departments
- 7+ Commercial clients

Scientific Services

ChemCentre's specialised scientific services underpin its role in providing high quality data and expertise to inform government and industry decision-makers in managing chemical risks and opportunities and in safeguarding the State from chemical threats. Our scientific analysis and consultancy services cross key sectors including mining (extraction, mine site operations and closure risk tools, processing and circular economy recovered materials assessments), health (pharmaceuticals, biodiscovery), primary industry (agriculture, horticulture, food production, soil health management) and environment (water and air quality), and support Western Australia's sustainable economic development.

The Scientific Services Division (SSD) has reported data on more than 500,000 analytes in 2023/24, from a variety of matrices including dusts, sediments, biota, water, soils, filters, mining samples, pharmaceuticals, plants, food, waste and concrete. We continue to build on our existing capabilities
and improve our capacity as we push into new markets to support the growth and diversification of WA industry. Examples of these activities are described below.

As one of only a few laboratories in Australia to be accredited by the Therapeutics Goods Administration (TGA) to undertake certification testing of medicinal cannabis, we continue to support this emerging industry by providing a range of testing services for medicinal cannabis raw material, intermediates and final products for local, national and international producers. ChemCentre can also test for psilocybin and psilocin (the active components in medicinal mushrooms), supporting decisions about prescribing these additional therapeutics for a range of conditions such as treatment-resistant depression and post-traumatic stress disorder (PTSD).

We continue to develop and improve methods to determine the authenticity of products subject to potential adulteration and fraud. Method development and analysis at ChemCentre was instrumental in establishing a process to detect adulteration in high-value monofloral honey, and our techniques have been extended to help determine the purity of tea tree oil products which provides assurance to consumers that the tea tree oil they purchase is as claimed on the label.

ChemCentre's advanced capabilities in unknown compound identification using liquid chromatography coupled with quadrupole time-of-flight high resolution mass spectrometry (LC/Q-TOF) is being used to screen for a range of chemicals in targeted WA flora and fauna as we continue to support the development of emerging industries.

Our expertise in air quality, pollution control and forensic microanalysis continues to be applied in work on dust characterisation, in collaboration with the Department of Water and Environmental Regulation (DWER). We have developed techniques to distinguish very small variations in dust deposition and composition at different locations over time, allowing comparison with dust samples collected from fugitive emission sources in the region. Our combination of high-resolution sampling, XRD mineralogy and isotopic analysis can confirm whether dust deposition in an area is linked to local industrial activity or the movement of local sand and soil.

Our scientists also continue to work with the Murujuga Aboriginal Corporation, DWER and Curtin University on the Murujuga Rock Art Monitoring Program. The laboratory continues to analyse samples taken from monitoring stations across the peninsula and has provided testing to support experiments on the impact of smoke and fumes on the rock art.

In January, ChemCentre assisted the Department of Health with their investigation of several premises in the town of Kalgoorlie. The operation related to clandestine gold processing activities using the toxic metal mercury. This crude form of gold extraction can cause environmental contamination and poses a significant risk to the local community. The team mobilised to take atmospheric and soil samples from various locations within the town. These samples were subsequently analysed both onsite and through the inorganics section to determine the level of mercury contamination at these premises and their surroundings, thereby ensuring the public remains protected from the risks posed by this activity.

We continue to participate in and provide specialist expertise to a range of working groups including the Lithium-ion Working Group, where we work with the Department of Fire and Emergency Services (DFES), DWER and the Department of Energy, Mines, Industry Regulation and Safety (DEMIRS) to evaluate and manage the hazards and risks associated with lithium-ion batteries and examine issues related to their safe use, emergency management, recycling and disposal.

Emergency Response

ChemCentre works with DFES to provide Western Australia with a hazardous materials (HAZMAT) 24/7 emergency response service. Over the past year we helped resolve a variety of significant HAZMAT incidents and contributed to the safety of the community as mandated under the *Chemistry Centre Act 2007* and the State Hazard Plan (HAZMAT).

ChemCentre also recently assisted DFES to complete Operation Bright Spark, which involved destroying an Electric Vehicle. Much work was completed to ensure that the vehicle's lithium-ion batteries ignited in a way that avoided generating large quantities of toxic and flammable gas, as a large crowd of interested parties were watching the exercise. The vehicle was physically damaged to simulate a car crash, which caused the batteries to enter thermal runaway. This caused the vehicle to burn for several hours, attended to by a DFES robot and fire crews spraying water and foam. Samples were taken throughout the operation to ensure firefighting capability for this emerging hazard continues safely.

In addition to attending incidents, we have attended interagency training exercises, provided interagency training and collaborated with the Chemical Warfare Agent Laboratory Network (CWALN) to ensure the widest coverage of potential hazards. We have successfully participated in proficiency trials administered through CWALN and the Royal College of Pathologists of Australasia.

Our emergency response capability is continuously maintained and advanced and is accompanied by a series of dedicated in-house and external training programs to ensure that all staff on the emergency response roster are appropriately trained and fully competent in their roles. Maintaining an around the clock Emergency Response service every day of the year is a dynamic process, and the dedication and enthusiasm of all staff on the roster deserve acknowledgement.

Forensic Science Laboratory

ChemCentre's forensic science laboratory plays a key role in supporting the administration of justice in Western Australia and it provides a range of forensic science services to the Western Australia Police Force, the State Coroner and the State's racing industry. We are relied upon to deliver scientifically robust, legally defensible analysis relating to forensic toxicology, chemical criminalistics, physical evidence, drug analysis and racing chemistry. During 2023-24 ChemCentre analysed approximately 4,820 illicit drug exhibits, 50 clandestine drug and drug profiling cases, 620 criminal cases, 7,160 traffic enforcement toxicology cases, 9,050 racing chemistry samples and issued approximately 2,250 reports to the Coroner, which included approximately 640 urgent/rapid toxicology case requests. ChemCentre also attended approximately 40 callouts in response to clandestine drug laboratory investigations and analysed approximately 500 exhibits for the Department of Health E-cigarette and Vaping Compliance Branch.

We continued to support the Western Australia Police Force to improve road safety through the provision of forensic toxicology services, including testing of drivers who may be affected by alcohol and/or drugs, as well as ongoing expansion of drug testing of those involved in traffic accidents.

Additionally, ChemCentre works closely with WA Police in efforts targeting the illicit drug trade and to reduce drug-related harm by conducting forensic analysis of illicit drug samples, clandestine drug laboratories and drug profiling. Our work on drug profiling provides highly valuable criminal intelligence to track the source of drug seizures.

Our expertise in the analysis of novel psychoactive substances and our ongoing research on the toxicology of illicit drugs is internationally recognised. For several years we have been working with the Royal Perth Hospital Emergency Department to compare observed symptoms with drugs identified through toxicological analysis. This involvement has expanded into a nationally funded program, the Emerging Drugs Network of Australia (EDNA) project. Through this project our toxicology services are assisting medical specialists to better understand the role of illicit drugs in emergency department presentations. It has also led to an early warning system to facilitate rapid and targeted harm reduction responses to help save lives and reduce the health impacts of illicit drug use in our community.

In collaboration with the WA Police Force, Royal Perth Hospital Emergency Department and the Sexual Assault Resource Centre, ChemCentre is continuing its participation in a world-first initiative addressing community safety concerns related to drink spiking. Our forensic toxicologists have developed an analytical strategy for testing that covers more than 600 substances in a single sample. This replaces traditional toxicology testing that typically screens for a small number of drugs which limits the potential to identify substances that may have been used in drink spiking incidences.

Public health concerns surround the issue of vaping in the community and the illegal importation and distribution of e-cigarettes, especially those containing nicotine. Our forensic experts are assisting efforts by police and health authorities to target illegal e-cigarette products through the analysis of seized products.

We continue to deliver extensive toxicology services to support coronial investigations in Western Australia. The introduction of CT scanning into the coronial system enables forensic pathologists to determine cause of death, without having to perform an invasive post-mortem examination. Since its introduction in 2019, we have seen a corresponding increase in the number of coronial cases requiring rapid analysis by our toxicology experts. The laboratory continues to expand its analytical capability to assist forensic pathologists and the Coroner in determining cause of death.

Our expertise, particularly in the analysis of physical trace evidence, such as fibres and glass, is internationally recognised and we have developed a world-leading fibres database to assist police in criminal investigations and cold case reviews. Different types of trace evidence, which previously may not have been considered as having evidential value, are now being reviewed as being potentially relevant, with enhanced expertise, technological advances and innovative forensic science methodologies now available. This has been the catalyst for our pioneering forensic proteomic methodology to detect and identify specific proteins within biological systems.

We now use proteomic methodology to routinely, simultaneously screen for a range of peptides in analyses for the racing industry. This is one of the many analyses undertaken by the racing team to support racing authorities in ensuring the horse and greyhound industries remain drug-free. Our racing chemists regularly provide expert reliable and defensible evidence at Racing Stewards' inquiries.

ChemCentre is leading research to develop a world-first forensic proteomics technique using protein-based procedures for human identification. The project is a collaboration with Murdoch University, Edith Cowan University, WA Police Force, PathWest, University of California (Davis) and the Fiona Stanley Foundation. The project is currently in the second year of the four-year timeline and is supporting three PhD candidates to undertake this exciting research. This capability will complement DNA analyses and could be used to assist in identifying victims and offenders through analysis of hair strands recovered from crime scenes. The technique also has potential applications for coronial investigations, crisis and emergency response management and disaster victim identification.

Our forensic scientists continue to support STEM initiatives through education and outreach activities. Such activities include involvement in career expos, presentations and laboratory tours for high school students, and university lecture series. Our staff are also supervising seven PhD and one Post-Doctoral student undertaking important, novel research relevant to a range of forensic science disciplines.

ChemCentre contributes to the development of national standards and capability through its representation on a number of scientific advisory groups and committees, including the Australian New Zealand Forensic Executive Committee (ANZFEC) and Australian New Zealand Police Advisory Agency National Institute of Forensic Science (ANZPAA-NIFS) Specialist Advisory Groups for Chemical Criminalistics, Illicit Drugs, Toxicology, Quality and Forensic Intelligence. We also contribute to the development of rigorous quality accreditation requirements through participation with Standards Australia and the Organisation of Scientific Area Committees (OSAC) for Forensic Science in Chemistry.

Research and Innovation

Our research and innovation program applies technical and specialist knowledge to solve complex problems for government and the State's industrial, mining, agricultural, environmental and forensic science sectors with a focus on law and order, emergency response, public health and safety and forensic science. We continue to pursue high-quality research and innovation to support the growth of established and emerging industries.

ChemCentre is leading world-first proteomics research which aims to enhance the value of forensic evidence and its significance in criminal investigations and cold case reviews. This work is developing a new technique with the potential to determine human identity through the analysis of specific proteins in hair strands. A single human hair contains a combination of protein variants which are unique to an individual, much like DNA. This work will be complementary to DNA evidence and be particularly useful in cases where DNA has not been collected or has degraded, to assist in the identification of individuals and help solve crime. As part of the research, a proteomics dataset is being created that is representative of the genetic diversity of the Australian population. This research has the potential to transform the process of human identification in criminal investigations, coronial investigations, crisis and emergency response management and disaster victim identification.

With the Cooperative Research Centre for Future Battery Industries (CRC FBI), ChemCentre is exploring innovative approaches to support the growth of battery industries to power Western Australia's future. ChemCentre is engaged in research aimed at assisting the mining and processing operations for critical minerals used in batteries to manage their sites in accordance with best environmental practice. In addition, research is focussed on utilisation of intermediates and processing by-products as high value components in a circular economy context.

With the CRC for Transformation in Mining Economies (CRC TiME), ChemCentre continues to explore opportunities for transformation beyond the life of mine operations. ChemCentre is leading a project to develop national guidance for management of mine pit lakes after mine closure, including development of a nation-wide pit lake classification framework and guidance on the level of assessment required for different mine risk profiles.

As a partner in the End Food Waste CRC (EFW CRC), ChemCentre is undertaking research to reduce food waste throughout the supply chain and transform waste into innovative high-value co-products. We are working with the Australian Sandalwood Network, Chameleon, Curtin University and Quest Biotech Pharma to divert the waste of tonnes of sandalwood nuts by investigating opportunities to add value to the nut, which has potential as a nutritious food product, for therapeutic purposes, or for new biomaterials of commercial value. This work is helping the sandalwood industry bring nuts, which would otherwise go to waste, back into a circular economy thereby creating an additional revenue stream for the industry.

In related work, ChemCentre and EFW CRC are also partnering to evaluate the use of brewery spent grain (BSG) to develop new food products and additives and biomaterials like plant-based leather therefore reducing food waste and supporting a circular economy in an industry that currently sends most BSG to low value endpoints.

We continue to support the State in the transition to a circular economy with predictive tools and protocols to inform environmental impact, waste management and mine site closure planning and approval, and reduce tailings storage. ChemCentre is using the Leaching Environmental Assessment Framework (LEAF) to assess the long-term environmental impact of mining by-products for a variety of applications, such as potential use in construction and fill for road projects. We are working with the Sustainability Waste Alliance in their drive to improve waste-derived materials and by-product recovery and reuse into major road and rail infrastructure projects in Western Australia. Our internally developed and trademarked sequential leaching process *AccSeL* can assist mining companies in environmental impact assessments by providing preliminary data within weeks, to complement and give focus to traditional kinetic leaching data which takes longer, sometimes years, to obtain.

ChemCentre is also providing expertise to collaborative projects with the University of Western Australia and Curtin University addressing chemical contamination issues relating to microplastics in the marine and estuarine environment around the Perth basin and in significant commercial fisheries.

In collaboration with UWA researchers, ChemCentre has assisted remote Aboriginal communities in Western Australia to manage nitrate levels in their water supply, which has been linked to adverse health outcomes. The project has validated a rapid, preliminary test to measure nitrate concentration, and demonstrated freeze filtration as a low-cost method to reduce nitrate levels at the point of use.

Business and Corporate Services

The Business and Corporate Services (BCS) Division plays a pivotal role in driving transformative corporate initiatives that add value to our agency and stakeholders. In 2023-24, BCS successfully led the delivery of a critical and advanced Laboratory Information Management System (LIMS). Developed in-house over an intensive three-year period, the bespoke LIMS aims to enhance operational efficiency and expand our capabilities. The LIMS project engaged cross-divisional focus groups, fostering a collaborative and innovative environment to achieve the design of streamlined processes to meet future requirements.

Following a successful change management and transition program, the LIMS now performs critical functions for the Forensic Science Laboratory. The LIMS project will now embark on further initiatives, these being the integration of the LIMS into the Scientific Services Division, delivery of digital data sharing capability with key stakeholders, and facilitating the adoption of cutting-edge technologies and appropriate AI-enabled tools.

The team also remained committed to maturing a secure and reliable operating environment by progressing security and data protection controls. Independent self-commissioned reviews ensured those measures remained effective as supported by appropriate training.

An enhanced records management system with advanced features and improved user experience was also implemented that will support the introduction of the planned WA Government information classification initiative. These requirements were also reflected in the review undertaken during the year of our Record Keeping Plan in line with the *State Records Act 2000*.

Financial management and the procurement function were also delivered to a high standard as reflected by internal audits performed during the year.

Key human resource initiatives progressed in 2023-24 include delivery of mental health training, access to coaching for middle management, and culture workshops supporting a safe and inclusive work environment; a dual-career pathway for scientific officers providing expanded career options for pathways towards subject expertise and management roles; and a new Learning Management System was implemented streamlining the on-boarding process and access to online development. The team also continues implementation of the Public Sector Commission's '*Building Leadership Impact*' initiative, complementing our focus on nurturing leadership behaviours and talent within our workforce.

A knowledge-sharing program across the BCS team is proving successful in increasing capabilities to perform a range of functions and contribute to continuous improvement and maturity models.

LIMS project team (L-R): Tomi Baric, Tintu Antu, Ben Quach, Lina Barbato, Freya Moeineddin, Azam Alidousti, Nantha Kanagalingam, Gnana Kanagalingam.

Education and Outreach

ChemCentre is committed to community engagement and the promotion of chemistry and Science, Technology, Engineering and Maths (STEM) in helping to create a scientifically-literate workforce able to meet society's current and future challenges. In addition to supervising tertiary students completing their postgraduate degrees across a range of chemistry fields, including forensic science and environmental science, we run a diverse education and outreach program. Our enthusiastic staff participate in laboratory tours, school visits, career events for aspiring scientists, webinars, guest lecturing and a range of science-related community events, to share their passion for chemistry with students and the wider community.

Our virtual tour of the Organics laboratory can be accessed from our website, and continues to be popular. In the past financial year it has seen 938 visitors.

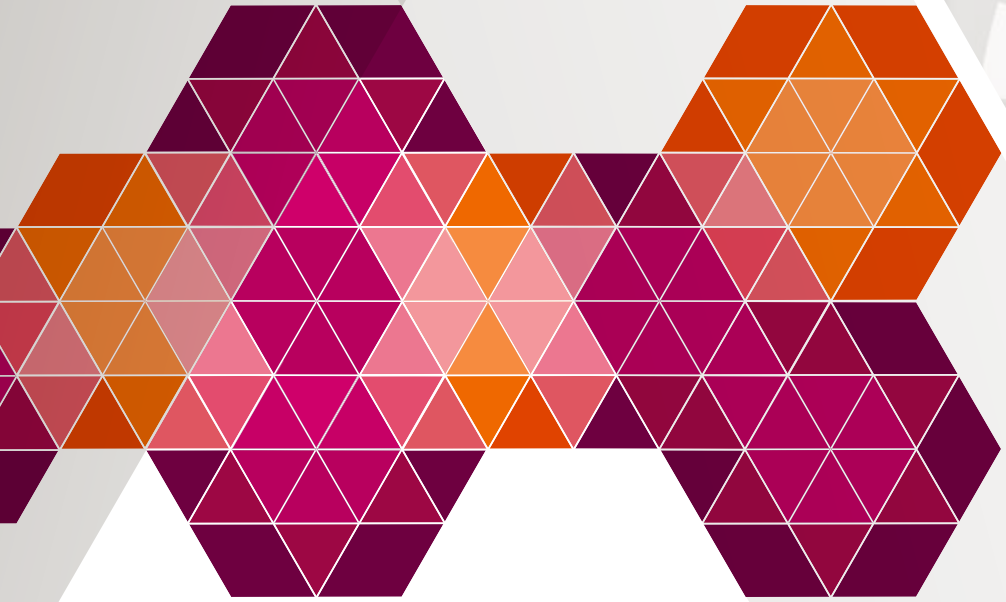
We were excited to again take science to the regions, participating in the South West Science Fair in Bunbury in August 2023. More than 100 junior investigators enjoyed taking part in the ChemCentre-Curtin forensic "Whodunit" workshops, with all five workshops booked to capacity. Attendees at the Fair also had the opportunity to participate in world-first forensic research, as ChemCentre staff held an interactive stall where people could learn about the proteomics research project, and provide hair and DNA samples for the project dataset.

ChemCentre continues to play an integral role in coordinating National Science Week in WA, through active participation in the coordinating committee and financial sponsorship providing grant opportunities and events support.

Several of our staff continue to participate as mentors in 'The Innovators' Tea Party' programs to inspire students to take up pathways to careers in science.

Our popular community event, ChemCentre Open Day is planned to next occur in 2025. This event is always a great demonstration to the community of the diverse work we do with a range of collaborators including WA Police, Department of Fire and Emergency Services and the Australian Border Force.

Performance Management Framework



Outcome Based Management Framework

Broad high-level government goals are supported at agency level by more specific desired outcomes. Agencies deliver services to achieve these desired outcomes, contributing to the achievement of the higher-level government goals. The relationship between the government goals, agency level desired outcomes and associated services is tabulated below.

ChemCentre's effort is divided approximately 28% to the delivery of statutory services for government and 72% to fee-for-services activities delivered to government and private sectors.

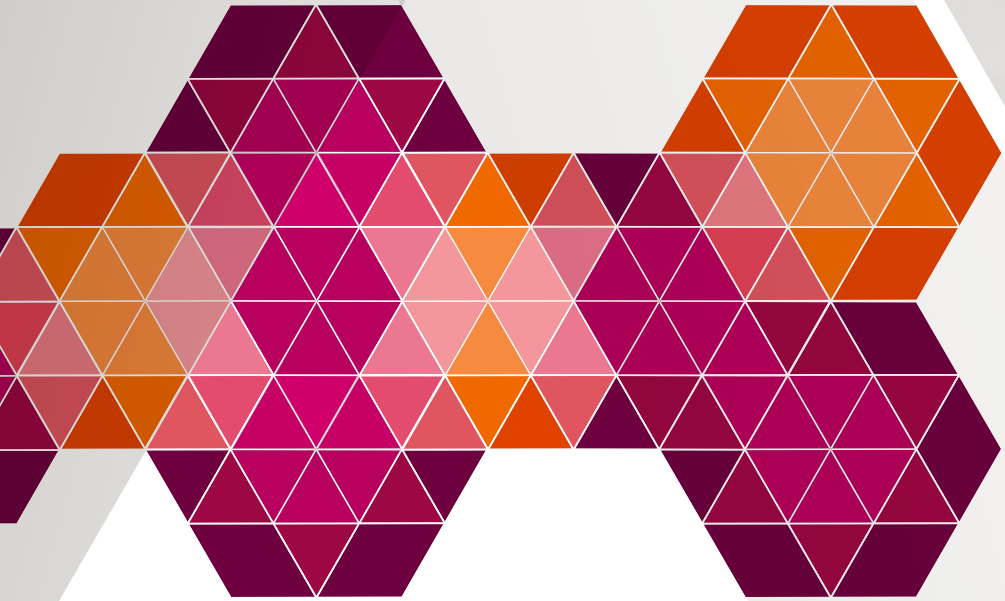
Government Goal	Desired Outcome	Services
Western Australian Jobs Plan: Diversifying the Western Australian economy, creating local jobs for the future.	**Quality research and innovation** Key Effectiveness Indicator: Contributions to scientific forums	**Service 1:** **Research and Innovation** Key Efficiency Indicator: Publications per R&I FTE
Safe, Strong and Fair Communities: Supporting our local and regional communities to thrive.	**Quality scientific advice** Key Effectiveness Indicator: Proficiency rating for the accredited services	**Service 2:** **Commercial and Scientific information and advice** Key Efficiency Indicator: Average cost of providing commercial scientific information and advice per applicable FTE
	Quality emergency response Key Effectiveness Indicators: Average Mobilisation Time for emergency response incidents Availability of Emergency Response workforce to meet agreed inter-agency requirements	**Service 3:** **Emergency Response Management** Key Efficiency Indicator: Average cost to maintain an emergency response capability per Western Australian

Shared Responsibilities with Other Agencies

ChemCentre's Emergency Response Service is largely delivered in support of the Department of Fire and Emergency Services.

ChemCentre also provides an extensive forensic science service to the Western Australian Police and the Office of the State Coroner.

Agency Performance



Auditor's Opinion

Auditor General

INDEPENDENT AUDITOR'S REPORT

2024

Chemistry Centre (WA)

To the Parliament of Western Australia

Report on the audit of the financial statements

Opinion

I have audited the financial statements of the Chemistry Centre (WA) (Centre) which comprise:

- the statement of financial position as at 30 June 2024, the statement of comprehensive income, statement of changes in equity and statement of cash flows for the year then ended
- notes comprising a summary of material accounting policies and other explanatory information.

In my opinion, the financial statements are:

- based on proper accounts and present fairly, in all material respects, the operating results and cash flows of the Chemistry Centre (WA) for the year ended 30 June 2024 and the financial position as at the end of that period
- in accordance with Australian Accounting Standards (applicable to Tier 2 Entities), the *Financial Management Act 2006* and the Treasurer's Instructions.

Basis for opinion

I conducted my audit in accordance with the Australian Auditing Standards. My responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of my report.

I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

7th Floor Albert Facey House 469 Wellington Street Perth MAIL TO: Perth BC PO Box 8489 Perth WA 6849 TEL: 08 6557 7500

Responsibilities of the Board for the financial statements

The Board is responsible for:

- keeping proper accounts
- preparation and fair presentation of the financial statements in accordance with Australian Accounting Standards (applicable to Tier 2 Entities), the *Financial Management Act 2006* and the Treasurer's Instructions
- such internal control as it determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Board is responsible for:

- assessing the entity's ability to continue as a going concern
- disclosing, as applicable, matters related to going concern
- using the going concern basis of accounting unless the Western Australian Government has made policy or funding decisions affecting the continued existence of the Centre.

Auditor's responsibilities for the audit of the financial statements

As required by the *Auditor General Act 2006*, my responsibility is to express an opinion on the financial statements. The objectives of my audit are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Australian Auditing Standards will always detect a material misstatement when it exists.

Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations or the override of internal control.

A further description of my responsibilities for the audit of the financial statements is located on the Auditing and Assurance Standards Board website. This description forms part of my auditor's report and can be found at https://www.auasb.gov.au/auditors_responsibilities/ar4.pdf

Report on the audit of controls

Opinion

I have undertaken a reasonable assurance engagement on the design and implementation of controls exercised by the Chemistry Centre (WA). The controls exercised by the Chemistry Centre (WA) are those policies and procedures established to ensure that the receipt, expenditure and investment of money, the acquisition and disposal of property, and the incurring of liabilities have been in accordance with the State's financial reporting framework (the overall control objectives).

In my opinion, in all material respects, the controls exercised by the Chemistry Centre (WA) are sufficiently adequate to provide reasonable assurance that the controls within the system were suitably designed to achieve the overall control objectives identified as at 30 June 2024, and the controls were implemented as designed as at 30 June 2024.

The Board's responsibilities

The Board is responsible for designing, implementing and maintaining controls to ensure that the receipt, expenditure and investment of money, the acquisition and disposal of property and the incurring of liabilities are in accordance with the *Financial Management Act 2006*, the Treasurer's Instructions and other relevant written law.

Auditor General's responsibilities

As required by the *Auditor General Act 2006,* my responsibility as an assurance practitioner is to express an opinion on the suitability of the design of the controls to achieve the overall control objectives and the implementation of the controls as designed. I conducted my engagement in accordance with Standard on Assurance Engagements ASAE 3150 Assurance Engagements on Controls issued by the Australian Auditing and Assurance Standards Board. That standard requires that I comply with relevant ethical requirements and plan and perform my procedures to obtain reasonable assurance about whether, in all material respects, the controls are suitably designed to achieve the overall control objectives and were implemented as designed.

An assurance engagement involves performing procedures to obtain evidence about the suitability of the controls design to achieve the overall control objectives and the implementation of those controls. The procedures selected depend on my judgement, including an assessment of the risks that controls are not suitably designed or implemented as designed. My procedures included testing the implementation of those controls that I consider necessary to achieve the overall control objectives.

I believe that the evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

Limitations of controls

Because of the inherent limitations of any internal control structure, it is possible that, even if the controls are suitably designed and implemented as designed, once in operation, the overall control objectives may not be achieved so that fraud, error or non-compliance with laws and regulations may occur and not be detected. Any projection of the outcome of the evaluation of the suitability of the design of controls to future periods is subject to the risk that the controls may become unsuitable because of changes in conditions.

Report on the audit of the key performance indicators

Opinion

I have undertaken a reasonable assurance engagement on the key performance indicators of the Chemistry Centre (WA) for the year ended 30 June 2024 reported in accordance with *Financial Management Act 2006* and the Treasurer's Instructions (legislative requirements). The key performance indicators are the Under Treasurer-approved key effectiveness indicators and key efficiency indicators that provide performance information about achieving outcomes and delivering services.

In my opinion, in all material respects, the key performance indicators report of the Chemistry Centre (WA) for the year ended 30 June 2024 is in accordance with the legislative requirements, and the key performance indicators are relevant and appropriate to assist users to assess the Centre's performance and fairly represent indicated performance for the year ended 30 June 2024.

The Board's responsibilities for the key performance indicators

The Board is responsible for the preparation and fair presentation of the key performance indicators in accordance with the *Financial Management Act 2006* and the Treasurer's Instructions and for such internal controls as the Board determines necessary to enable the preparation of key performance indicators that are free from material misstatement, whether due to fraud or error.

In preparing the key performance indicators, the Board is responsible for identifying key performance indicators that are relevant and appropriate, having regard to their purpose in accordance with Treasurer's Instruction 904 Key Performance Indicators.

Auditor General's responsibilities

As required by the *Auditor General Act 2006*, my responsibility as an assurance practitioner is to express an opinion on the key performance indicators. The objectives of my engagement are to obtain reasonable assurance about whether the key performance indicators are relevant and appropriate to assist users to assess the entity's performance and whether the key performance indicators are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. I conducted my engagement in accordance with Standard on Assurance Engagements ASAE 3000 Assurance Engagements Other than Audits or Reviews of Historical Financial Information issued by the Australian Auditing and Assurance Standards Board. That standard requires that I comply with relevant ethical requirements relating to assurance engagements.

An assurance engagement involves performing procedures to obtain evidence about the amounts and disclosures in the key performance indicators. It also involves evaluating the relevance and appropriateness of the key performance indicators against the criteria and guidance in Treasurer's Instruction 904 for measuring the extent of outcome achievement and the efficiency of service delivery. The procedures selected depend on my judgement, including the assessment of the risks of material misstatement of the key performance indicators. In making these risk assessments, I obtain an understanding of internal control relevant to the engagement in order to design procedures that are appropriate in the circumstances.

I believe that the evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

My independence and quality management relating to the report on financial statements, controls and key performance indicators

I have complied with the independence requirements of the *Auditor General Act 2006* and the relevant ethical requirements relating to assurance engagements. In accordance with ASQM 1 Quality Management for Firms that Perform Audits or Reviews of Financial Reports and Other Financial Information, or Other Assurance or Related Services Engagements, the Office of the Auditor General maintains a comprehensive system of quality management including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Other information

The Board is responsible for the other information. The other information is the information in the entity's annual report for the year ended 30 June 2024, but not the financial statements, key performance indicators and my auditor's report.

My opinion on the financial statements, controls and key performance indicators do not cover the other information and accordingly I do not express any form of assurance conclusion thereon.

In connection with my audit of the financial statements, controls and key performance indicators my responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements and key performance indicators or my knowledge obtained in the audit or otherwise appears to be materially misstated.

If, based on the work I have performed, I conclude that there is a material misstatement of this other information, I am required to report that fact. I did not receive the other information prior to the date of this auditor's report. When I do receive it, I will read it and if I conclude that there is a material misstatement in this information, I am required to communicate the matter to those charged with governance and request them to correct the misstated information. If the misstated information is not corrected, I may need to retract this auditor's report and re-issue an amended report.

Matters relating to the electronic publication of the audited financial statements and key performance indicators

This auditor's report relates to the financial statements and key performance indicators of the Chemistry Centre (WA) for the year ended 30 June 2024 included in the annual report on the Centre's website. The Centre's management is responsible for the integrity of the Centre's website. This audit does not provide assurance on the integrity of the Centre's website. The auditor's report refers only to the financial statements, controls and key performance indicators described above. It does not provide an opinion on any other information which may have been hyperlinked to/from the annual report. If users of the financial statements and key performance indicators are concerned with the inherent risks arising from publication on a website, they are advised to contact the entity to confirm the information contained in the website version.

Jordan Langford-Smith
Senior Director Financial Audit
Delegate of the Auditor General for Western Australia
Perth, Western Australia
27 August 2024

Financial Statements

CERTIFICATION OF FINANCIAL STATEMENTS
For the reporting period ended 30 June 2024

The accompanying financial statements of ChemCentre have been prepared in compliance with the provisions of the *Financial Management Act 2006* from proper accounts and records to present fairly the financial transactions for the reporting period ended 30 June 2024 and the financial position as at 30 June 2024.

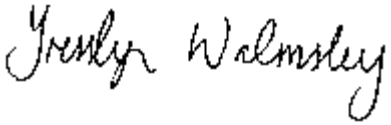
At the date of signing, we are not aware of any circumstances which would render the particulars included in the financial statements misleading or inaccurate.

Stefan Anicic

Chief Financial Officer
22 August 2024

Peter McCafferty

Chief Executive Officer
ChemCentre
22 August 2024



Tresslyn Walmsley

Chair
ChemCentre Board
22 August 2024

Colin Murphy

Chair
Finance, Audit & Risk
Management Committee
Member, ChemCentre Board
22 August 2024

STATEMENT OF COMPREHENSIVE INCOME

For the year ended 30 June 2024

	Notes	2024 $000	2023 $000
COST OF SERVICES			
Expenses			
Employee benefits expense	2.1(a)	17,840	17,247
Supplies and services	2.2	2,063	1,894
Depreciation and amortisation expense	4.1, 4.2 & 4.3	2,525	2,482
Finance cost	6.2	8	8
Accommodation expenses	2.2	5,800	5,762
Other expenses	2.2	6,024	5,455
Total cost of services		**34,260**	**32,848**
Income			
Provision of services	3.2	6,342	5,944
Interest income	3.3	122	51
Other income	3.4	13	17
Total income		**6,477**	**6,012**
NET COST OF SERVICES		**27,783**	**26,836**
Income from State Government			
Service appropriation	3.1	9,610	8,616
Resources received	3.1	22	13
Income from other public sector entities	3.1	18,102	16,876
Total Income from State Government		**27,734**	**25,505**
SURPLUS/(DEFICIT) FOR THE PERIOD		**(49)**	**(1,331)**
TOTAL COMPREHENSIVE INCOME/(LOSS) FOR THE PERIOD		**(49)**	**(1,331)**

The Statement of Comprehensive Income should be read in conjunction with the accompanying notes.

STATEMENT OF FINANCIAL POSITION

As at 30 June 2024

	Notes	2024 $000	2023 $000
ASSETS			
Current Assets			
Cash and cash equivalents	6.3	8,043	6,552
Restricted cash and cash equivalents	6.3	2,236	707
Receivables	5.1	2,083	1,762
Prepayments	5.2	938	938
Total Current Assets		**13,300**	**9,959**
Non-Current Assets			
Property, plant and equipment	4.1	6,024	6,614
Right-of-use assets	4.2	72	191
Intangible assets	4.3	1,535	1,422
Sinking fund	5.2	3,092	2,715
Total Non-Current Assets		**10,723**	**10,942**
TOTAL ASSETS		**24,023**	**20,901**
LIABILITIES			
Current Liabilities			
Payables	5.3	1,436	1,072
Lease liabilities	6.1	26	53
Provisions	2.1(b)	3,472	3,096
Contract liability	5.4	154	364
Total Current Liabilities		**5,088**	**4,585**
Non-Current Liabilities			
Lease liabilities	6.1	50	132
Provisions	2.1(b)	1,349	1,279
Total Non-Current Liabilities		**1,399**	**1,411**
TOTAL LIABILITIES		**6,487**	**5,996**
NET ASSETS		**17,536**	**14,905**
EQUITY			
Contributed equity	8.9	26,206	23,526
Accumulated deficit		(8,670)	(8,621)
TOTAL EQUITY		**17,536**	**14,905**

The Statement of Financial Position should be read in conjunction with the accompanying notes.

STATEMENT OF CHANGES IN EQUITY

For the year ended 30 June 2024

	Notes	Contributed equity	Accumulated deficit	Total Equity
		$000	$000	$000
Balance at 1 July 2022		21,026	(7,290)	13,736
Deficit		-	(1,331)	(1,331)
Total Comprehensive Income/(Loss) for the year		**-**	**(1,331)**	**(1,331)**
Transactions with owners in their capacity as owners:				
Capital appropriation	8.9	2,500	-	2,500
Total		**2,500**	**-**	**2,500**
Balance at 30 June 2023		**23,526**	**(8,621)**	**14,905**
Balance at 1 July 2023		23,526	(8,621)	14,905
Deficit		-	(49)	(49)
Total Comprehensive Income/(Loss) for the year		**-**	**(49)**	**(49)**
Transactions with owners in their capacity as owners:				
Capital appropriation	8.9	2,680	-	2,680
Total		**2,680**	**-**	**2,680**
Balance at 30 June 2024		**26,206**	**(8,670)**	**17,536**

The Statement of Changes in Equity should be read in conjunction with the accompanying notes.

STATEMENT OF CASH FLOWS

For the year ended 30 June 2024

	Notes	2024 $000	2023 $000
Cash flows from State Government			
Service appropriation		9,610	8,616
Capital appropriation		2,680	2,500
Funds from other public sector entities for services provided		18,108	16,806
Net cash provided by State Government		**30,398**	**27,922**
Utilised as follows:			
Cash flows from operating activities			
Payments			
Employee benefits		(17,268)	(17,138)
Accommodation		(6,038)	(5,861)
Finance costs		(8)	(8)
GST payments on purchases		(1,435)	(1,448)
GST payments to taxation authority		(852)	(879)
Other payments		(7,927)	(7,841)
Receipts			
Provision of services		5,847	6,056
GST receipts on services		2,396	2,286
Net cash provided by/(used in) operating activities		**(25,285)**	**(24,833)**
Cash flows from investing activities			
Payments			
Purchase of non-current assets		(2,062)	(2,501)
Net cash provided by/(used in) investing activities		**(2,062)**	**(2,501)**
Cash flows from financing activities			
Payments			
Principal elements of lease		(31)	(63)
Net cash provided by/(used in) financing activities		**(31)**	**(63)**
Net increase/(decrease) in cash and cash equivalents		3,020	525
Cash and cash equivalents at the beginning of period		7,259	6,734
Cash and cash equivalents at the end of the period	6.3	**10,279**	**7,259**

The Statement of Cash Flows should be read in conjunction with the accompanying notes.

NOTES TO THE FINANCIAL STATEMENTS

For the year ended 30 June 2024

1. Basis of preparation

Chemistry Centre WA (ChemCentre) is a WA Government entity and is controlled by the State of Western Australia, which is the ultimate parent. ChemCentre is a not-for-profit entity (as profit is not its principal objective). A description of the nature of its operations and its principal activities have been included in the 'Overview' which does not form part of these financial statements.

These annual financial statements were authorised for issue by the ChemCentre Board on 27 August 2024.

Statement of compliance

The financial statements constitute general purpose financial statements that have been prepared in accordance with Australian Accounting Standards, the Framework, Statement of Accounting Concepts and other authoritative pronouncements of the Australian Accounting Standards Board as applied by Treasurer's instructions. Several of these are modified by Treasurer's instructions to vary application, disclosure, format and wording.

The Act and Treasurer's instructions are legislative provisions governing the preparation of financial statements and take precedence over Australian Accounting Standards, the Framework, Statement of Accounting Concepts and other authoritative pronouncements of the Australian Accounting Standards Board. Where modification is required and has had a material or significant financial effect upon the reported results, details of that modification and the resulting financial effect are disclosed in the notes to the financial statements.

Basis of preparation

These financial statements are presented in Australian dollars applying the accrual basis of accounting and using the historical cost convention. All values are rounded to the nearest thousand dollars ($000).

Accounting for Goods and Services Tax (GST)

Income, expenses and assets are recognised net of the amount of goods and services tax (GST), except that the:

a. Amount of GST incurred by ChemCentre as a purchaser that is not recoverable from the Australian Taxation Office (ATO) is recognised as part of an asset's cost of acquisition or as part of an item of expense; and

b. Receivables and payables are stated with the amount of GST included.

Cash flows are included in the Statement of cash flows on a gross basis. However, the GST components of cash flows arising from investing and financing activities which are recoverable from, or payable to, the ATO are classified as operating cash flows.

Contributed equity

Interpretation 1038 *Contribution by Owners Made to Wholly-Owned Public Sector Entities* requires transfers in the nature of equity contributions, other than as a result of a restructure of administrative arrangements, as designated as contributions by owners (at the time of, or prior to, transfer) be recognised as equity contributions. Capital contributions (appropriations) have been designated as contributions by owners by Treasury Instruction TI 955 *Contributions by Owners made to Wholly-Owned Public Sector Entities* and have been credited directly to Contributed Equity.

Comparative information

Except when an Australian Accounting Standard permits or requires otherwise, comparative information is presented in respect of the previous period for all amounts reported in the financial statements. AASB 1060 provides relief from presenting comparatives for:

- Property, Plant and Equipment reconciliations;
- Intangible Asset reconciliations; and
- Right-of-use Asset reconciliation.

Judgements and estimates

Judgements, estimates and assumptions are required to be made about financial information being presented. The significant judgements and estimates made in the preparation of these financial statements are disclosed in the notes where amounts affected by those judgements and/or estimates are disclosed. Estimates and associated assumptions are based on professional judgements derived from historical experience and various other factors that are believed to be reasonable under the circumstances.

2. Use of our funding

Expenses incurred in the delivery of services

This section provides additional information about how ChemCentre's funding is applied and the accounting policies that are relevant for an understanding of the items recognised in the financial statements. The primary expenses incurred by the agency in achieving its objectives and the relevant notes are:

	Notes	2024	2023
		$000	$000
Employee benefits expense	2.1(a)	17,840	17,247
Employee benefits provision	2.1(b)	4,821	4,375
Other expenditure	2.2	13,887	13,111

2.1(a) Employee benefits expenses

	2024	2023
	$000	$000
Employee benefits	16,099	15,485
Termination benefits	-	116
Superannuation – defined contribution plans	1,741	1,646
Employee benefits expense	**17,840**	**17,247**
Add: AASB 16 non-monetary benefits (not included in employee benefits expense)	47	23
Less: Employee contributions (per note 3.4 Other revenue)	(13)	(12)
Total employee benefits provided	**17,874**	**17,258**

Employee benefits include wages, salaries, accrued and paid leave entitlements and paid sick leave, and non-monetary benefits recognised under accounting standards other than AASB 16 (such as uniform and prescription eyewear allowances) for employees.

Termination benefits are payable when employment is terminated before normal retirement date, or when an employee accepts an offer of benefits in exchange for the termination of employment. Termination benefits are recognised when ChemCentre is demonstrably committed to terminating the employment of current employees according to a detailed formal plan without possibility of withdrawal or providing termination benefits as a result of an offer made to encourage voluntary redundancy. Benefits falling due more than 12 months after the end of the reporting period are discounted to present value.

Superannuation: The amount recognised in profit or loss of the Statement of Comprehensive Income comprises employer contributions paid to the GSS (concurrent contributions), the WSS, the GESBs, or other superannuation funds.

AASB 16 non-monetary benefits are non-monetary employee benefits relating to the provision of vehicle benefits that are recognised under AASB 16 and are excluded from the employee benefits expense.

Employee contributions are contributions made to the Centre by employees towards employee benefits that have been provided by the Centre. This includes both AASB 16 and non-AASB 16 employee contributions.

2.1(b) Employee benefits provisions

	2024 $000	2023 $000
Current		
Employee benefits provisions		
Annual leave	1,742	1,492
Long service leave	1,550	1,443
	3,292	2,935
Other provisions		
Employment on-costs	180	161
Total current employee related provisions	**3,472**	**3,096**
Non-current		
Employee benefit provisions		
Long service leave	1,279	1,212
Other provisions		
Employment on-costs	70	67
Total non-current employee related provisions	**1,349**	**1,279**
Total employee related provisions	**4,821**	**4,375**

Provision is made for benefits accruing to employees in respect of annual leave and long service leave for services rendered up to the reporting date and recorded as an expense during the period the services are delivered.

Annual leave liabilities are classified as current as there is no unconditional right to defer settlement for at least 12 months after the end of the reporting period. The provision for annual leave is calculated at the present value of expected payments to be made in relation to services provided by employees up to the reporting date.

Long service leave liabilities are classified as current liabilities where the Centre does not have an unconditional right to defer settlement of the liability for at least 12 months after the end of reporting period.

Pre-conditional and conditional long service leave provisions are classified as non-current liabilities because the Centre has an unconditional right to defer the settlement of liability until the employee has completed the requisite years of service.

The provision for long service leave is calculated at present value as the Centre does not expect to wholly settle the amount within 12 months. The present value is measured taking into account the present value of expected future payments to be made in relation to services provided by employees up to the reporting date. These payments are estimated using the remuneration rate expected to apply at the time of settlement and discounted using national government bonds at the end of the reporting period on national government bonds with terms to maturity that match, as closely as possible, the estimated future cash outflows.

Employment on-costs involve settlements of annual and long service leave liabilities which give rise to the payment of employment on-costs including workers' compensation insurance and payroll tax. The provision is measured at the present value of expected future payments. Employment on-costs, including worker's compensation insurance, are not employee benefits and are recognised separately as liabilities and expenses when the employment to which they related has occurred. Employment on-costs are included as part of 'Other expenditures', note 2.2 and are not included as part the Centre's 'employee benefits expense'. The related liability is included in 'Employment on-costs provision'.

2.2 Other expenditures

	2024 $000	2023 $000
Supplies and Services		
Communications	7	6
Consumables	1,954	1,805
Materials	4	20
Travel	98	63
	2,063	**1,894**
Accommodation expenses		
Property rent	4,378	4,375
Property outgoings	713	603
Building repairs and maintenance	168	267
Utilities	541	517
	5,800	**5,762**
Other expenses		
Equipment repairs and maintenance	1,298	1,229
IT & network maintenance	527	438
External laboratory services	831	868
Postage, printing and stationery	166	152
Motor vehicle	24	24
Expected credit losses expense	8	1
Payroll tax	970	950
Professional services and research costs	1,296	901
Staff training and miscellaneous staff expenses	225	239
Insurance	157	145
Other minor expenses	522	508
	6,024	**5,455**
Total other expenditure	**13,887**	**13,111**

Supplies and services: Supplies and services are recognised as an expense in the reporting period in which they are incurred.

Accommodation expenses: Lease payments for the lease of the ChemCentre's main facility at Curtin University to Government Office Accommodation are not within scope of *AASB 16 Leases* and are expensed as incurred. Utility, property outgoing, repairs and maintenance costs are recognised as an expense as incurred.

Other expenses: Other expenditures generally represent the day-to-day running costs incurred in normal operations.

Expected credit losses is an allowance of trade receivables and is measured at the lifetime expected credit losses at each reporting date, based on its historical credit loss experience, adjusted for forward-looking factors specific to the debtors and the economic environment. Please refer to Note 5.1 Receivables for further details.

3. Other funding sources

This section provides additional information about how ChemCentre obtains its funding and the relevant accounting policy notes that govern the recognition and measurement of this funding. The primary income received by ChemCentre and the relevant notes are:

	Notes	2024 $000	2023 $000
Income from State Government	3.1	27,734	25,505
Provision of services	3.2	6,342	5,944
Interest revenue	3.3	122	51
Other revenue	3.4	13	17

3.1 Income from State Government

	2024 $000	2023 $000
Appropriations received during the period:		
- Salaries and Allowance Act 1975	254	253
- Service Appropriation	9,356	8,363
Total appropriation received	**9,610**	**8,616**
Resources received from other public sector entities during the period:		
- Service received free of charge	22	13
Total resources received	**22**	**13**
Income for services provided to other public sector entities	18,102	16,876
Total income for services provided to other public sector entities	**18,102**	**16,876**
Total income from State Government	**27,734**	**25,505**

Service Appropriations are recognised as income at fair value of consideration received in the period in which ChemCentre gains control of the appropriated funds at the time those funds are deposited in the bank account.

Resources received from other public sector entities are recognised as income (and assets or expenses) equivalent to the fair value of the assets or services that can be reliably determined and which would have been purchased if not donated.

Income for services provided to other public sector entities represents a range of services provided including chemical analyses, research and advice on a fee for service basis. Revenue for services and funding agreed to on an annual MOU basis is recognised over time, representing the series of services provided over the financial year and the agreed performance obligations met over time. Routine chemical analyses provided is recognised at a point-in-time, with the performance obligation satisfied when the reporting of testing results is provided to the entity.

Summary of Consolidated Account Appropriations

For the year ended 30 June 2024

	2024 Budget	2024 Section 25 Transfers	2024 Additional Funding	2024 Revised Budget	2024 Actual	2024 Variance
	$000	$000	$000	$000	$000	$000
Delivery of Services						
Item 68 Net amount appropriated to deliver services	9,527	-	(171)	9,356	9,356	-
Amount Authorised by Other Statutes:						
Salaries and Allowances Act 1975	254	-	-	254	254	-
Total appropriations provided to deliver services	**9,781**	**-**	**(171)**	**9,610**	**9,610**	**-**
Capital						
Item 140 Capital Appropriations[(a)]	2,680	-	3,333	6,013	2,680	(3,333)
GRAND TOTAL	**12,461**	**-**	**3,162**	**15,623**	**12,290**	**(3,333)**

(a) An additional $3.33m capital appropriation in 2023-24 for leasehold improvement was approved at the 2023-24 Mid-Year Review. However, due to delays in lease commencement the drawdown of the funding has been deferred to the following year.

3.2 Provision of service

	2024 $000	2023 $000
Income for service provided to non-public sector entities	6,342	5,944
	6,342	**5,944**

Revenue is recognised at the transaction price when ChemCentre transfers control of the services to customers. Revenue is recognised for the major activities as follows:

- Routine chemical analyses revenue is recognised at a point-in-time. Performance obligations for these fees and charges are satisfied when the reporting of testing results is provided to the client.
- Research activity revenue recognition is assessed on a case by case basis and is dependent on the terms of the project agreement, funding arrangements including rights to receive payment for research performance to date and the nature of services being performed. For each obligation, ChemCentre determines whether the obligation would be satisfied over time or at a point in time. For an obligation that is satisfied over time ChemCentre recognises revenue in line with its measurement of progress towards complete satisfaction of the obligation. This measurement may be based on observable output methods such as milestones achieved or on input methods such as labour hours expended or resources consumed.

3.3 Interest income

	2024 $000	2023 $000
Interest income	122	51
	122	**51**

3.4 Other income

	2024 $000	2023 $000
Employee contributions [a]	13	12
Resources received free of charge – Open Day volunteers [b]	-	5
Total Other Income	**13**	**17**

(a) Income received by ChemCentre relates to the senior Executives' contribution towards the motor vehicle leased from Department of Finance.

(b) Recognises the receipt of volunteer services during ChemCentre Open Day, a biennial education and outreach event held to promote science and chemistry through laboratory tours, displays, 'hands on' activities, presentations, and a science show.

4. Key Assets

Assets ChemCentre utilised for economic benefit or service potential

This section includes information regarding the key assets ChemCentre utilises to gain economic benefits or provide service potential. The section sets out both the key accounting policies and financial information about the performance of these assets:

	Notes	2024	2023
		$000	$000
Property, plant and equipment	4.1	6,024	6,614
Right-of-use assets	4.2	72	191
Intangibles	4.3	1,535	1,422

4.1 Property, plant and equipment

	Plant & scientific equipment	Office equipment	Work in progress	Total
	$000	$000	$000	$000
1 July 2023				
Gross carrying amount	19,266	1,895	204	21,365
Accumulated depreciation	(13,157)	(1,594)	-	(14,751)
Carrying amount at start of period	**6,109**	**301**	**204**	**6,614**
Additions	1,224	61	-	1,285
Transfers from Work in Progress	170	34	(204)	-
Disposals	(56)	-	-	(56)
Depreciation	(1,644)	(175)	-	(1,819)
Carrying amount at 30 June 2024	**5,803**	**221**	**-**	**6,024**
Gross carrying amount	**19,746**	**1,215**	**-**	**20,961**
Accumulated depreciation	**(13,943)**	**(994)**	**-**	**(14,937)**

Initial recognition and measurement

Items of property, plant and equipment costing $5,000 or more are initially recognised at cost. Where an asset is acquired for no cost or significantly less than fair value, the cost is valued at its fair value at the date of acquisition. Items of property, plant and equipment costing less than $5,000 are immediately expensed except for specified items that are capitalised as grouped assets direct to the Statement of Comprehensive Income other than where they form part of a group of similar items which are significant in total.

Subsequent measurement

After recognition as an asset, ChemCentre uses the cost model for all property, plant and equipment. All items of property, plant and equipment are carried at cost less accumulated depreciation and accumulated impairment losses, if any.

4.1.1 Depreciation charge for the period

	2024	2023
	$000	$000
Plant and scientific equipment	1,644	1,556
Office equipment	175	169
Total depreciation for the period	**1,819**	**1,725**

Useful lives

All non-current assets that have a limited useful life are systematically depreciated over their estimated useful lives in a manner that reflects the consumption of their future economic benefits.

Depreciation on assets is calculated using the straight-line method, using rates which are reviewed annually. Estimated useful lives for each class of depreciable asset are:

Plant & Scientific equipment	7-10 years
Office equipment	4-5 years

Impairment of assets

Plant and equipment and intangible assets are tested for any indication of impairment at the end of each reporting year. Where there is an indication of impairment, the recoverable amount is estimated. Where the recoverable amount is less than the carrying amount, the asset is considered impaired and is written down to the recoverable amount and an impairment loss is recognised in profit or loss.

If there is an indication that there has been a reversal in impairment, the carrying amount shall be increased to its recoverable amount. However, this reversal should not increase the asset's carrying amount above what would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised in prior years.

4.2 Right-of-use assets (ROU)

	Buildings	Motor Vehicles	Total
	$000	$000	$000
Carrying amount at beginning of period	**91**	**100**	**191**
Additions	-	7	**7**
Disposals[(a)]	(84)	-	**(84)**
Depreciation	(7)	(35)	**(42)**
Net Carrying amount as at end of period	**-**	**72**	**72**

(a) The property lease with the Department of Energy, Mines, Industry Regulation and Safety was terminated during the financial year.

Initial recognition

Right-of-use assets are measured at cost including the followings:

- The amount of the initial measurement of lease liability;
- Any lease payments made at or before the commencement date less any lease incentives received;
- Any initial direct costs; and
- Restoration costs including dismantling and removing the underlying assets.

The corresponding lease liabilities have been disclosed in Note 6.1.

Subsequent Measurement

The cost model is applied for subsequent measurement of right-of-use assets, requiring the asset to be carried at cost less any accumulated depreciation and accumulated impairment losses and adjusted for any re-measurement of lease liability.

Depreciation and impairment of right-of-use assets

Right-of-use assets are depreciated on a straight-line basis over the shorter of the asset's useful life and the lease term. If ownership of the leased asset transfer to ChemCentre at the end of the lease term or the cost reflects the exercise of a purchase option, depreciation is calculated using the estimated useful life of the asset.

Right-of-use assets are tested for impairment when an indication of impairment is identified. The policy in connection with testing for impairment is outlined in note 4.1.1.

4.2.1 Depreciation charge of ROU

	2024 $000	2023 $000
Accommodation	7	28
Motor Vehicles	35	30
Total right-of-use-asset depreciation	**42**	**58**
Lease interest expense	8	8
Total amount recognised in the statement of comprehensive income	**50**	**66**

The total cash outflow for leases in 2024 was $39,313 (2023: $62,806).

The agency's leasing activities and how these are accounted for:

- Leases for vehicles with State Fleet and for accommodation with Department of Energy, Mines, Industry Regulation and Safety. These leases are recognised as right-of-use assets and associated lease liabilities in the Statement of Financial Position. The corresponding lease liabilities in relation to these right-of-use assets have been disclosed in note 6.1.
- Memorandum of Understanding Agreements with the Department of Finance for the leasing of office accommodation. These are not recognised under AASB 16 because of substitution rights held by the Department of Finance and are accounted for as an expense as incurred.

4.3 Intangible assets

	Software $000
1 July 2023	
Gross carrying amount	6,224
Accumulated amortisation	(4,802)
Carrying amount at start of period	**1,422**
Additions	777
Amortisation expense	(664)
Carrying amount at 30 June 2024	**1,535**
Gross carrying amount	**6,166**
Accumulated amortisation expense	**(4,631)**

Initial recognition

Intangible assets are initially recognised at cost. For assets acquired at significantly less than fair value, the cost is their fair value at date of acquisition.

An internally generated intangible asset arising from development (or from the development phase of an internal project) is recognised if, and only if, all of the following are demonstrated:

a) the technical feasibility of completing the intangible asset so that it will be available for use or sale;

b) an intention to complete the intangible asset, and use or sell it;

c) the ability to use or sell the intangible asset;

d) the intangible asset will generate probably future economic benefit;

e) the availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset; and

f) the ability to measure reliably the expenditure attributable to the intangible asset during its development.

Acquisition of intangible assets costing $5,000 or more and internally generated intangible assets costing $50,000 or more that comply with the recognition criteria as per AASB 138.57 (as noted above) are capitalised. Costs incurred of less than these amounts are immediately expensed directly to the Statement of Comprehensive Income.

Subsequent Measurement

The cost model is applied for subsequent measurement requiring the asset to be carried at cost less any accumulated amortisation and accumulated impairment losses.

Computer software

Software that is an integral part of the related hardware is treated as property, plant and equipment. Software that is not an integral part of the related hardware is treated as an intangible asset. Software costing less than $5,000 is expensed in the year of acquisition.

4.3.1. Amortisation charge for the period

	2024 $000	2023 $000
Software	664	699
Total amortisation for the period	**664**	**699**

As of 30 June 2024, there were no indications of impairment to intangible assets.

ChemCentre held no goodwill or intangible assets with an indefinite useful life during the reporting period. At the end of the reporting period there were no intangible assets not yet available for use. Amortisation for intangible assets with finite useful lives is calculated for the period of the expected benefit (estimated useful life) on the straight-line basis using rates which are reviewed annually. All intangible assets controlled by ChemCentre have a finite useful life and zero residual value.

The expected useful lives for each class of intangible asset are:

Software[(a)] 5 years

(a) Software that is not integral to the operation of any related hardware.

5. Other assets and liabilities

This section sets out those assets and liabilities that arose from ChemCentre's controlled operations and includes other assets utilised for economic benefits and liabilities incurred during normal operations:

	Notes	2024 $000	2023 $000
Receivables	5.1	2,083	1,762
Other assets	5.2	4,030	3,653
Payables	5.3	1,436	1,072
Other liabilities	5.4	154	364

5.1 Receivables

	2024 $000	2023 $000
Trade receivables	1,441	1,358
Allowance for impairment of trade receivables	(13)	(11)
Contract assets	479	173
GST receivable	176	242
Total current receivables	**2,083**	**1,762**

ChemCentre does not hold any collateral or other credit enhancements as security for receivables.

Receivables are recognised at original invoice amount less any allowances for uncollectible amounts (i.e. impairment). The carrying amount of net trade receivables is equivalent to fair value as it is due for settlement within 30 days. The collectability of receivables is reviewed on an ongoing basis and any receivables identified as uncollectable are written-off against the allowance account. The allowance for impairment of trade receivables is raised when there is objective evidence that ChemCentre will not be able to fully collect a debt and is otherwise based on historical credit loss experience for trade receivables used to estimate the lifetime expected credit losses.

5.2 Other assets

	2024 $000	2023 $000
Current		
Prepayments	938	938
	938	**938**
Non-current		
Sinking fund	3,092	2,715
	3,092	**2,715**
Total other assets	**4,030**	**3,653**

The **Sinking Fund** balance represents the accumulation of a $0.26m annual bond paid to the landlord i.e. Curtin and the interest earned on the balance. Its purpose is to provide for required building maintenance as set out in the lease contract. It is refundable upon ChemCentre vacating the premises after offsetting the cost of any remediation to the premises required.

5.3 Payables

	2024 $000	2023 $000
Trade payables	83	71
GST payable	179	185
Accrued expenses	487	292
Accrued employee benefits expense	687	524
Total current payables	**1,436**	**1,072**

Payables are recognised at the amounts payable when ChemCentre becomes obliged to make future payments as a result of a purchase of assets or services. The carrying amount is equivalent to fair value as settlement is generally within 20 days.

Accrued employee benefits expense represents the amount due to staff but unpaid at the end of the reporting period. Accrued salaries are settled within a fortnight after the reporting period. ChemCentre considers the carrying amount of accrued salaries to be equivalent to its fair value.

5.4 Contract Liability

	2024 $000	2023 $000
Reconciliation of changes in contract liabilities		
Opening balance	364	666
Additions	631	945
Revenue recognised in the reporting period	(841)	(1,247)
Balance at end of period	**154**	**364**
Current	154	364
Non-Current	**-**	**-**

ChemCentre's contract liabilities relate to payments received for research activities and contracted analytical work yet to be performed at the end of the reporting period.

6. Financing

6.1 Lease liabilities

	2024	2023
	$000	$000
No later than one year	26	53
Later than one year and not later than five years	50	132
	76	**185**

Initial measurement

ChemCentre measures a lease liability, at the commencement date, at the present value of the lease payments that are not paid at the date. The lease payments were discounted using the interest rate implicit in the lease. If that rate cannot be readily determined, ChemCentre uses the incremental borrowing rate provided by Western Australian Treasury Corporation.

Lease payments included by ChemCentre as part of the present value calculation of lease liability include:

- Fixed payments (including in-substance fixed payments), less any lease incentives receivable;
- Payments for penalties for terminating a lease, where the lease term reflects the agency exercising an option to terminate the lease.

The interest on the lease liability is recognised in profit or loss over the lease term so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period.

Lease liabilities do not include any future changes in variable lease payments (that depend on an index or rate) until they take effect, in which case the lease liability will be reassessed and adjusted against the right-of-use asset. Periods covered by extension or termination options are only included in the lease term by ChemCentre if the lease is reasonably certain to be extended (or not terminated).

This section should be read in conjunction with note 4.2 Right of Use Assets.

Subsequent Measurement

Lease liabilities are measured by increasing the carrying amount to reflect interest on the lease liabilities; reducing the carrying amount to reflect the lease payments made; and remeasuring the carrying amount at amortised cost, subject to adjustments to reflect any reassessment or lease modifications.

6.2 Finance costs

	2024	2023
	$000	$000
Lease interest expense	8	8
Finance costs expensed	**8**	**8**

Finance cost expensed relates to the interest component of lease liability repayments.

6.3 Cash and cash equivalents

	2024	2023
	$000	$000
Cash and cash equivalents	8,043	6,552
Restricted cash and cash equivalents[(a)]	2,236	707
	10,279	**7,259**

(a) Composed of $0.618m in 2023-24 unspent capital appropriation and payments received in advance of work being completed; $1.464m relating to the appropriation funded Forensic Proteomics Project and $0.154m relating to other research project and fees for service work.

6.4 Capital commitments

	2024	2023
	$000	$000
Within 1 year	118	154
	118	**154**

Capital expenditure commitments, being contracted capital expenditure additional to the amounts reported in the financial statements.

7. Financial Instruments and Contingencies

7.1 Financial instruments

The carrying amounts of each of the following categories of financial assets and financial liabilities at the end of the reporting period are:

	2024 $000	2023 $000
Financial Assets		
Cash and cash equivalents	10,279	7,259
Sinking fund and receivables [a]	4,999	4,235
Total financial assets	**15,278**	**11,494**
Financial Liabilities		
Financial liabilities measured at amortised cost [b]	1,333	1,072
Total financial liabilities	**1,333**	**1,072**

a) Total amount of receivables excludes GST recoverable from the ATO.

b) Total amount of financial liabilities excludes GST payable to the ATO.

7.2 Contingent assets and liabilities

Contingent assets and contingent liabilities are not recognised in the statement of financial position but are disclosed and, if quantifiable, are measured at nominal value.

7.2.1 Contingent assets

ChemCentre does not have any contingent assets.

7.2.2 Contingent liabilities

ChemCentre does not have any contingent liabilities.

8. Other disclosures

This section includes additional material disclosures required by accounting standards or other pronouncements, for the understanding of this financial report.

	Notes
Events occurring after the end of the reporting period	8.1
Changes in accounting policy	8.2
Key management personnel	8.3
Related party transactions	8.4
Related bodies	8.5
Affiliated bodies	8.6
Special purpose accounts	8.7
Remuneration of auditors	8.8
Equity	8.9
Supplementary financial information	8.10
Explanatory statement	8.11

8.1 Events occurring after the end of the reporting period

There were no known events occurring after the end of the reporting period and up to the date of this report.

8.2 Changes in accounting policy

The following standards are operative for reporting periods ended on or after 30 June 2024:

- AASB 2021-2 – Amendments to Australian Accounting Standards – Disclosure of Accounting Policies and Definition of Accounting Estimates
- AASB 2021-6 – Amendments to Australian Accounting Standards – Disclosure of Accounting Policies: Tier 2 and Other Australian Accounting Standards
- AASB 2021-7b – Amendments to Australian Accounting Standards – Effective Date of Amendments to AASB 10 and AASB 128 and Editorial Corrections
- AASB 2022-1 – Amendments to Australian Accounting Standards – Initial Application of AASB 17 and AASB 9 – Comparative Information
- AASB 2022-7 – Editorial Corrections to Australian Accounting Standards and Repeal of Superseded and Redundant Standards

These did not have a material impact on the reported result or presentation of the 2023-24 statements.

8.3 Key Management Personnel

ChemCentre has determined key management personnel to include cabinet ministers, board members, and senior officers of the agency. ChemCentre does not incur expenditures to compensate Ministers and those disclosures may be found in the *Annual Report on State Finances.*

The total fees, salaries, superannuation, non-monetary benefits and other benefits for Board of Directors of the agency for the reporting period are presented within the following bands:

Compensation band ($)	**2024**	**2023**
0 - 10,000	1	1
10,001 – 20,000	-	4
20,001 – 30,000	5	1
30,001 – 40,000	1	1

	2024	**2023**
	$000	**$000**
Total compensation of members of the accountable authority	**153**	**135**

The total fees, salaries, superannuation, non-monetary benefits and other benefits for senior officers of the agency for the reporting period are presented within the following bands:

Compensation band ($)	**2024**	**2023**
0 – 50,000	-	-
50,001 – 100,000	-	-
100,001 – 150,000[(a)]	-	2
150,001 – 200,000	-	-
200,001 – 250,000[(a)]	3	2
250,001 – 300,000	-	1
300,001 – 350,000	1	-

	2024	**2023**
	$000	**$000**
Total compensation of senior officers	**943**	**959**

(a) The retirement and replacement of a director part way through 2022-23 resulted in one more senior officer than in 2023-24. The number of senior officer positions has not changed between the two years.

8.4 Related party transactions

ChemCentre is a wholly owned public-sector entity that is controlled by of the State of Western Australia.

Related parties of ChemCentre include:

- all Cabinet ministers and their close family members, and their controlled or jointly controlled entities;
- all senior officers and their close family members, and their controlled or jointly controlled entities;
- other departments and statutory authorities, including related bodies, that are included in the whole of government consolidated financial statements (i.e. wholly-owned public sector entities); and
- the Government Employees Superannuation Board (GESB).

Significant Transactions with Government-related entities

In conducting its activities, ChemCentre is required to transact with the State and entities related to the State. These transactions are generally based on the standard terms and conditions that apply to all agencies. Such transactions include:

- income from State Government (Note 3.1);
- equity contributions (Note 8.9);
- superannuation payments to GESB (Note 2.1(a));
- lease rentals payments to the Department of Finance (Government Office Accommodation and State Fleet) (Note 2.2);
- insurance payments to the Insurance Commission and Risk Cover fund (Note 2.2);
- payment for payroll services provided by Department of Energy, Mines, Industry Regulation and Safety (Note 2.2);
- payment for professional services to PathWest (Note 2.2);
- payment for professional services to the Department of Primary Industries and Regional Development (Note 2.2);
- payment for legal services to the State Solicitor's Office (Note 2.2);
- remuneration for services provided by the Auditor General (Note 8.8).

Material transactions with other related parties

Outside of normal citizen type transactions with the agency, there were no other related party transactions that involved key management personnel and/or their close family members and/or their controlled (or jointly controlled) entities.

8.5 Related bodies

ChemCentre does not have any related bodies.

8.6 Affiliated bodies

ChemCentre does not have any affiliated bodies.

8.7 Special purpose accounts

ChemCentre does not operate any special purpose accounts.

8.8 Remuneration of auditors

Remuneration paid or payable to the Auditor General in respect of the audit for the current financial year is as follows:

	2024 $000	2023 $000
Auditing the accounts, financial statements, controls, and key performance indicators	59	53

8.9 Equity

The Western Australian Government holds the equity interest in ChemCentre on behalf the community. Equity represents the residual interest in the net assets of ChemCentre.

	2024 $000	2023 $000
Contributed equity		
Balance at the start of the year	**23,526**	**21,026**
Contributions by owners		
Equity Contribution	2,680	2,500
Total contributions by owners	**26,206**	**23,526**
Retained earnings		
Balance at start of year	**(8,621)**	**(7,290)**
Result for the year	(49)	(1,331)
Balance at end of period	**(8,670)**	**(8,621)**
Total equity at end of year	**17,536**	**14,905**

8.10 Supplementary financial information

a) Write-offs

During the financial year, the following bad debts and property was written off under the authority of:

	2024 $000	2023 $000
The Accountable Authority	6	2
The Minister	-	-
	6	**2**

b) Losses through theft, defaults and other causes

	2024 $000	2023 $000
Losses of public money and public and other property through theft or default	-	-
	-	**-**

c) Gifts of public property

	2024 $000	2023 $000
Gifts of public property provided by the Agency	-	-
	-	**-**

8.11 Explanatory statement

This explanatory section explains variations in the financial performance of ChemCentre undertaking transactions under its own control, as represented by the primary financial statements.

All variances between annual estimates (original budget) as published in the 2023-24 State Budget Papers and actual results for 2024, and between the actual results for 2024 and 2023 are shown below. Narratives are provided for key major variances which vary more than 10% from their comparative and that the variation is more than 1% of the following variance analyses for the:

1. Estimate and actual results for the current year;
   - Total Cost of Services of the estimate for the Statements of Comprehensive Income & Cash Flows ($357,000), and
   - Total Assets of the estimate for the Statement of Financial Position ($231,000)
2. Actual results for the current year and the prior year actual:
   - Total Cost of Services for the previous year for the Statements of Comprehensive Income & Cash Flows ($328,000)
   - Total Assets for the previous year the Statement of Financial Position ($209,000).

8.11.1 Statement of Comprehensive Income Variances

	Notes	Original Budget 2024	Actual 2024	Actual 2023	Variance between budget and actual	Variance between actual results for 2024 and 2023
		$000	$000	$000	$000	$000
COST OF SERVICES						
Expenses						
Employee benefits expense		18,401	17,840	17,247	(561)	593
Supplies and services	1	2,425	2,063	1,894	(362)	169
Depreciation and amortisation expense		2,579	2,525	2,482	(54)	43
Accommodation expenses		5,773	5,800	5,762	27	38
Finance costs		7	8	8	1	-
Other expenses	2	6,545	6,024	5,455	(521)	569
Total cost of services		**35,730**	**34,260**	**32,848**	**(1,470)**	**1,412**
Income						
Provision of Services		6,504	6,342	5,944	(162)	398
Interest Revenue		30	122	51	92	71
Other Revenue		21	13	17	(8)	(4)
Total Income		**6,555**	**6,477**	**6,012**	**(78)**	**465**
NET COST OF SERVICES		**29,175**	**27,783**	**26,836**	**(1,392)**	**947**
Income from State Government						
Service appropriation	3	9,781	9,610	8,616	(171)	994
Resources received		-	22	13	22	9
Income from other public sector entities		18,142	18,102	16,876	(40)	1,226
Total Income from State Government		**27,923**	**27,734**	**25,505**	**(189)**	**2,229**
SURPLUS/(DEFICIT) FOR THE PERIOD		**(1,252)**	**(49)**	**(1,331)**	**1,203**	**1,282**
TOTAL COMPREHENSIVE INCOME / (LOSS) FOR THE PERIOD		**(1,252)**	**(49)**	**(1,331)**	**1,203**	**1,282**

8.11.2 Statement of Financial Position Variances

	Notes	Original Budget 2024	Actual 2024	Actual 2023	Variance between budget and actual	Variance between actual results for 2024 and 2023
		$000	$000	$000	$000	$000
ASSETS						
Current Assets						
Cash and cash equivalents		7,315	8,043	6,552	728	1,491
Restricted cash and cash equivalents		626	2,236	707	1,610	1,529
Prepayments		953	938	938	(15)	-
Receivables		2,637	2,083	1,762	(554)	321
Total Current Assets		**11,531**	**13,300**	**9,959**	**1,769**	**3,341**
Non-Current Assets						
Property, plant and equipment		6,654	6,024	6,614	(630)	(590)
Right-of-use assets		147	72	191	(75)	(119)
Intangible assets		1,592	1,535	1,422	(57)	113
Sinking Fund	4	3,184	3,092	2,715	(92)	377
Total Non-Current Assets		**11,577**	**10,723**	**10,942**	**(854)**	**(219)**
TOTAL ASSETS		**23,108**	**24,023**	**20,901**	**915**	**3,122**
LIABILITIES						
Current Liabilities						
Payables		1,205	1,436	1,072	231	364
Provisions	5	3,355	3,472	3,096	117	376
Lease liabilities		60	26	53	(34)	(27)
Contract liability	6	481	154	364	(327)	(210)
Total Current Liabilities		**5,101**	**5,088**	**4,585**	**(13)**	**503**

	Notes	Original Budget 2024	Actual 2024	Actual 2023	Variance between budget and actual	Variance between actual results for 2024 and 2023
		$000	$000	$000	$000	$000
Non-Current Liabilities						
Provisions		1,435	1,349	1,279	(86)	70
Lease liabilities		89	50	132	(39)	(82)
Total Non-Current Liabilities		**1,524**	**1,399**	**1,411**	**(125)**	**(12)**
TOTAL LIABILITIES		**6,625**	**6,487**	**5,996**	**(138)**	**491**
NET ASSETS		**16,483**	**17,536**	**14,905**	**1,053**	**2,631**
EQUITY						
Contributed equity		26,206	26,206	23,526	-	2,680
Retained earnings		(9,723)	(8,670)	(8,621)	1,053	(49)
TOTAL EQUITY		**16,483**	**17,536**	**14,905**	**1,053**	**2,631**

8.11.3 Statement of Cash Flows Variances

	Notes	Original Budget 2024	Actual 2024	Actual 2023	Variance between budget and actual	Variance between actual results for 2024 and 2023
		$000	$000	$000	$000	$000
CASH FLOWS FROM STATE GOVERNMENT						
Service appropriation	3	9,781	9,610	8,616	(171)	994
Capital appropriation		2,680	2,680	2,500	-	180
Funds from other public sector entities		18,013	18,108	16,806	95	1,302
Net cash provided by State Government		**30,474**	**30,398**	**27,922**	**(76)**	**2,476**
CASH FLOWS FROM OPERATING ACTIVITIES						
Payments						
Employee benefits		(18,378)	(17,268)	(17,138)	1,110	(130)
Accommodation		(5,979)	(6,038)	(5,861)	(59)	(177)
GST payments on purchases		(1,122)	(1,435)	(1,448)	(313)	13
GST payments to taxation authority		(1,101)	(852)	(879)	249	27
Finance costs		(7)	(8)	(8)	(1)	-
Other payments	7	(8,945)	(7,927)	(7,841)	1,018	(86)
Receipts						
Provision of services		6,325	5,847	6,056	(478)	(209)
GST receipts on services		2,192	2,396	2,286	204	110
Net cash provided by/(used in) operating activities		**(27,015)**	**(25,285)**	**(24,833)**	**1,730**	**(452)**
CASH FLOWS FROM INVESTING ACTIVITIES						
Payments						
Purchase of non-current assets	8	(2,680)	(2,062)	(2,501)	618	439
Net cash provided by/(used in) investing activities		**(2,680)**	**(2,062)**	**(2,501)**	**618**	**439**

	Notes	Original Budget 2024	Actual 2024	Actual 2023	Variance between budget and actual	Variance between actual results for 2024 and 2023
		$000	$000	$000	$000	$000
CASH FLOWS FROM FINANCING ACTIVITIES						
Payments						
Principal elements of lease		(56)	(31)	(63)	25	32
Net cash provided by/(used in) financing activities		**(56)**	**(31)**	**(63)**	**25**	**32**
Net increase/(decrease) in cash and cash equivalents		723	3,020	525	2,297	2,495
Cash and cash equivalents at the beginning of period		7,218	7,259	6,734	41	525
CASH AND CASH EQUIVALENTS AT THE END OF PERIOD		**7,941**	**10,279**	**7,259**	**2,338**	**3,020**

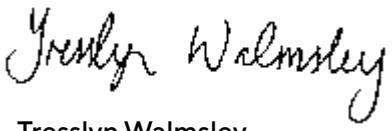
Significant variances commentary

1. The $0.36m decrease in Supplies and Services expense as compared to the budget is attributable to efficiencies in consumables usage resulting from new equipment and changes in methodology, as well as fewer bulk consumable purchases being undertaken during the year.
2. The $0.57m increase in Other Expenses as compared to prior year is primarily due to increased professional services expenditure for the forensic proteomics research project which only commenced in the second half of the previous financial year.
3. The $0.99m increase in Service Appropriation as compared to the prior year mainly reflects a full year of funding for the forensic proteomics research project as compared to only part-year funding in 2022-23.
4. The $0.38m increase in the Sinking Fund as compared to the prior year reflects the annual contribution payment to the sinking fund of $0.26m and $0.12m interest earned on the fund.
5. The $0.38m increase in (Current) Provisions as compared to the prior year is attributable to adjustments in leave provisions due to revised actuarial assumptions regarding future salary inflation.
6. The $0.33m decrease in Other Current Liabilities as compared to the budget and $0.21m decrease as compared to the prior year reflects the completion of research project milestones during the year and a lower proportion of projects being funded in advance of research being performed.
7. The $1.02m decrease in Other Payments compared to the budget is primarily attributable to lower-than-expected proteomics project research costs due to delays in resource mobilisation by certain research collaborators.
8. The $0.62m decrease in Purchase of Non-current Assets as compared to the budget and $0.44m decrease as compared to the prior year reflects longer-than-expected delivery time for some instruments. As a result, commissioning and payment for these items will occur in early 2024-25.

Key Performance Indicators

CERTIFICATION OF KEY PERFORMANCE INDICATORS

We hereby certify that the performance indicators are based on proper records, are relevant and appropriate for assisting users to assess ChemCentre's performance, and fairly represent the performance of ChemCentre for the financial year ended 30 June 2024.



Tresslyn Walmsley

Chair
ChemCentre Board
27 August 2024

Colin Murphy
Chair
Finance, Audit & Risk Management Committee
Member, ChemCentre Board
27 August 2024

Peter McCafferty

Chief Executive Officer
ChemCentre
27 August 2024

Government Goal	Desired Outcome	Services
WA Jobs Plan: Diversifying the WA economy, creating local jobs for the future.	Quality research and innovation	1. Research and Innovation
Safe, Strong and Fair Communities: Supporting our local and regional communities to thrive.	Quality scientific advice	2. Commercial and Scientific Information and Advice
	Quality emergency response	3. Emergency Response Management

Key Effectiveness Indicators by Desired Outcome

Desired Outcome: Quality Research and Innovation

Delivery of quality project-based developed knowledge, know-how and/or intellectual property relevant to state development, public health and safety, or delivery of ChemCentre's other services.

	2020-21	2021-22	2022-23	2023-24	2023-24
	Actual	Actual	Actual	Actual	Target
Contribution to Scientific Forums: *as determined by the number of recognised contributions from ChemCentre staff to presentations, publications, or technical forums.*	60	89	74	71	70
This indicator is relevant in measuring ChemCentre's contribution to knowledge, know-how and and/or Intellectual Property relevant to State development, public health and safety.					

Desired Outcome: Quality Scientific Advice

Development and delivery of quality scientific information and advice, including commercial services, to government, industry and the community.

	2020-21	2021-22	2022-23	2023-24	2023-24
	Actual	Actual	Actual	Actual	Target
Proficiency Rating for the Accredited Services: *this includes performance in qualitative and quantitative trials undertaken during the relevant year and is determined by the percentage of samples satisfactorily meeting the evaluation criteria of the proficiency trial provider.*	88%	96%	98%	98%	95%
The proficiency rating is a relevant measure as it demonstrates the quality of testing undertaken by ChemCentre. A range of external parties are engaged to supply proficiency trials, primarily being ISO 17043 accredited suppliers and professional bodies from within Australia and to a lesser extent overseas.					

Desired Outcome: Quality Emergency Response

Specialist technical advice and support to government and industry in managing the risks arising from unmanaged chemical-biological-radiological releases.

	2020-21	2021-22	2022-23	2024-24	2023-24
	Actual	Actual	Actual	Actual	Target
Average Mobilisation Time for all Emergency Response Incidents Attended: as *extracted from the response team logbook.*	16 minutes	14 minutes	15 minutes	17 minutes	20 minutes
The average mobilisation time is relevant because the quicker ChemCentre is able to mobilise to respond to a chemical-biological-radiological emergency, the lower the risk to the community.					

	2020-21	2021-22	2022-23	2024-24	2023-24
	Actual	Actual	Actual	Actual	Target
Availability of Emergency Response Workforce to Meet Agreed Inter-Agency Requirements: *as determined by the proportion of weekly staff rosters, which provide the required number of staff with the technical capability to meet all agreed inter-agency requirements.*	100%	100%	100%	100%	100%
The indicator reflects ChemCentre's performance in maintaining the required capacity to respond to Emergency Response (ER) incidents. ChemCentre's 24/7 365-day coverage is met through rosters prepared on a weekly basis, instructed by an existing workforce management plan to accommodate technical capability requirements.					

Notes

Desired Outcome 1: Quality Research and Innovation

Contribution to Scientific Forums: The 71 contributions in 2023-24 is 3 less than the prior year and 1 more than the target. The result aligns with long-term historical performance with the 2021-22 outcome being an outlier due to COVID-19 related activity postponements.

Desired Outcome 2: Quality Scientific Advice

Proficiency Rating for the Accredited Services: The proficiency rating of 98% is unchanged from the previous year and is 3% above the target. The above target result reflects ChemCentre's continuing focus on technical excellence and high-quality analysis.

Desired Outcome 3: Quality Emergency Response

Average Mobilisation Time for all Emergency Response Incidents Attended: The average mobilisation time of 17 minutes is 2 minutes more than previous year and 3 minutes faster than the target. The slightly higher result reflects additional equipment being required for some specific incidents during the year. The result remaining faster than the target reflects the maintenance of high level of capability and readiness of ChemCentre's emergency responders in minimising harm to the community through rapid mobilisation to HAZMAT incidents

Availability of Emergency Response Workforce to Meet Agreed Inter-Agency Requirements: The result of 100% is in line with the prior year and target reflecting ChemCentre's commitment to the 24/7, 365-day provision of an appropriately staffed emergency response team.

Key Efficiency Indicators by Service

Service 1: Research and Innovation

Delivery of quality project-based developed knowledge, know-how and/or intellectual property relevant to state development, public health and safety, or delivery of ChemCentre's other services.

	2020-21 Actual	2021-22 Actual	2022-23 Actual	2023-24 Actual	2023-24 Target
Publications per R&I FTE: *as determined by the total number of publications during the financial year, divided by the average number of full-time equivalent employees allocated to R&I projects and internal research activity within the financial year.*	3.3	2.6	5.0	3.4	3.2

Service 2: Commercial and Scientific Information and Advice

Development and delivery of quality scientific information and advice, including commercial services, to government, industry and the community.

	2020-21 Actual	2021-22 Actual	2022-23 Actual	2023-24 Actual	2023-24 Target
Average Cost of Providing Commercial Scientific Information and Advice per Applicable FTE: *calculated by dividing the total cost of the service by the number of FTEs*	$240,000	$245,000	$258,000	$261,000	$246,000

Service 3: Emergency Response Management

Specialist technical advice and support to government and industry in managing the risks arising from unmanaged chemical-biological-radiological releases.

	2020-21 Actual	2021-22 Actual	2022-23 Actual	2023-24 Actual	2023-24 Target
Average Cost to Maintain an Emergency Response Capability per Western Australian: *as determined by the total cost of maintaining the minimum Emergency Response capability required by Government, divided by the Western Australian population.*	$0.75	$0.72	$0.72	$0.55	$0.84

Notes

Service 1: Research and Innovation

Publications per R&I FTE: The number of publications per R&I FTE is 1.6 lower than the previous year and 0.2 higher than the target. The accomplishment of the target reflects our ongoing strategic emphasis on conducting research in collaboration with industry and regulatory bodies. The decrease compared to the previous year can be attributed to 2022-23 being an outlier year, with the finalisation of several major multi-year projects (and resulting publications) coinciding within the one year.

Service 2: Commercial and Scientific Information and Advice

Average Cost of Providing Commercial Scientific Information and Advice per Applicable FTE: The 2023-24 result is $3,000 (1.1%) higher than the previous year and is $15,000 (6.1%) above the target. The increase over the past year mainly reflects broad inflationary pressures passed on by some suppliers. The increase over the target mainly reflects the impact of the Public Sector Wages Policy, with the final salary agreement (signed after the KPI target was set) exceeding the assumed salary increase.

Service 3: Emergency Response Management

Average Cost to Maintain an Emergency Response Capability per Western Australian: The cost of service per Western Australian is $0.17 lower than the previous year and is $0.29 lower than the target. The decrease in the average cost can be mainly attributed to reduced demand from external agencies for services beyond the core emergency response capability, such as specialised advice and training. Higher than anticipated population growth was also a minor factor in the decrease.

Other Disclosures and Legal Compliance

Ministerial Directives

ChemCentre was not subject to any Ministerial directives during the year.

Workforce Inclusion Statement

ChemCentre is committed to creating an enriched, diverse workforce with dedicated and quality employees. We value the broad range of ideas and perspectives diversity brings to our decision-making processes, progress towards achieving our strategic objectives and key performance indicators, and service delivery to the Western Australian community. We continue to consider the measures intended to achieve equality in the *Equal Opportunity Act 1984,* the *Commissioner's Instruction 39 – Interim Arrangements to Fill Public Sector Vacancies* and our 'Disability Access and Inclusion Plan 2023–2028' to increase the diversity of our workforce and inclusivity in our workplace.

Our 'Workforce and Diversity Plan 2022 – 2025' focuses on talent attraction and retention through evolving our employee value proposition and supporting skills development, developing a safe and inclusive work culture, and an innovative mindset. ChemCentre is implementing the Public Sector Commission's 'Building Leadership Impact' initiative designed to embed leadership mindsets and behaviours across all levels of our workforce.

As part of the inaugural Western Australian Public Sector Census in 2023, our staff were asked about their diversity, whether they had shared this with us, and if not, the reason for not sharing. The confidence of staff to give voice to their identities, workplace experiences and concerns is an indication of the level of workplace trust, psychological safety and inclusion. Our results showed that the majority of our staff had shared, and felt comfortable sharing, their diversity information.

Having analysed the insights from the Census, the following actions to improve our workplace culture and inclusion were instigated during the reporting period:

- training was provided to all staff to aid in the prevention of bullying and harassment, particularly sexual harassment
- our fortnightly staff newsletter, 'The Chronicle', included articles about pertinent subjects such as conflicts of interest and reporting mechanisms (including anonymous) for any observed integrity concerns
- our policies and procedures were reviewed to ensure avenues for addressing and reporting issues and concerns in the workplace were clear
- our employee assistance provider, Access Wellbeing Services, made a presentation at our monthly face-to-face communications session which incorporated themes such as identifying and safely responding to witnessed bullying behaviour in the workplace, seeking appropriate support and expected bystander behaviour.

The results from our 'People at Work' survey completed by the workforce in June 2024 also reflected a strong positive response for the level of awareness of our promotion of diversity and inclusion, with some improvements identified to further foster diverse perspectives across teams. This feedback will be used to gauge the effectiveness of the above actions and guide future workforce initiatives.

Employment and Industrial Relations

All staff are appointed under Part 3 of the *Public Sector Management Act 1994*. Terms and conditions for employees (excluding the Chief Executive Officer) are derived from the *Public Service Award 1992* and *Public Sector CSA Agreement 2022*. The Agreement expired on 12 June 2024. Its replacement is currently being negotiated by Government and is expected to be agreed and registered in the Western Australian Industrial Relations Commission during the upcoming financial year.

During the reporting period, there were no industrial relations issues and no disruption to the delivery of services.

Employment Profile

Employment Type	2021-22	2022-23	2023-24
Permanent Full-time	102	100	103
Fixed-term Full-time	23	25	26
Permanent Part-time	24	27	27
Fixed-term Part-time	5	5	6
Total Head Count	**154**	**157**	**162**
Total FTEs	**143**	**145**	**152**

*Headcount and paid Full-Time Equivalent (FTE) calculated as at 30 June each financial year

Board and Committee Remuneration

Position	Member Name	Type of Remuneration	Period of Membership for the Year	Expiry of Term	Gross/Actual Remuneration for 2023-24
Chair	David Blyth	Annual fee	12 months	31 July 2024	$39,965
Deputy Chair	Tresslyn Walmsley	Annual fee	12 months	30 September 2024	$26,913
Member	Colin Murphy	Annual fee	12 months	30 June 2025	$21,547
Member	Jane Cutler	Annual fee	12 months	31 July 2026	$21,547
Member	Ian Harrison	Annual fee	12 months	30 September 2024	$21,547
Member	Miriam Stanborough	Annual fee	12 months	30 June 2025	$21,547
Member	Kylie Whiteley	Annual fee	12 months	30 June 2025	$0

Management of Board Interests

Under section 16 of the *Chemistry Centre (WA) Act 2007*, the Board follows a disclosure of interest process. The Board has a standing item for members to declare actual, perceived and potential conflicts of interest on appointment and as matters arise. Conflicts of interest are documented and managed.

Director's and Officer's Liability Insurance

An insurance policy has been taken out to indemnify Board members against liabilities under sections 13 or 14 of the *Statutory Corporations (Liability of Directors) Act 1996*. This policy is placed through the State Government insurer and is renewed annually with a limit of $10 million dollars for any one claim at a cost of $6,377 (inc. GST).

Compliance with Public Sector Standards and Ethical Codes

ChemCentre has policies and procedures in place to ensure its obligations are met with respect to Public Sector Commissioner's Instructions, Public Sector Standards in Human Resources Management, the Public Sector Code of Ethics, and ChemCentre's Code of Conduct. ChemCentre's Statement of Business Ethics is published on our website and outlines the values and ethical standards ChemCentre upholds when conducting business, and the conduct and standards expected from our business partners, service providers, contractors and suppliers in return. All policies and procedures are reviewed periodically.

A detailed and structured induction program is provided to all new employees which incorporates acknowledging an understanding of key ChemCentre policies and procedures, including but not limited to, the Code of Conduct, Confidentiality and Release of Official Information, Fraud and Corruption Control Plan, and External Paid Employment. Mandatory online training includes Accountable and Ethical Decision Making which reinforces ChemCentre's Values and expected behaviours.

ChemCentre actively promotes continued awareness and adherence to standards of conduct and integrity through monthly face-to-face staff communications sessions, articles featured in the fortnightly staff newsletter 'The Chronicle', and refresher training.

On 2 October 2023, the new *Commissioner's Instruction 40 – Ethical Foundations* commenced operation across the Western Australian public sector. In order to comply with the new Instruction, ChemCentre revised its Code and Conduct, associated policies and staff training, and communicated these changes to all staff. In November 2023, 'The Chronicle' included an article promoting the Public Sector Commission's 'Safe2Say' initiative which is an anonymous reporting platform for minor misconduct that helps to ensure Government services are delivered with honesty and integrity.

During the reporting period, four disciplinary processes were initiated under Part 5 of the *Public Sector Management Act 1994*. Three resulted in substantiated breaches of discipline with improvement and/or disciplinary action taken, and one was discontinued.

One claim for a breach of the Employment Standard was received during the reporting period which has been referred to the Public Sector Commission in accordance with regulation 10 of the *Public Sector Management (Breaches of Public Sector Standards) Regulations 2005*. The Public Sector Commission's determination of the claim had not been finalised by 30 June 2024.

Pricing Policies for Services Provided

ChemCentre charges for goods and services rendered on a full or partial cost recovery basis. These fees and charges were determined in accordance *with Costing and Pricing Government Services: Guidelines for Use by Agencies in the Western Australian Public Sector* published by Treasury.

WA Multicultural Policy Framework

We recognise the value of cultural and linguistic diversity and our 'Multicultural Plan 2021 – 2025' supports our commitment to:

- harmonious and inclusive communities
- culturally responsive policies, programs and services
- economic, social, cultural, civic and political participation.

ChemCentre has a proud history of attracting and retaining culturally and linguistically diverse scientists and technicians. As at 31 March 2024, 28.5% of our workforce were culturally and linguistically diverse, whereas representation across the Western Australian public sector was at 17.4%[1].

All new employees to ChemCentre complete Diversity WA cultural competency training to encourage communicating and working effectively with colleagues, clients and community members from culturally and linguistically diverse backgrounds. We promote an inclusive workplace culture through reinforcement of our Values and regular refresher training.

We recognise and acknowledge culturally significant occasions throughout the year and the Office of Multicultural Interests events calendar is on our staff intranet. The theme of 'everyone belongs' for Harmony Week was promoted in March 2024.

ChemCentre remains committed to promoting and supporting Science, Technology, Engineering and Mathematics (STEM) to diverse groups as part of its outreach program and continues to offer student placements to young emerging scientists from all cultures.

[1] Chemistry Centre (WA) Quarterly Entity Profile March 2024 - Public Sector Commission

Reconciliation Action Plan

ChemCentre has continued to progress initiatives from our 'Reconciliation Action Plan 2023-2024' which documents how we can build strong, respectful and collaborative partnerships with Aboriginal and Torres Strait Islander peoples and communities. During the reporting period various activities were designed to enhance our workforce's understanding and appreciation of indigenous culture and foster respectful relationships including:

- a curated tour of the Carrolup Collection at the John Curtin Gallery was organised for staff
- Aboriginal musicians, Gina Williams and Guy Ghouse, performed an abridged version of *Kalyakoorl, Ngalak Warangka* (Forever, We Sing) at our monthly staff communications session
- Aboriginal artist, Barbara Bynder, was commissioned to facilitate creating a ChemCentre reconciliation artwork through the participation of staff
- using Aboriginal owned and operated businesses for catering at staff celebrations and training throughout the year
- providing Noongar language seminars for staff
- continuing to support a two-way science program that is connecting Aboriginal knowledge and learnings with school science curriculums. The program provides an opportunity for all students to learn about science from one of the world's oldest continuing cultures.

ChemCentre is also hosting an Aboriginal trainee through the Public Sector Commission's 'Solid Futures Program' in 2024.

Disability Access and Inclusion Plan Outcomes

ChemCentre is committed to working progressively to improve and remove barriers to people with a disability accessing our information, services and facilities. ChemCentre promotes the principles and outcomes of our 'Disability Access and Inclusion Plan 2023–2028' (DAIP) to our staff which are reflected in our policies and procedures. Our DAIP is published on our website and included in our induction program for new staff. Flexibility in our recruitment activities and work design accommodates people with a disability.

We work closely with Curtin University to ensure that the building and facilities continue to remain accessible for people with a disability. Planning processes for events, such as ChemCentre Open Day, ensures the needs for people with disability are considered. Staff are aware of the need to mitigate risks and make reasonable adjustments for people with disability, to meet their needs and ensure appropriate access to our events and services. Our website has been designed to meet web content accessibility guidelines and content is available in alternative formats.

Work Health and Safety

ChemCentre has a disciplined and committed approach to providing a safe and healthy workplace and environment which promotes the safety and wellbeing of all employees, visitors and contractors. ChemCentre continues to maintain its JAS-ANZ work health and safety management system that is accredited via an annual third-party inspection body independently auditing against ISO45001:2018.

The Safety Committee and Management have consulted, planned and successfully implemented actions to comply with the new *Work Health and Safety Act 2020* (WHS Act) and subsidiary legislation. Compliance with the WHS Act is monitored throughout ChemCentre and assessed by the Safety Committee with regular reporting to senior management and the Board. Over the course of the next year, activities to eliminate, minimise or mitigate risks associated with physical and psychological harm to our workforce, visitors and contractors will be reviewed and improved.

All new employees receive a comprehensive corporate and local safety induction. Extensive training of staff and managers is provided at regular intervals to ensure their health and safety knowledge is refreshed and updated.

The Safety Committee continues to support Management to steer health and wellbeing programs for staff. These are underpinned by feedback from the 'People at Work' survey, which is a psychosocial risk assessment process which aids in the identification and management of workplace risks to the psychological health of all workers and persons within the workplace.

Initiatives to address psychosocial risks within the workplace during the reporting period included:

- revision of the Psychosocial Risk Management policy to incorporate procedures for reporting and investigating psychosocial incidents
- staff with supervisory responsibilities provided training in:
  - Middle Management
  - Mental Health in the Workplace
  - Investigating a Psychosocial Incident
- intranet and staff newsletter articles concerning RUOK? Day, Mental Health Week and our safety-related policy and procedures
- our employee assistance provider, Access Wellbeing Services, made a presentation at our monthly face-to-face communications session aimed at building mental health literacy, self-help seeking behaviours, and promoting the counselling and support services they provide
- online session on 'The 12 stages of burnout' for all staff
- Presentation to all staff on sleep and fatigue management by Dr Nick Mabbott.

Injury Management

ChemCentre's Workers Compensation and Injury Management policy and associated procedures are compliant with the requirements of the *Workers Compensation and Injury Management Act 1981* (replaced by *Workers Compensation and Injury Management Act 2023* from 1 July 2024).

During 2023–2024, two workers compensation claims were lodged with one accepted. At the end of the reporting period, the insurer had deferred the decision on liability for the other claim.

Work, Health and Safety Performance

ChemCentre's performance against key indicators for Work Health and Safety in 2023–24 are outlined in the table below:

Measures	Base Year*	2022/23	2023/24	Targets	Comments about Targets
Number of Fatalities	0.00	0.00	0.00	0	Target Achieved
Lost time injury and disease incidence rate	0.00	0.00	1.2%	0 or 10% reduction in incidence rate in comparison with the base year.	Target not Achieved**
Lost time injury severity rate	0.00	0.00	100%	0 or 10% reduction in severity rate in comparison with the base year.	Target not Achieved**
Percentage of injured workers returned to work (i) within 13 weeks	100%	100%	0%	Greater than or equal to 80%	Target not Achieved
Percentage of injured workers returned to work (i) within 26 weeks	100%	100%	0%	Greater than or equal to 80%	Target not Achieved
Percentage of managers trained in work, health and safety and injury management responsibilities, including refresher training within 3 years	81%	87.5%	78%	Greater than or equal to 80%	Target not Achieved. The organisation has recruited new managers in the recent months. Training has been scheduled for early 2025.

Lost Time Injury and Disease Incidence Rate	Number of Lost Time Injury and Disease Claims x100 Total Number of FTE employees
Lost Time Injury Severity Rate	Number of Severe Claims x 100 Number of Lost Time Injury Claims

* *The performance reporting examines a three-year trend and, as such, the comparison base year is to be two years prior to the current reporting year. The base rate was calculated prior to psychosocial risk being included in the legislation which came into effect only in 2022.*

** *Comment on agency performance over the three-year period*

Information Management and Recordkeeping Plan

ChemCentre's current Recordkeeping Plan was approved by the State Records Commission in 2019 and in accordance with the *State Records Act 2000* is required to be reviewed every 5 years. Following a comprehensive review and evaluation, ChemCentre's 'Recordkeeping Plan 2024' was submitted in June 2024. Approval of the Plan and the recommendations for future improvements are anticipated after consideration by the State Records Commission later in 2024.

During the year, our electronic records management system (OurDocs) was upgraded to incorporate additional features and functions with strengthened security.

Other significant projects underpinning recordkeeping compliance and operational requirements have been undertaken throughout the year and are nearing completion, including the overhaul of the Business Classification Scheme and the development of an Information Asset Register. Acting as a pivotal point for overseeing the management of ChemCentre's information assets, the Register also has a fundamental role in progressing compliance requirements, including both Information Classification Policy and preparing for the forthcoming Privacy and Responsible Information Sharing legislation.

Records Awareness Training is a key component of the ChemCentre mandatory induction process for new staff. The recently revised Records Awareness Training resource was integrated into the automated Learning Management System in 2024. It addresses staff recordkeeping roles and responsibilities, provides information on public sector employee accountability, legislative requirements including the *State Records Act 2000* and the *Freedom of Information Act 1992*, and requirements to adhere to the Recordkeeping Plan.

New staff also receive a welcome email, which includes a request for their participation in a one-on-one or small group introductory training session in the use of OurDocs, reflecting a participation rate of 100% and positive feedback. Guides for the OurDocs system are also available on the intranet.

The ChemCentre newsletter and organisation-wide communication sessions provide further opportunities to share information on recordkeeping practices, with these forums providing an opportunity to focus on relevant records management matters.

Freedom of Information

In the reporting period, two requests to access documents under the *Freedom of Information Act 1992* were received. In accordance with the legislation, our Freedom of Information Statement and associated procedures are available on the ChemCentre website.

Credit Card – Unauthorised Use

In accordance with the requirements of Treasurer's Instruction 321 staff who hold credit cards are reminded of their obligations and requested to acknowledge the policy and conditions of credit card use. However, two employees inadvertently used the corporate credit card on personal expenditure, they reported the incidents immediately and promptly settled the amounts. It was noted that the nature of the expenditure was immaterial and characteristic of an honest mistake.

Number of instances the Western Australian Government Purchasing Cards have been used for personal purposes	2
Aggregate amount of personal use expenditure for the reporting period	$36.35
Aggregate amount of personal use expenditure settled by the due date (within 5 working days)	$36.35
Aggregate amount of personal use expenditure settled after the period (after 5 working days)	-
Aggregate amount of personal use expenditure remaining unpaid at the end of the reporting period	-
Number of referrals for disciplinary action instigated by the notifiable authority during the reporting period	-

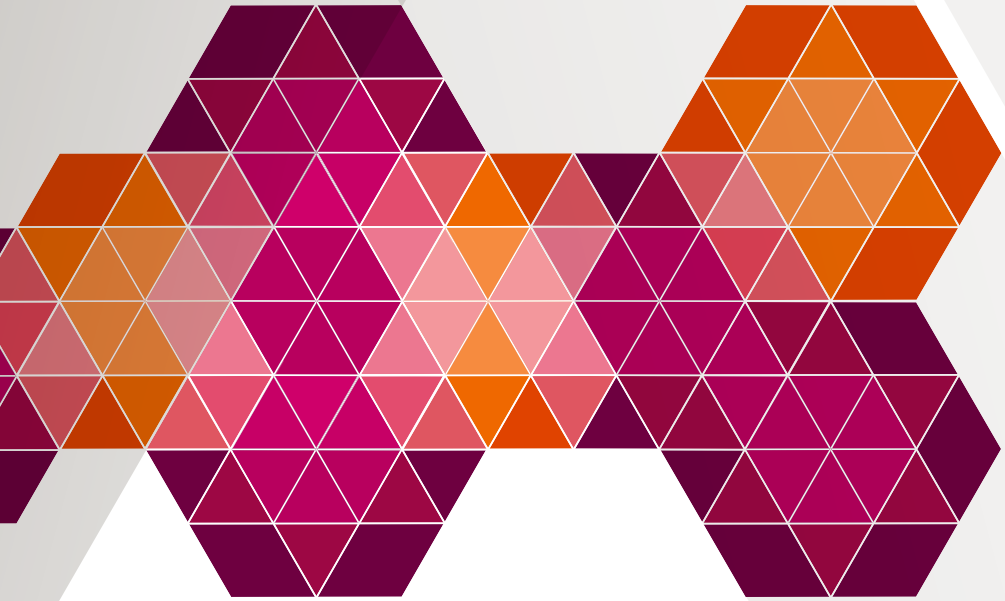
Expenditure on Advertising, Market Research, Polling and Direct Mail

In accordance with section 175ZE of the *Electoral Act 1907,* ChemCentre is required to report its expenditure in relation to advertising, market research, polling, direct mail and media advertising.

Expenditure during 2023-24 included advertising for job vacancies and surveys for market research, summarised in the table below:

Type	Organisation	2023-24 Expenditure Inc of GST
Advertising agencies	LinkedIn Initiative Media Australia Pty Ltd	$6,666 $2,748.25
Polling	-	–
Direct mail organisations	N/A	–
Market research organisations	Survey Monkey	$828
Media advertising organisations	N/A	–
Polling organisations	N/A	–

Appendices



2023-24 Publications and Presentations

Conference and Workshop Presentations

Agarwal, M. 2024. "Utilising Sandalwood Nut Waste to Enhance Profitability and Sustainability for the Industry". Ag Evoke Accelerate Program, Perth.

Behrouzi, B., **Oosthuizen, F.**, **Douglas, B.**, **Brown, D.**, Baddock, B., and Procopis, B. 2024. "Implementation and Early Results of a Unique Drink Spiking Initiative in Western Australia (WA)". The 12th Forensic and Clinical Toxicology Association Conference 2024, Hobart.

Bornt, K., How, J., de Lestang, S., **Linge, K.**, Hovey, R. and Langlois, T. 2023. "Optimisation and Validation of Tissue Digestion Methods for Analysing Microplastics in Large Decapod Crustaceans". 12th International Conference and Workshop on Lobster (and Crab) Biology and Management 2023. Fremantle, WA.

Bornt, K., How, J., de Lestang, S., **Linge, K.**, Hovey, R. and Langlois, T. 2023. "Strategies for Optimising Plastic Gear Use and Loss in a Fishery". 12th International Conference and Workshop on Lobster (and Crab) Biology and Management 2023. Fremantle, WA.

Bornt, K., How, J., de Lestang, S., **Linge, K.**, Hovey, R. and Langlois, T. 2024. "Plastic Contamination: Inputs from Fisheries and Occurrence in Decapods in Western Australia". World Fisheries Congress 2024, Washington, USA.

Bornt, K., How, J., de Lestang, S., **Linge, K.**, Hovey, R. and Langlois, T. 2024. "Plastic Contamination: Inputs from Fisheries and Occurrence in Decapods in Western Australia". DPRID Aquatic Animal Health Technical Forum, Sorrento Beach, WA.

Bourke, S., Alexis, L., Stokes, A., **May, H.**, Jeffries-Stokes, C., and Wyrwoll, C. 2023. "Facilitating Community Based Measurement and Treatment of Nitrate in Potable Water". Water RA Know Your Neighbour Workshop, Perth, WA.

Bourke, S., Alexis, L., Stokes, A., **May, H.**, Jeffries-Stokes, C., and Wyrwoll, C. 2023. "Low-tech Monitoring and Treatment of Nitrate in Drinking Water". Australasian Groundwater / New Zealand Hydrological Society Joint Conference, 2023. Auckland.

Bourke, S., Alexis, L., Stokes, A., Kardol, L., **May, H.**, Wyrwoll, C., Jeffries-Stokes, C., and Moggridge, B. 2024. "Aboriginal Communities as Partners: A Community-first Approach to Naturally Elevated Nitrate in Drinking Water Supplied from Groundwater". Australasian Land and Groundwater Association Perth Regional Contaminated Land and Groundwater Conference 2024, Perth.

Brown, D., **Harrison, S.**, **Harvey, A.**, **Oosthuizen, F.**, and **Sakrajda, P.** 2024. "Prevalence of Pregabalin in Emerging Drugs Network of Australia (EDNA) and Drugs in Driving Casework in Western Australia (2022-23)". The 12th Forensic and Clinical Toxicology Association Conference 2024, Hobart.

Cooper, L. 2023. "Oil Spill Forensics". Environmental Science and Technology Network Workshop, Adelaide.

Edmunds, R. 2023. "Impurity Profiling of Street Level Seizures of Methylamphetamine In Western Australia". International Association of Forensic (IAFS) Science Symposium, Sydney.

Horrocks, A., Lewis, S., **Pitts, K.**, **DeTata, D.**, **Dunsmore, R.**, and **Fillingham R.** 2023. "Characterisation and Source Determination of Chlorate-based Homemade Explosive Materials". International Association of Forensic Science Symposia, Sydney.

Linge, K., **May, H.**, Black, S. and Allen, D. 2024. "Identifying Opportunities for Mine Pit Lake Reuse after Mine Closure". Connected by Water, Perth, WA.

McCafferty, P. 2024. "Practical Workplace Applications of Positive Mental Health and Wellbeing." Future Labs 2024, Sydney Australia.

Mead, R., Di-Loreto, T., and **Lynch, D.** 2024. "Passive Air Quality Monitoring, Analysis, Workflows (QA/QC) and Interpretation". Murujuga Science Symposium, Perth.

Mullins, B., **Martin, A.**, and Mohomed, A. 2024. "Chamber Studies – Measurements, Workflows (QA/QC) and Interpretation". Murujuga Science Symposium, Perth.

Pitts, K., Aspandiar, M., **Newland, T.**, Lewis, S., Dawson, L., Skelton, J., **Morey, B.**, Speers, J., Mead, R., Henry, D. 2023. "Forensic Analysis of the Inorganic and Organic Fractions of Sandy Soils". International Association of Forensic Science Symposia, Sydney.

Sakrajda, P. 2023. "Wild Mushroom Soup - What Not to Serve For Dinner". ANZFSS Perth Branch Meeting. ChemCentre, Bentley, Western Australia.

Sakrajda, P., **Oosthuizen, F.**, **Harvey, A.**, **Edmunds, R.**, and **Brown, D.** 2024. "WISE to EDNA – What Drugs and Trends Were Observed Over the Last 8 Years?". The 12th Forensic and Clinical Toxicology Association Conference 2024, Hobart.

Stevens, S., Edwards, S., Noble, G., Scrivener, C., Krebs, G., Lynch, E., Petzel, C., **May, C.**, Blake, B., and Dods, K. 2023. "The Pharmacokinetics and Toxicology of Δ9-THC in Sheep". International Association of Forensic Sciences, Sydney.

Walker, M., and Hansen, M. 2024. "Lithium-ion Batteries". DEMIRS WorkSafe Inspectors Forum (Mine Safety).

Walker, M. 2023. "Emerging Risks - Lithium-ion Batteries". WAFES conference, ChemCentre.

Walker, M. 2023. "Lithium-ion Batteries". Child and Adolescent Health Services Forum CAHS, Perth Children's Hospital.

Weber, C., Thompson, A., Schumann J., Alfred, S., Stockham, P., **Sakrajda, P.**, Fatovich, D., and Isoardi, K. 2024. "Nitazenes in Australia: Emergency Department (ED) Presentations with Analytically Confirmed 'Nitazenes' from the Emerging Drugs Network of Australia (EDNA)". The 12th Forensic and Clinical Toxicology Association Conference 2024, Hobart.

Conference Posters

Alexis, L., **May, H.**, Stokes, A., Jeffries-Stokes, C., Wyrwoll, C., and Bourke, S. 2024. "Low-tech Monitoring and Treatment of Nitrate in Drinking Water". Connected by Water, Perth, WA.

Dorakumbura, B., **Beckett, N.**, **Cook, E.**, **Nolan, A.**, **Brown, D.** and **Douglas, B.** 2023. "Emerging Human Medications in Racing Animals: Analytical and Regulatory Challenges". International Conference of Racing Analysts and Veterinarians (ICRAV), Hong Kong.

Dunsmore, R., **Pitts, K.**, **DeTata, D.**, and Lewis, S. 2023. "Starting with a Bang: Source Determination of Peroxide and Nitrated Based Explosives". School of Molecular and Life Sciences Symposium, Curtin University, Perth.

McGann, J., and **Green, H.** 2023. "A Study on Novel Psychoactive Substances in Seizures in Western Australia". 23rd Triennial Meeting of the International Association of Forensic Sciences (IAFS 2023), Sydney.

Lectures

Behrouzi, B., and **Hollings, A.** 2024. "Forensic Toxicology". Lecture to Murdoch University Undergraduate Students (CH103), 23 May 2024, Murdoch WA.

Bergmann, R. 2024. "Breaking Bad Down Under: Chemistry and Illicit Drug Investigations". Lecture to Curtin University Undergraduate Students, 23 April 2024, Bentley, Western Australia.

Bock, S. 2024. "Forensic Chemistry Laboratory- Illicit Drugs Section". Lecture to Edith Cowan University Undergraduate Students (SCH3216), 2 May 2024, Murdoch WA.

Dunsmore, R. 2023. "Forensic Chemistry". Lecture to Murdoch University Undergraduate Students, 22 August 2023, Murdoch University, Murdoch, Western Australia.

Dunsmore, R., **Pitts, K.**, **DeTata, D.**, and Lewis, S. 2023. "Source Determination of Home-made Explosives for Counter Terrorism and Forensic Intelligence Purposes: Peroxide Based and Nitrated Materials". Curtin University School of Molecular and Life Sciences Higher Degree by Research Seminar, 16 November 2023, Perth, Australia.

Edmunds, R. 2024. "Impurity Profiling of Street Level Seizures of Methylamphetamine in Western Australia". Via Teams to ESR New Zealand Drug and Clandestine Laboratory Staff, January 3 2024.

Fillingham, R. and **Trigg, S.** 2024. "Forensic Chemistry". Lecture to Murdoch University Undergraduate Students (CH103), 2 May 2024, Murdoch WA.

Gummer, J. 2024, "Proteomics". Lecture to Murdoch University Undergraduate Students (CH103), 7 May 2024, Murdoch WA.

Linge K., 2023. "Testing the Waters: Future Opportunities for Mine Pit Lakes". MRIWA Science Communications Awards. YouTube, uploaded by @ mriwa 11 October 2023, https://www.youtube.com/watch?v=Ht_eEAAyGgY

Lynch, D. 2024. "ChemCentre, a Research and Analytical Partner". Western Australian Institute of Marine Science Board and Partner Meeting, Nedlands.

Palmer, J., **Linge, K.**, **Swinny, E.**, and **West, N**. 2023. "Development of an Emergency Response Plan. Results from a Confidential Study". 26 July 2023, Perth, Western Australia.

Palmer, J. 2024. "Integrated Approach". Lecture to DFES SET Course, June 2024, Forrestfield, Western Australia.

Palmer, J. 2024. "Monitoring Procedures". Lecture to DFES SET Course, June 2024, Forrestfield, Western Australia.

Palmer, J. 2024. "MultiRAE & PID". Lecture to DFES SET Course, June 2024, Forrestfield, Western Australia.

Pitts, K. 2024 "Case from Physical Evidence". Lecture to Curtin University Undergraduate Students (FORS2000), 23 May 2024, Bentley WA.

Pitts, K. 2024 "Microscopy in Forensics". Lecture to Murdoch University Undergraduate Students (CH103), 18 April 2024, Murdoch WA.

Powell, R., 2024 "Analysis of Fibres". Lecture to Murdoch University Undergraduate Students (CH103), 30 April 2024, Murdoch WA.

Sakrajda, P. 2023. "Forensic Toxicology". Lecture to Edith Cowan University Undergraduate Students, 15 September 2023, ECU, Joondalup, Western Australia.

Research Papers and Reports

Agarwal, M., Newman, J., LI, Y., G, Li., Li, B., Basavarajappa, S., and Ren, Y. 2024. "Delivery and Adoption of Nitrogen/Low Oxygen and Nitrogen + Phosphine Technology for the Management of Grain Storage Pests in Commercial Silos". Science and Technology of Cereals, Oils and Foods, 2024, 32(3): 39-54.

Agarwal, M., Newman, J., LI, Y., G, Li., Li, B., and Ren, Y. "Nitrogen as an Alternative to Phosphine". Science and Technology of Cereals, Oilsand Foods, 2024, 32(3): 55-68.

Alshuwaili,T., Mohammedali, M., Lahuf, A., **Agarwal, M.**, and Koli,P . 2024. "Study on Metabolic Response of Female and Male Trogoderma variabile (Ballion) on Different Host Grain Using Direct Immersion Solid-phase Microextraction Coupled with Gas Chromatography Mass". Journal of Kerbala for Agricultural Sciences 11(1): 14-30: https://doi.org/ 10.59658/jkas.v11i1.1426.

Alshuwaili, T., Mohammedali, M., Lahuf, A., Koli,P., and **Agarwal, M.** 2023. "Optimization and Validation for Identification of Volatile Organic Compounds Released from Trogoderma variabile Ballion /Using Headspace Solid-phase Microextraction and GC-FID/MS". Journal of Kerbala for Agricultural Sciences (4):195-207,10.59658/jkas.v10i4.1310

Bornt, K., **Linge, K.**, How, J., de Lestang, S., Hovey, R., and Langlois, T. 2023. [Pre-print] Microplastic Extraction from Digestive Tracts of Large Decapods. SSRN. DOI: dx.doi.org/10.2139/ssrn.4804342

Horrocks, A., **Detata, D.**, **Pitts, K.**, and Lewis, S. 2023. Chlorate-based Homemade Explosives: A Review". WIREs Forensic Science, e1506. doi.org/10.1002/wfs2.1506

Isoardi, K., **Roberts, D.**, Holford, A., Brown, J., Griffiths, A., Soderstrom, J., McDonald, C., Gerostamoulos, D., **Sakrajda, P.**, Turner, C., Yates, H., Gunja, N., and Greene, S. 2023. "A Cluster of Acute Thebaine Poisonings from Non-food Grade Poppy Seeds in the Australian Food Supply". Clinical Toxicology, DOI: 10.1080/15563650.2023.2265053

Jones, I., Turner, G., **Pitts, K.**, **Powell, R.**, Riboldi-Tunnicliffe, A. Boer, S., Allena, L., and Moggach, S. 2023. "High-pressure Induced Guest-mediated Gate Opening Behaviour of the Co-based Framework ZIF-67". CrystEngComm, 25, 6533, Royal Society of Chemistry, DOI: 10.1039/d3ce00979c

Koli, P., **Agarwal, M.**, Kessell, D., Ren, Y., and McKirdy, S. 2024. "Chemical Ecology of Rathayibacter toxicus and Associated Bacteria: Profiling Volatile Compounds for Insights into Annual Ryegrass Toxicity Causative Agent". Microchemical Journal, Volume 196, 109613, ISSN 0026-265X, https://doi.org/10.1016/j.microc.2023.109613

Linge, K., **Cooper, L.**, and **Downey, A.** 2024. "Comparison of Approaches for Authentication of Commercial Terpinen-4-ol-type Tea Tree Oils Using Chiral GC/MS". Journal of Agricultural and Food Chemistry, 72, 8389-8400.

Linge, K., Gruchlik, Y., Busetti, F., Ryan, U, and Joll, C. 2024. "Use of Micropollutant Indicator Ratios to Characterize Treatment Efficiency in Wastewater Treatment Plants and to Identify Wastewater Impact on Groundwater". Journal of Environmental Management, 358, 120822.

Linge, K., **Pitts, K.**, Black, S., **Downey, A.**, Brand, M., Taylor, P., and Priddis, C. 2024. "Investigating Nuisance Dust Complaints: Combining High Frequency Dust Deposition Records and Source Identification using Integrated Microanalytical Techniques". Atmospheric Pollution Research, In Press, Journal Pre-proof Available online 28 June 2024, 102241 DOI: 10.1016/j.apr.2024.102241

McCutcheon, D., Soderstrom, J., Raghavan, M., **Oosthuizen, F.**, **Douglas, B.**, Burrows, S., Smith, J., and Fatovich, D. 2023. "Illicit Drugs in the Emergency Department: Can we Determine on Clinical Grounds if Patients are Intoxicated? Results from the Western Australian Illicit Substance Evaluation (WISE) Study". Drug and Alcohol Review APSAD. https://doi.org/10.1111/dar.13738

Newland, T., **Pitts, K.**, and Lewis, S. 2023. "Negative Result: Application of Raman Spectroscopy to the Forensic Analysis of an Arid, Sandy Soil". Forensic Science International: Reports, 8, doi.org/10.1016/j.fsir.2023.100343

Restrepo-Vieira, L., Busetti, F., **Linge, K.**, and Joll, C. 2024. "Removal Mechanisms of Illicit and Psychoactive Drugs in Different Wastewater Treatment Processes". Environmental Science: Water Research and Technology, 10, 847-859.

Smith, J., Greene, S., McCutcheon, D., Weber, C., Kotkis, E., Soderstrom, J., **Douglas, B.**, Lenton, S., Grigg, J., Dessauer, P., Ezard, N., and Fatovich, D. 2024. "A Multicentre Case Series of Analytically Confirmed Gamma-hydroxybutyrate Intoxications in Western Australian Emergency Departments: Pre-hospital Circumstances, Co-detections and Clinical Outcomes". Drug and Alcohol Review, CDAR-2023-0269.

Wang, F., Pasin, D., Skinnider, M., Liigand, J., Kleis, J-N., **Brown, D.**, Oler, E., Sajed, T., Gautam, V., **Harrison, S.**, Greiner, R., Foster, L., Dalsgaard, P., and Wishart, D. 2023. "Deep Learning-Enabled MS/MS Spectrum Prediction Facilitates Automated Identification Of Novel Psychoactive Substances". Analytical Chemistry, 95:pp. 18326-18334. https://doi.org/10.1021/acs.analchem.3c02413

Ziogos, S., Dadour, I., **Pitts, K.**, and Magni, P. 2023. "Qualitative Analyses of Textile Damage (Cuts and Tears) Applied to Fabrics Exposed to the Decomposition of Carcasses and Associated Insect Activity in an Austral Summer". Insects, MDPI doi.org/10.3390/insects14070618

Book Chapters and Technical Reports

Pitts, K. 2024. "Practitioner Aspects", in Chemometric Methods in Forensic Science, edited by Sharma, V., Sauzier, G., and Lewis, S. The Royal Society of Chemistry, CPI group, Croyden, United Kingdom.

Horrocks, A., **Pitts, K.**, **DeTata, D.**, and **Dunsmore, R.** 2024. "Fire and Explosions Investigation", in Chemometric Methods in Forensic Science, edited by Sharma, V., Sauzier, G., and Lewis, S. The Royal Society of Chemistry, CPI group, Croyden, United Kingdom.

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